

**AN ASSESSMENT OF *BODA BODA* MOTORCYCLISTS' COMPLIANCE TO THE
NATIONAL TRANSPORT AND SAFETY AUTHORITY (OPERATION OF
MOTORCYCLES) REGULATIONS, 2015 IN MBITA SUB-COUNTY, KENYA**

**BY
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**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF RESEARCH AND PUBLIC POLICY OF**

MASENO UNIVERSITY

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DECLARATION

This thesis is my original work and has not been presented for a degree or any other purpose in any other university or institution. I further take full responsibility for any short-coming that may arise as a result of collecting, collating and analyzing data that has been presented here.

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ACKNOWLEDGEMENT

I thank my Supervisors: Prof. Susan Kilonzo who not only constantly reminded and pushed me to work extra hard to accomplish this goal but also complemented this by timely and instrumental comments and guidance throughout this endeavor. You are such a wonderful scholar; always having time for students! Prof. Erick Nyambedha for his support, helpful comments and guidance through the course of study and writing of this thesis. I acknowledge Maseno University for the valuable institutional support that was at my disposal. I also give special recognition to the staff of Maseno University at the School of Development and Strategic Studies for the support they gave me during my study.

I must express my deepest appreciation to my course mates for the insightful discussions we always had both during class sessions and in other informal fora. To my respondents: *the bodaboda* riders in Mbita Sub-County; Mbita police station, traffic department; and the *bodaboda* groups' leadership, I say "*thank you.*" To my research assistants, your contributions cannot go unappreciated.

Lastly, I must appreciate my beloved wife Liz, my children; Unilorate, Cyndy, Nyasio Jrn, and Shantel; and my friends for backing me up with full support for the long list of requirements for servicing this undertaking. To my uncle Jeconia Atieno, I value your support and encouragement whenever I was down.

Even to those not mentioned here for reasons of deficiency in space, I say "*Thank you for willing to sacrifice so much so graciously.*" And more so, to God. Without Him, I would not have this opportunity and blessing.

DEDICATION

My maternal Grand-Pa, the late Josiah Athieno Acholla, “You went not to school; you lived your life supporting vulnerable children access education” *I celebrate you posthumously!*

ABSTRACT

The National Transport and Safety Authority (Operation of Motorcycles) Regulations, 2015, is a Kenyan comprehensive plan designed to address safety in the motorcycle sector. Despite this, there still exist high rate of motorcycle related fatalities. Whereas insufficiency of specific regulatory policies have been blamed for motorcycle injuries, very little information exist to support universal assessment of compliance with the provisions of these regulations, inhibiting the ability to restructure and repackage them. The purpose of this study was therefore to assess the *bodaboda* motorcyclists' compliance to a specific regulations. Specifically, the study sought to: Assess the level of adherence to the 15 regulations provided for in the policy by the *Bodaboda* Motorcyclists; Examine factors that determine compliance to the provisions of the policy and; Evaluate the SACCO model provided for in the policy. Conducted in Mbita sub-County, with poor roads and several islands necessitating motorcycling as a means of motorized land transport, the study was anchored on descriptive design and guided by Goal Framing Theory suggesting that goals frame the way people process information and act upon it. The study population was 2000 *bodaboda* riders, amongst them 10 special riders who were leaders of various *bodaboda* associations in the area and six traffic police officers. Using Krejcie & Morgan table, 322 *boda boda* riders, six traffic officers and 10 heads of *boda boda* groups formed the sample size. The sub-County was stratified into existing five County Assembly Wards from which systematic sampling was employed to select the 322 riders from the wards based on *bodaboda* population per ward. Quantitative data on compliance to the policy was collected using structured questionnaires presented and analyzed on a binary scale. Qualitative data on factors determining compliance and the role of SACCO model of the policy was collected using key informant interviews and Focused Group Discussions targeting the 10 *bodaboda* group/associations' leaders and the six traffic officers. Qualitative data was analyzed through coding which generated themes relevant to the objectives. The findings revealed mixed results of compliance to each of the provisions with child helmet scoring the lowest (0%) while compliance to 'all time rear number plates' visibility scoring the highest (97.2%). It further revealed that, depending on how actors in the motorcycle industry framed their goals, costs, corruption, bureaucracy, mistrust, ignorance, comfort, hygiene, expectations, security, culture, religion, exploration, misunderstanding, carelessness, conflict of laws and political interference determined compliance with the regulations. It also emerged that SACCOs played a very important role in riders' behavioral change, social protection, economic enhancement, political empowerment as well as guaranteeing them physical security, which in-turn influenced their compliance to the regulations. To improve compliance the study suggested the need to: adapt gradual and piecemeal enforcement of the policy; enhance public information campaigns; empower SACCOs to enhance complete policy compliance; establish training institutions specific to motorcycles in the sub-County; include motorcycling in the secondary syllabus; and exhaustively relook at the law to address all variations. With such findings, it is hoped that, other than contributing to the on-going scholarly debates, the study will be a basis for policy initiative on the motorcycle transport safety in Kenya.

TABLE OF CONTENTS

DECLARATION	i
ACKNOWLEDGEMENT	ii
DEDICATION	iii
ABSTRACT	iv
TABLE OF CONTENTS	v
LIST OF ABBREVIATIONS AND ACRONYMS	ix
OPERATION OF TERMS	x
LIST OF TABLES	xii
LIST OF FIGURES	xiii
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the Study	1
1.2 Statement of the Problem	7
1.3 Objectives of the Study	8
1.3.1 Main objective	8
1.3.2 Specific objectives	8
1.4 Research Questions	8
1.5 Significance of the Study	9
1.6 Scope of the Study	9
1.7 Limitations of the Study	9
1.8 Theoretical Framework	10
CHAPTER TWO: LITERATURE REVIEW	12
2.1 Introduction	12
2.2 Compliance to Regulations	12
2.3 Factors Determining Compliance	14
2.4 The Influence of the SACCO Model on <i>bodaboda</i> Riders' Compliance	18
CHAPTER THREE: METHODOLOGY	22
3.1 Research Design	22
3.2 Study Area	22
3.3 Target Population	24
3.4 Sample Size	24

3.5 Sampling Techniques.....	24
3.5.1 Stratified Sampling	24
3.5.2 Systematic sampling	25
3.5.3 Purposive sampling.....	26
3.6 Data collection	26
3.6.1 Observation	26
3.6.2 Questionnaire Interview.....	27
3.6.3 Individual In-Depth Interviews (IDIs).....	27
3.6.4 Focused Group Discussions (FGDs).....	27
3.7 Data Analysis and presentation.....	28
3.8 Validity and Reliability.....	29
3.9 Ethical Considerations	29
CHAPTER FOUR: AN ASSESSMENT OF THE LEVEL OF COMPLIANCE TO THE PROVISIONS OF THE REGULATIONS	31
4.1 Introduction.....	31
4.2 Valid driving license issued by the Authority.....	31
4.3 Insurance	34
4.4 Protective gears.....	35
4.4.1 Helmet.....	35
4.4.1.1 Rider Helmet	36
4.4.1.2 Passenger Helmet.....	37
4.4.1.3 Child Helmet.....	39
4.4.1.4 Helmet Labeling.....	40
4.4.1.5 Helmet Colour.....	40
4.4.2 Reflective Jacket	41
4.4.2.1 Riders’ Reflector Jackets	42
4.4.2.2 Passenger’s Reflector Jackets	43
4.4.2.3 Labeling of Reflector Jacket(s).....	44
4.4.2.4 Important considerations for protective gears.....	44
4.4.3 Hygiene of Protective Gears	45
4.5 Number of Passengers Carried.....	47

4.6 Passengers Sitting Style	50
4.7 Day Headlights.....	51
4.8 Loads and Passengers to be carried	53
4.9 All Time Rear Number Plates Visibility.....	55
4.10 Overtaking.....	57
4.11 Observation of all Traffic Rules	58
4.12 Parking Areas.....	59
4.13 Membership of a body corporate (SACCO Model).....	60
4.14 Conclusion	61
CHAPTER FIVE: FACTORS DETERMININGNON-COMPLIANCE (OR	
COMPLIANCE) TO THE PROVISIONS OF THE REGULATIONS.....	63
5.1 Introduction.....	63
5.2 Valid Driving License.....	63
5.3 Insurance.....	69
5.4 Protective Gears	73
5.5 Carrying Capacity and Passenger Sitting Style	76
5.6 Day Headlights.....	82
5.7 All Time Rear Number Plates Visibility.....	83
5.8 Overtaking.....	84
5.9 Parking areas.....	86
5.10 Membership to a Body Corporate (SACCO Model)	86
5.11 Conclusion	90
CHAPTER SIX	92
INFLUENCE OF SACCO MODEL ON THE MOTORCYCLE RIDERS' (NON)	
COMPLIANCE TO THE REGULATIONS.....	92
6.1 Introduction.....	92
6.2 An Overview of SACCO Movement.....	92
6.3 The SACCO structure in Mbita sub-County.....	93
6.4 Influence of SACCOs on Riders' Behavior Change.....	94
6.5 Influence of SACCOs on Riders' Security	97
6.6 Influence of SACCOs on Riders' Business	100

6.7 Influence of SACCOs on Social Protection.....	104
6.8 Influence of SACCOs on Political Empowerment	107
CHAPTER SEVEN: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	110
7.1 Introduction.....	110
7.2 Summary of Findings.....	110
7.3 Conclusion	112
7.4 Recommendations.....	113
7.5 Suggestions for further research	114
REFERENCES.....	116
APPENDICES.....	123

LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	-	Acquired Immune Deficiency Syndrome
CEC	-	Constituency Elections Coordinator
FGD	-	Focused Group Discussion
GFT	-	Goal Framing Theory
GHSO	-	Governor’s Highway Safety Office
GOK	-	Government of Kenya
IEBC	-	Independent Electoral and Boundaries Commission
KES	-	Kenya Shillings
NACOSTI	-	National Commission for Science, Technology and Innovation
NARC	-	National Alliance Rainbow Coalition
NGOs	-	Non-Governmental Organizations
NTSA	-	National Transport and Safety Authority
NYCDOT	-	New York City Department of Transportation
OCPD	-	Officer Commanding Police Division
SACCO	-	Savings and Credit Cooperative Organization
UN-HABITAT-	-	United Nations Human Settlement Program
VMMC	-	Voluntary Medical Male Circumcision
WHO	-	World Health Organization

OPERATION OF TERMS

- Authority:** The National Transport and Safety Authority established under section 3 of the National Transport and Safety Authority Act. 2012.
- Bodaboda:** Two wheeled motorcycle used for commercial purposes. It has also been used to refer to a process that involves the movement of commuters, goods and services from a given point of origin to a specific destination using a commercial motorcycle. It also stands for the term *Peng'* – a local dholuo version, commonly used in most parts of Nyanza including Kisumu, Homabay, Migori and Siaya counties in reference to a motorcycle and motorcycle transport services.
- Compliance:** Acting in accordance with the provisions of the National Transport and Safety Authority (Operation of Motorcycles) Regulations, 2015. This was measured through comparing practice of motorcyclists with the 15 stipulations of the NTSA (Operation of Motorcycles) Regulations, 2015.
- Child:** A person aged thirteen years and below as provided for in the NTSA (Operation of Motorcycles) Regulations, 2015.
- Customer:** Pillion passenger who is to be ferried or somebody with goods or some work to be done by a *bodaboda* rider at a fee.
- Driving License:** A license to drive a motorcycle issued under the National Transport and Safety Authority (Operation of Motorcycles) Regulations, 2015.
- Load:** For the purpose of this research the term "load" excludes luggage carried by a passenger provided such luggage does not exceed ten kilograms in weight and does not project more than fifteen centimeters beyond the outside end of the handle bars. Such luggage can be carried together with a passenger provided the luggage is properly secured between the rider and the passenger.
- Matatu:** Public Transport System using vehicles.
- Motorcycle:** A motor vehicle with less than four wheels the weight of which unladen does not exceed eight hundred weights.
- Motorcyclist:** A person who drives or guides or controls or is travelling on a motorcycle on the road.
- Numberless Motorcycle:** A motorcycle that has no registration plate fixed to it.
- NTSA:** A body corporate established by an Act of parliament to: advise and make recommendations to the Cabinet Secretary on matters relating to motorcycle transport safety; implement policies relating to motorcycle transport and to plan,

manage and regulate motorcycle transport in accordance with Traffic Act and any other written law.

PikiPiki: A Swahili name for motorcycle and adopted locally

Regulations: The term has been used to mean the NTSA (Operation of Motorcycles) Regulations, 2015.

Regulation: Refers to specific provisions of the NTSA (Operation of motorcycles) Regulations, 2015.

“Returns”: Money paid to motorcycle owner by riders at the end of everyday as a rental fee.

Rider: Anybody in control of a two wheeled motorcycle used for commercial purposes.

SACCO: A SACCO registered under the cooperative societies Act or a self-help group registered with the Ministry of Labour, Social Security and Services.

Stage: A formal or informal place where riders often, either in the morning before they start their trade, during the day when they are free or in the evening before they retire to their homes after a day’s work gather to either tell stories, engage in football gambling popularly known as betting or avail themselves for those passengers not able to see one passing pick them.

Vehicle/Motor Vehicle: Includes a motor vehicle, a trailer and any other conveyance used on the road including motorcycles.

LIST OF TABLES

Table 4. 1. Distribution frequency of riders with valid Driving License.....	31
Table 4. 2. Possession of Valid Driving License and Formal Training Cross-tabulation	32
Table 4. 3. Those in Possession of Insurance	34
Table 4. 4. Having an Insurance policy and status of the Insurance cover.....	34
Table 4. 5. Frequency of Riders having helmet	36
Table 4. 6. Riders having helmet and whether single or a pair of helmet Cross-tabulation	37
Table 4. 7. Riders with properly labeled helmets Cross-tabulation.....	40
Table 4. 8 Riders Having Reflector Jacket(s)	42
Table 4. 9 Customer Jacket Representation	43
Table 4. 10. Reflector Jackets Cleaning Frequency.....	45
Table 4. 11. Helmets Cleaning Frequency.....	46
Table 4. 12. Percentage Representation of Passengers Always Carried at a Time.....	48
Table 4. 13. Number of Children Carried per Trip.	49
Table 4. 14 Distribution Frequency on How Passengers Sit on Motorbike.....	50
Table 4. 15. Headlamp status during the day	52
Table 4. 16. Handling a Customer with Load	53
Table 4. 17. When a Customer with Load Rejects to Hire an Extra-Motorcycle	54
Table 4. 18. Rear number plate Visibility.....	56
Table 4. 19. Riders Overtaking Rating	57
Table 4. 20. SACCO Membership.....	60
Table 4. 21 Summary of Compliance to Each Regulation.....	61
Table 5. 1. Reasons for not having License	64
Table 5. 2. Recommendations on Riding License Compliance	68
Table 5. 3. Reasons why Riders do not have Insurance.....	69
Table 5. 4. Factors Enhancing Non-usage of Protective Gears	74
Table 5. 5. Why Carry More Than One Passenger per Trip	77
Table 5. 6. Why Carry One Passenger per Trip.....	78
Table 5. 7. Day Headlights	82
Table 5. 8. Reasons for SACCO membership	87
Table 5. 9. Reasons for Non-Compliance.....	87

LIST OF FIGURES

Figure 3. 1. Map of Mbita sub-County	23
Figure 3. 2. Sample Size per County Assembly Ward	25
Figure 4. 1. Percentage Representation of Helmet Colour	41
Figure 4. 2. Properly Labeled Jackets.....	44
Figure 4. 3. Types of Number Plates Owned.....	55
Figure 5. 1. Sitting Style Determinants.....	80
Figure 6. 1 Boda Boda Groups hierarchical arrangement in Mbita sub-County	94
Figure 6. 2. Has SACCOs Influenced Riders' Security	98
Figure 6. 3. Reasons for SACCO Membership.....	101

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

BodaBoda transportation is a process that involves the movement of commuters, goods and services from a given point of origin to a specific destination using a commercial motorcycle. Bodaboda - more often motorcycle taxi is a common mode of transport across African countries under different names. In Benin and Togo, they are known as *zemidjan*; in Cameroon, *bendskin*; in Niger *kabukabu*; in Nigeria *okadaor alalok* and *oleyia* in Togo (Nyachieo, 2015). Bodabodas provide public transport services in both rural and urban areas. They are a preferred means of transport as they can easily navigate through traffic and are very fast and sometimes considered affordable to many. In Kenya, both bicycle and motorcycle services are known by the same name, *bodaboda*. However, the name *Peng'* or *ngware* – a local dholuo version, referring to the motorcycle transport services of *bodaboda*, is preferred in Kisumu, Homabay, Migori and Siaya counties of Kenya. The term *bodaboda* will apply for this study. Globally, it is estimated that there are over 200 million motorcycles in operations with South and East Asia taking the larger share of this population.

In a report on Global Status on Road Safety, WHO (2009) identified various key road safety risk factors. These included; speeding, drunk driving, non-use of helmets, the absence of child restraints and weak legislations. Due to road accidents, people riding on roads to earn a living or make journeys to various destinations have gone never to return home, leaving behind shattered families and communities (World Health Organization, 2004). WHO (2009) also reported that pedestrians walking to their private businesses have found themselves victims of motorcycle accidents. It concluded by asserting that despite world countries' attempt to formulate comprehensive policies to cover all the risk factors, the challenge is in the implementation for compliance. However, the report only gave a summary of world countries without specifics. Where an analysis of specific countries was attempted, reference was only made to European countries. African countries were however, lumped as: low-income; middle-income; sub-Saharan Africa or; African countries and discussed collectively. The current research laid emphasis on a specific African country, Kenya.

Motorcycle taxis were not only unique to the developing countries, they were also found in advanced economies of Europe where car ownership is relatively very high and public transportation services more reliable and often of higher standards and quality compared to developing countries (Tuffour & Appiagyei, 2014). Tuffour and Appiagyei (2014) further reported higher compliance to traffic rules in the advanced economies of Europe compared to developing nations. They however, did not give reasons for low compliance as experienced in the low income economies. This study intended to give this explanation missing in Tuffour & Appiagyei's study. There was also evidence of motorcycles in France as confirmed by Pierre's findings on the unpredicted rise of motorcycles and their cost benefit in the city of Paris (Pierre, 2011). Pierre's study was however, more concerned with the costs and benefits considered within parameters of manoeuvrability and time factors, neglecting a very important issue of safety of the actors in the sector. The current study sought to fill this void by establishing compliance level and reasons defining those levels. From such an establishment, reflections could be made on the existing policy for its repackaging in order to enhance compliance. Teigen (2007) reviewed Motorcycle safety in New York City and reported an increase in sales and use of motorcycles in the city. He further underscored the importance of helmets in motorcyclists' safety despite mixed reactions on helmet regulations. He reported that while other states in the United States were expanding their helmet laws to cover all riders, others were limiting their helmet laws to a certain age group. However, Tiegen's study only provided information about state policy and laws that addressed motorcycle safety and their effectiveness without delving in their compliance levels. The current study made a report on the compliance level to the NTSA (Operation of Motorcycles) Regulations which is a formulated motorcycle safety program.

In African countries, the provision of public transport had been dominated by state owned companies. However, state transport companies stopped their operations in the mid-1980s and 1990s leading to the emergence of informal transport services (National Crime Research Centre, 2018). The degeneration in organized public transport system led to rapid growth in non-conventional means of public transportation initially provided by minibuses and shared taxis or vans and more recently by public motorcycles (Kumar, 2011).

Howe (2003) argued that, in Uganda, it is only the operational discipline provided by government institutions that regulated the *boda boda* industry. His study advocated for a government led jurisdiction organized in stage committees with the ability to enforce discipline and hygiene through fines, suspension of membership and the right to operate, and other sanctions as opposed to associations or cooperatives. He argued that cooperatives in Uganda have been defeated by instability and did not see how they could be beneficial to the motorcycle industry. Uganda had had failed cooperative system experiences in the past years (The Uhuru Institute for Social Development, 2013). Goodfellow (2015), on the other hand advocated for an independent cooperatives managed by the motorcyclists themselves as is the case in Rwanda if sanitizing the sector was to be realized. This argument was supported by Rollason (2013) who, in his study, argued that the motorcycle sector in Rwanda was much more tightly regulated than in the neighboring countries with riders enlisted as members of co-operatives or associations. This, he reported, ensured that riders were properly documented and licensed. His study also reported that the SACCOs were independent entities, which collaborated with the state making them an effective tool in motorcycle management. Goodfellow & Smith (2013) also argued that organizing the Rwandan motorcyclists in cooperatives, which ensured the use of numbered jackets and developed databases containing the details of all riders and their machines, guaranteed their identity and in turn providing security by incorporating them into the city surveillance system. The two schools of thought however, contradicted with the ability to confuse a Kenyan policy actor. This contradiction called for probing of the efficacy of SACCO model provided for in the NTSA (Operation of Motorcycles) Regulations, 2015 by examining its influence on the Kenyan motorcycle sector.

Motorcycling culture is relatively new to Kenya compared to other countries such as Nigeria, Ghana and Rwanda. It found an impetus with the election of National Alliance Rainbow Coalition (NARC) to power in 2003, which tax exempted importation of motorcycles (Nyachieo, 2016). Since then, public motorcycle enterprise has become a source of livelihood to many households and a source of passenger transport and running of office errands in Kenya (Kenya National Bureau of Statistics, 2009). The history of motorcycle transport in Kenya can be traced back to 1960's when Kenya and Uganda, at their border town of Busia, developed the *boda-boda* which is part of the African bicycle culture (Nyongesa, 2014). The bicycle owners would shout

out “*boda-boda*” meaning border-to-border to potential customers hence the name (Odero, 2009). This mode originated from a need to transport people across the “no-man’s-land” between the border posts without the paperwork involved in using motor vehicles crossing the international border. Most of the bicycles have so far been replaced by motorbikes, though maintaining the name *boda-boda*. Statistics has it that there were less than 100 000 registered motorcycles in Kenya by 2007 (National Crime Research Centre, 2018). This number increased to about 700 000 by 2016 (Nyachieo,2016), to about 1,393,390 in 2018 (NTSA, 2018). This number has so far increased to nearly two million with the majority operating in the rural areas where there exist poor roads and road network (NTSA, 2020).

The rapid increase and use of *boda boda* motorcycles in Kenya is attributed to various factors including: zero-rating of all motorcycles by the government in 2008; current transport system’s inability to fully meet the commuters’ transportation needs; high levels of unemployment forcing mostly the young people to embrace *boda boda* business as a form of employment and; the ease with which one can get into the *boda boda* business (Nyachieo, 2016). Unfortunately, the industry’s vast growth has been accompanied by increasing road traffic accidents that have threatened the safety of Kenyan motorcyclists (Chitere & Kibua, 2004). The World Report on Road Traffic Injury Prevention recommended the enactment and enforcement of policies and regulations in order to manage and reduce fatalities in the road transport (World Health Organization, 2004). Despite the enactment of NTSA (Operation of Motorcycles) Regulations, 2015 in Kenya, there was still statistical evidence that placed motorcycle related fatalities at 18% of the total road fatalities in Kenya (NTSA, 2015). This percentage increased by 48% in October 2020(NTSA, 2020).In a study of *Bodaboda* Motorcycle Transport and Security Challenges in Kenya the National Crime Research Center (2018) identified Homabay County as one of the counties with high rate of *bodaboda* motorcycles related accidents. The national percentage increase manifested itself in Homabay County which experienced a positive deviation of 39% in motorcycle related accidents between 2019 and 2020. Of all the motorcycle accidents recorded in Homabay, Mbita Sub-County contributed the highest percentage standing at 18.6%, Homabay town 16.4%, Suba South 14.8%, Kasipul and Kabondo 15.2%, Rangwe 17.7%, Ndhiwa 13.4% and Karachuonyo 16.9% (County Government of Homabay, 2020) These statistics could however, be an underestimation as a huge portion of motorcycle accidents were never reported

and hence not captured in the county data. These reports however, only reported percentage proportion motorcycle related accidents without deeper analysis of compliance levels by riders with the NTSA regulations limiting its ability to explain reasons for (non)compliance. The current study intended to ascertain the compliance level and explain reasons behind the same.

In exercise of the powers conferred by section 54 of the National Transport and Safety Authority Act (GOK, 2014), the Cabinet Secretary for Transport and Infrastructure made the “*National Transport and Safety Authority (Operation of Motorcycles) Regulations, 2015*,” as a comprehensive plan to re-organize the Kenya’s *bodaboda* sector (Government of Kenya, 2015) and also to comply with the WHO’s interventional proposal. The regulations, in regulation 6, provides that every rider must; (a) have a valid driving license issued by the Authority; (b) ensure that they shall not ride or carry a person on a motorcycle without the prescribed protective gear properly fastened (provisions in regulation 4); (c) not carry more than one person at a time; (d) ensure that passengers are carried on a proper seat with footrests securely fixed to the motor cycle behind the rider's seat; (e) ensure that a passenger sits astride on the motor cycle; (f) ensure that the headlights of the motorcycle are on at all times when riding; (g) ensure that loads and passengers are not carried at the same time; (h) keep the protective gear in a clean, dry and generally wearable condition; (i) ensure that the rear number plates are visible at all times; (j) overtake on the right hand side and not to overtake in the same lane occupied by vehicle being overtaken; (k) observe traffic lights; (l) observe all traffic rules; and (m) not park in undesignated areas. It further provides in regulation 9 that; (1) Any person engaging in business of motorcycle taxis services shall be a member of a body corporate which shall have a minimum of 100 motorcycle taxis and (2) For two wheeler taxis, the name of the group or SACCO which they are members of must be indelibly printed in letters not less than four inches in height on the back of their jackets. A reconnaissance study held at the proposal stage of this research revealed that riders were aware of the existence of this regulations. This was also confirmed by their leadership when all of them revealed to be aware of the regulations when they were asked if they were aware of the existence of the regulations during in-depth oral interviews.

Despite the existence of NTSA Regulations, the sector is at cross roads and faced with various dangers of crashes and exposure to health risks (Nyongesa, 2014). Most studies (Nyongesa,

2014; Odiwuor, Nyamusi, & Odero, 2015; Asingo & Mittulah, 2004; Green, 2008; Odero, 2009) on the sector have however, concentrated on the history, development and results of the *boda boda* transport in Kenya leaving out the regulatory aspect hence ignoring the relevance of compliance and factors that contribute to compliance or non-compliance to the NTSA Regulations, by motorcyclists. This study sought to fill this gap.

Studies have shown that correct use of motorcycle helmets decrease the risk and severity of injuries while reflector jackets increases the visibility of the riders (Matheka , Omar, Kipsaina, & Witte, 2015). A study on *boda-boda* habits in central and Rift Valley indicated that less than one third of riders use them (Manyara, 2013). Moreover, the traffic police; tasked with implementation of transport policies did not bother with *boda-boda* riders but were focused on the *matatu* operators with the capacity to bribe with big sums of money when found on the wrong side of the law (Manyara, *ibid*). In other words, those who should enforce the road safety policies turned their eyes away from their responsibility focusing on those activities they saw as having huge monetary returns to them leaving the motorcyclists to operate in a more or less an uncontrolled atmosphere characterized with carelessness and anarchy. The study sought to analyze how behavioral tendencies coupled with exogenous factors influenced the application of NTSA (Operation of Motorcycles) Regulations, 2015 with specific reference to Mbita sub-County, Kenya.

A research done to assess the training and safety status of motorcycle transportation in Kakamega County in Kenya showed that there exist a significant statistical relationship between injuries and accidents as a result of improper training of riders, riding without valid licenses and general disregard of the law (Luchidio, 2015). The research went further to show the existence of a gap in training the actors in the industry on the safety measures existing in law and the implementation of the same. In another research done in Kitale to study the motorcycle operators' Compliance with Road Safety Regulations, Nasong'o (2015) reported that a substantial number of riders acquired their skills informally and hence did not have licenses. However, both Luchidio's and Nasong'o's findings were too general as they were based on the provisions of the National Transport and Safety Authority Act of 2012 which was a general Act to the whole transport industry. Their research did not focus on NTSA (Operation of

Motorcycles) Regulations as outlined in the 2015 policy. The current study concentrated on the NTSA (Operation of Motorcycles) Regulations, 2015, specific to the motorcycle transport industry. In Mbita, the traffic composition is mixed comprising of motorcycles, taxis, minibuses, lorries and boats. Due to its geographical nature of poorly maintained roads, seven islands and hilly terrain, the transport system in the region is dominated by taxis in the mainland, boats along the beaches and motorcycles within the islands and other parts of the sub-County that were inaccessible by vehicles (Mbita CEC, 2012). This terrain therefore makes it difficult for the traffic police to effectively fulfill their mandate under the NTSA (Operation of Motorcycles) Regulations, 2015. It is also a rough terrain for research of this nature that may entail a lot of movement. Very little research, specific to this area and Kenya in general, assessing the application of NTSA (Operation of Motorcycles) Regulations, 2015 exist. This study sought to fill the gap.

1.2 Statement of the Problem

Though relatively new in Kenya, compared to other countries in sub-Saharan Africa, public motorcycle enterprise has become a source of livelihood to many households and a source of transport for passenger and office errands. The enterprise found an impetus with the election of National Alliance Rainbow Coalition (NARC) to power in 2002, which exempted importation of motorcycles from taxes. Despite the existence of the National Transport and Safety Authority (Operation of Motorcycles) Regulations, 2015 designed to address safety in the motorcycle sector in Kenya, the sector and specifically in Mbita is still experiencing an ever increasing cases of crashes resulting into injuries and fatalities. Whereas insufficiency or total absence of specific regulatory policies has been blamed for traffic injuries, very little has been done to universally assess compliance with the NTSA (Operation of Motorcycles) Regulations, 2015 in the *bodaboda* industry. This has repressed the ability to provide a feedback on its contribution to the safety of the sector for purposes of restructuring and repackaging of the motorcycle safety policy. Most studies on public motorcycle transport in Kenya have focused more on its socioeconomic impacts, growth and expansion as well as the legal provisions of the National Transport and Safety Authority Act of 2012 which is a general Act for the whole Transport Industry but failing to contextualize specific provisions of the NTSA regulations, 2015 with regards the key issues determining compliance with its provisions and the influence of the SACCOs model proposed in

the regulations on riders' compliance. There is therefore lack of knowledge on the effectiveness or the shortcomings of this policy and therefore no basis for recommendations on how to improve rules around road safety for *bodaboda* operators. This study assessed how *bodaboda* riders have or have not complied with the specifics of this policy; factors determining their behavior; and the influence of the SACCO model, provided for in the regulations, on riders' compliance. This specificity is missing in most studies conducted in the sector so far.

1.3 Objectives of the Study

1.3.1 Main objective

The main objective of this study was to;

Assess the *bodaboda* motorcyclists' compliance with the National Transport and Safety Authority (Operation of Motorcycles) Regulations, 2015 in Mbita Sub-County, Kenya.

1.3.2 Specific objectives

The specific objectives of this study were to;

1. Assess the level of compliance to the 15 regulations provided for in the NTSA (Operation of Motorcycles) Regulations, 2015 by the *Bodaboda* Motorcyclists in Mbita sub-County.
2. Examine factors that determine compliance to the provisions of the NTSA (Operation of Motorcycles) Regulations, 2015 by motorcyclists in Mbita Sub-county.
3. To evaluate the influence of the SACCO model on riders' compliance to NTSA (Operation of Motorcycles) Regulations, 2015 in Mbita sub-County.

1.4 Research Questions

This Research was premised on the following three questions;

1. What is the level of compliance to the provisions of NTSA (Operation of Motorcycles) Regulations, 2015 by motorcyclists in Mbita sub-County?
2. What are the factors determining compliance to the provisions of NTSA (Operation of Motorcycles) Regulations, 2015 by *bodaboda* motorcyclist in Mbita sub-County?
3. How has the SACCO model influenced riders' compliance with the NTSA (Operation of Motorcycles) Regulations, 2015 in Mbita sub-County?

1.5 Significance of the Study

The findings of this study can be useful to policy makers in the *bodaboda* transport sector. This is because they can enhance knowledge on the extent to which *bodaboda* riders comply with the NTSA Regulations and have a better understanding of issues determining compliance. This way, it provides a feedback on its contribution to the safety of the sector for purposes of restructuring and repackaging of the motorcycle safety policy. It is useful to motorcyclists by suggesting best practices which, if embraced, are likely to enhance their safety. To motorcycle owners, the study presents to them the dynamics and legal issues that arise during their operations. This way, they can equally join in promoting compliance. The government, as the policy initiator and the implementing agency, will be able to understand areas of laxity as well as the deficiencies faced by her officers in implementation so as to adjust accordingly. By and large, the research has enriched the existing body of knowledge on motorcycle and road safety regulations. It is therefore relevant to scholars in search of understanding on the application of NTSA regulations in enhancing *bodaboda* safety.

1.6 Scope of the Study

This research was conducted in Mbita sub County of Homabay County, Kenya. Mbita is one of the eight sub counties in Homabay County. The sub-County is composed of several islands namely; Rusinga, Mfangano, Takawiri, Sukru, Ngodhe, Ringiti and Remba. This research did not include the whole body motorcycling but zeroed down to two wheel commercial motorcycles since this was the predominant type operating in Mbita Sub County. The study was limited to the safety concerns in *bodaboda* motorcycle transport in lieu of the National Transport and Safety Authority (Operation of Motorcycles) Regulations, 2015 as the specific policy relevant in attempting to arrest traffic injuries in the motorcycle sector. Other regulations mentioned were purely for purposes of illustrations or comparison. Furthermore, the study confined itself to rider and traffic police responses and did not include passenger's responses.

1.7 Limitations of the Study

Whereas passengers and motorcycle owners are players in compliance to motorcycle regulations, their views were not directly captured in this research hence limiting depth. However, through observations and listening to the talks between riders and passengers at the point of boarding, passengers' behaviors which either enhanced or limited compliance could be inferred. Also, some of the police officers, *bodaboda* leaders and riders who were interviewed owned

motorcycles and gave a glimpse of the motorcycle owners' perspective. Lastly, the assumption that all the respondents were able to read and understand English hence not translating questionnaires into the local dialect might have led to variations in interpretation and understanding of questions by the respondents. However, trained research assistants who were from the local community was used to minimize chances of question misinterpretation as they would translate where there were difficulties.

1.8 Theoretical Framework

The study was anchored on the Goal Framing Theory (GFT). This is one of the compliance theories developed by Lindenberg and defines compliance as a function of powerful model of multi-goals preference formation (Lindenberg & Steg, 2007). The core assumption of the theory is that actors frequently pursue several heterogeneous goals at the same time, whether these goals are chosen autonomously or triggered by their environment. He postulated that goals “frame” the way people process information, herein referred to as regulation policy, and act upon it (Lindenberg & Steg, 2007). Lindenberg's view was further sharpened by Etienne who pointed out the limitations of his theory in terms of it ignoring the role played in compliance behavior by incapacity, ignorance, or misunderstanding (Etienne, 2011). Proponents of this theory and recent theoretical work in Public Policy recognize and understand behavior as a response to an interplay of norms and identity involving elements of both socialization and regulations in a process characterized as a logic of appropriateness. Rather than calculating how available choices help or harm ones interests in the strict meaning of rationalism, actors choose among behaviors based on an assessment of ‘what is the “right” thing to do in this situation for someone like me (Mitchell, 2007).

The theory was instrumental in deciding which data collection tools, which data analysis methods to be employed in the research as well as how to present the data so that the research could yield goals that had been set by the researcher. To this end, it informed the use of multiple data collection tools including questionnaires, interviews, observations and FGDs allowing triangulation of data for purposes of minimizing prejudiced results; the use of content analysis for the analysis of qualitative data and descriptive statistics for quantitative data; and the use of

verbatim as well as tables and figures for qualitative and quantitative data presentation respectively.

This study used Goal Framing Theory (Lindenberg, 2001a, Etienne, 2011) to assess the level of motorcyclists' compliance to the regulations. More specifically, the study attempted the riders' understanding and processing of the provisions of the regulations vis-à-vis their calculated gain depending on how they behaved towards the regulations. This way, their level of compliance, what motivated or demotivated them from complying and how to exacerbate compliance was reported. The study further examined the influence of the SACCO model provided for in the regulations with relation to the goals that were framed by the cyclists in deciding whether to comply or not.

The GFT has been criticized for failing to consider the role played by authority and power in the whole process of compliance by over concentrating on the perceptions of those to be regulated as if they operate in a vacuum (Cialdini & Goldstein, 2004). This criticism however, does not form a strong basis by which the theory can be rejected for a study of this nature. When analyzed closely, the theory tends to suggest that authority and power are some of the factors considered in goal formation. For this reason, the study interrogated the traffic officers in Mbita sub-County with an aim of understanding how their existence in the *bodaboda* sector influenced the choices made by the motorcyclists towards compliance to the NTSA regulations, 2015.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Motorcycles represent the fastest growing means of transport both in rural and urban areas across various states of the world (Odiwuor, Nyamusi, & Odero, 2015). Motorcycle transport provide access to areas hitherto inaccessible by motor vehicle transport mode. This is due to their nature: they are small in size compared to vehicles and faster compared to bicycles. This allows for optimum utilization of time as a valuable resource.

Road traffic accidents account for more than one million deaths annually worldwide, the great majority of which (up to 85%) occur in middle and low-income countries (Khan, Aziz, etal, 2008). Almost half of all deaths on the world's roads are among those with the least protection, motorcyclists taking the biggest share at 23% (WHO, 2015). This happens despite most countries endorsing the recommendations of the *World report on road traffic injury prevention* (WHO, 2009) which gave guidance on how countries could implement a comprehensive approach to improving road safety and reducing the death toll on their roads. These worrying trends have encouraged a number of scholars to explore the efficiency and efficacy of various policies formulated in this front. The present study used this relevant literature as a foundation for contextualizing this work and to identify gaps that have not been filled by the existing literature. The sections that follow hereunder review literature based on the study objectives to justify why and how the study aims were drawn from the existing gaps. The three sections included: adherence to regulations; key issues determining compliance and how to enhance the same; and the contribution of SACCO model in sanitizing the *bodaboda* transport sector.

2.2 Compliance to Regulations

A common theme in road safety and road use in low and middle-income countries is a widespread lack of compliance with traffic laws and related legislations (King, 2015). A key element of the success of road crash prevention strategies in high-income countries has been the achievement of safer road user behavior through compliance with traffic laws (Tunde, Taiw, & Matanmi, 2012). However, the realization of 100% compliance even in these developed states is not realistic as depicted by Ohio Department of Public Safety; Governor's Highway Safety Office(2006) blaming traffic police corruption and inefficiency. This evidence lack of total

compliance to regulatory policies in the motorcycle sector in countries regarded advanced. These countries are however, contextually different from Kenya where the current study is based.

Commercial motorcycles have become a very important part of the Nigerian transport and economic system (Ogunsanya & Galtima, 1993). An attempt to abolish *okada*, as they are called in Nigeria, in Lagos in 2007 (Kumar, 2011) and the Kalabar Metropolis in 2009, as a result of high casualties, led to a total mess in the transport and production sector due to delays in reporting to work and an increase in criminality as a result of loss of jobs. The basic question that followed therefore was whether these motorcyclists complied with basic requisite rules and what could be done to enhance compliance. In order to answer this question, a research was designed and which reported total (100%) compliance with minimum age limit, number plate registration and motorcycle engine capacity but found partial compliance rate with driver license, crash helmet usage, legal passenger load and union membership (Tunde, Taiw, & Matanmi, 2012). This research was however, done long before Kenya formulated her motorcycle sector specific policy. The current study sought to assess Kenyan riders' behavior towards a specific regulatory policy, as expressed by riders in Mbita sub-County, more than eight years after the Nigerian experience.

In Rwanda, the *bodaboda* sector is much more tightly regulated than in neighboring countries with all *motari*, as the riders are known in Rwanda, being members of co-operative or syndicate organizations (Rollason, 2013). Good fellow (2015) have argued that this tight administrative arrangement has tamed a sector that was hitherto rogue; instilling discipline on riders and enhancing compliance level. This report was however, specific to Rwanda which has a different political history, culture and arrangement to Kenya in which the current research is based. Russell, (2012) described Rwanda as lacking some of the basic freedoms and civil rights that are considered essential to a nation, particularly by Western democratic powers. He however, noted that the administration she chose worked for her largely as a result of President Paul Kagame's benevolent dictatorship especially as seen through the lens of those things which are most essential for stability, security, and development in a post-conflict setting. Kenyan democratization process, on the other hand, has settled in the comfortable inertia of complacency, largely attributable to the proliferation of a donor-driven industry around election

financing, monitoring, observation and civil society building invariably yielding the phenomenon of pseudo-democracy reproducing fragile participation and governance systems (Khadiagala, 2011).

National Transport and Safety Authority (Operation of Motorcycles) Regulations, 2015, is the Kenyan legislation which gave the legal framework through which the motorcycles operated by defining the sector and specifically providing for safety and organizational measures that intended to not only protect the motorcyclists but all the road users. The policy considered motorcyclists as distinct from other road users. Odero (2009), in a paper presented to a transport workshop in Ghana, argued that motorcycle and bicycle taxis were emerging as important means of public transportation in many African cities but their operations characterized by poor regulation and other precarious practices with little being done to make their use safer. He however, did not give a deeper explanation to this phenomenon. Moreover, his paper was done before the enactment of the NTSA Regulations, 2015. In another research, Manyara (2013) argued that apart from neglected and poorly designed roads, the Kenyan motorists, especially motorcyclists, always exhibited poor driving culture which violated traffic rules. His conclusions were however based on the broader Traffic Act general to all road users. The current research assessed compliance to the NTSA Regulations, 2015 specific to the motorcycle sector.

2.3 Factors Determining Compliance

Compliance and noncompliance are complex behaviors. Compliance in road safety is the act of obedience to rules guiding the usage of the roads by road users. The sequential objectives of these rules are; to avoid conflicts among road users; prevent events that are unpleasant to the road users; and mitigate the effects of the unpleasant events. However, compliance to these rules are influenced by certain factors. Lindenberg (1993, 2000a) developed a Goal Framing Theory in an attempt to explain what always leads to compliance or failure to comply. According to his theory, actors anticipate and evaluate the consequences of the options available to achieve a goal, and choose the one that is likely to best satisfy their purpose. It therefore means that one's goals would be framed depending on the situation. Besides, GFT accepts the idea that actors customarily assess options with reference to several, heterogeneous goals. And to keep his taxonomic exercise at a manageable level of complexity, Lindenberg used three broad

categories: the *hedonic* goal (motivation to achieve pleasure and/or stimulation in the accomplishment of a task); the *gain* goal (the motivation to preserve or increase one's resources); and the *normative* goal (logic of appropriateness or doing the right thing) (Lindenberg & Steg, 2007). It is this last goal that most governments envisage that the subjects would pursue and naturally comply with the law. They have always banked their hope on man's rationality that motivates him to be accurate, affiliate and to maintain a positive self-concept. Under rational thinking, man is expected to behave in a compliant and conformity manner to regulations. In an attempt to simplify the theory, Etienne (2011) considered incapacity, ignorance, or misunderstanding as some of the factors playing a crucial role in determining compliance, especially to regulations.

In a paper presented at an international conference on transport and road research held on 16th – 18th March 2016 in Mombasa, Kenya, Starkey argued that regulatory frameworks and enforcement mechanisms were often weak in many countries in Africa, Asia and Latin America giving leeway for many motorcycles not to comply (Starkey, 2016). His paper reported that road traffic injuries were high, often due to poor driver behavior. He blamed the traffic sector for poor regulatory compliance since it was as a result of petty corruption in the sector. Whereas Starkey reported rider behavior and corruption amongst the traffic officers, he did not explain the motivation behind such behaviors which the current study explored.

Like any other situation that calls for adherence, the first entity to examine is the author of that condition to ascertain how best the rule is written and to what extent the author is implementing it for conformity. WHO (2009) in its global status report on road safety argued that compliance to road best practices is affected by most governments' failure to recognize the needs for all road users while enacting transport laws which are not comprehensive enough. Some regulations are incapacitated by not being all inclusive and/or sometimes contradictory to other superior laws of the land such as the constitution. The report also had an issue with the various governments' implementing agencies which in most cases failed to collaborate with other partners in the transport sector. WHO (2009), however failed to explain the motivating factors in governments enacting insufficient policies and implementing agencies,' sometimes, resolve to work in isolation which the current study endeavored to explain. Tyler (1990), on his part, argued that compliance with a law or regulation is influenced by the extent to which individuals accord

legitimacy to the enforcement agencies. Legitimacy is a normative assessment by individuals of the appropriateness or right of enforcement agencies to restrict their behavior. Tyler's study demonstrated that compliance is higher when individuals accord a high level of legitimacy to the enforcement agencies (Tyler, 1990a, 1990b). These studies seemed to have overconcentrated on legitimacy which is not the only factor influencing compliance. This study intended to unearth other factors, other than legitimacy, that influenced compliance to regulations.

Analyzing factors affecting compliance with residential regulations in Jordan, which can equally be applied to the field of transport, Alnsour & Meaton, (2009) identified economic factors which defined awareness and administrative factors including monitoring and enforcement as some of those factors that would determine compliance level towards regulations. In the same manner, though using fisheries regulations as the point of reference, Viswanathan, Abdulah, Susilowati, & Ticao, (1995) explained that compliance or lack of it was rational as individuals behaved in a certain manner towards regulations in reference to utility expectation. That individuals committed crimes if the expected utility from committing the crime exceeded the utility from engaging in legitimate activity and vice versa. For those who complied, despite minimal returns for legitimate activity, the researchers qualified the importance of socialization processes as a determinant in behavior. They explained that compliance with rules and regulations was related to both the internal capacities of the individual and external influences of the environment. The socialization process was defined as the linkage between the individual and society. They qualified the role of cognitive and social learning as factors in individual behaviour. Cognitive had to do with an individual's personal morality and level of moral development. Social learning theory on the other hand focuses primarily on the conditioning effects of the environment and included the key variables such as peers' opinions, and the extent of social influence an individual encounters.

Ogunsanya & Galtima (1993), did a study on the use of motorcycle as means of public passenger traffic in Yola town, Adamawa State, Nigeria. The study identified economic depression and inadequate transport facilities as some of the factors that gave rise to the use of motorcycles as means of public transportation in Nigeria. In a similar manner, Adesanya (1998) focused on the evolution of motorcycles for public transportation in Ibadan, Nigeria. He looked at the socio-economic profiles of motorcycle operators, the characteristics of public motorcycle operations

and the impact of motor bikes on passengers, especially in terms of fares and safety. He generally observed the motorcycle transport as a “bottom up” response to a ray of problems facing African countries ranging from unemployment, shortage of transport facilities especially private vehicles as a result of low incomes, poor road infrastructure and convenience resulting from poor planning that constrain access to some areas using motor vehicles. This study however, concentrated on the economic value of *bodaboda* transport ignoring issues of compliance to regulations for the safety of users of the mode. This research concentrated on this component missing in Adesanya’s report. Ogunbodede, (2008) while studying the problems, challenges and prospects of urban road transportation in Nigeria for the period 1960 to 2006 concluded that the use of motorcycle as public mode of transportation should be institutionalized and the formulated policies guiding the regulations and use of this mode should be publicized and monitored so that its use would not affect negatively the commuters’ mobility problems. Similarly, he argued that the government should provide enabling environment that would guarantee efficient coexistence and adequate movement between motorcycles and vehicles while providing transport services. Though he also agreed with the argument propounded by other scholars (Mputhia, Mukulu , & Keriko, 2012), that ignorance was the major challenge facing compliance with laws and regulations, their argument was more or less biased towards blaming the authority as the cause for this ignorance and hence the cause for non-compliance. This study expanded this discussion by looking at the role equally played by riders, passengers and motorcycle owners in the sector in compliance.

The success of regulations depends heavily on the system’s culture to protect against compliance breaches and steps that can be taken to build and foster stronger ethical culture. The overall culture within which compliance operates can serve to foster and enhance compliance efforts, or, at its worst, it can impede or render compliance efforts meaningless. Grand (2005) discussed this concept of organizational culture in relation to compliance. He concluded that a system must maintain a positive culture of compliance which positively reward problem solvers and negatively reward problem creators. It must also ensure that regulatees realize that implementors will not accept the covering-up of problems, especially non-compliance. This study however, concentrated on explaining what needed to compose regulations than explaining why people

would opt to obey or disregard the provisions of a well written regulation. This study looked at this omission.

2.4 The Influence of the SACCO Model on *bodaboda* Riders' Compliance

The formal assertion by citizens in favor of cooperatives began during the colonial period aiming to increase the farmers' bargaining power, through pooling their produce and voices (ActionAid, 2013). Over the years, cooperatives' functions have gone beyond the struggle for fair crop marketing for farmers (G.O.K, 2014) to include: the enhancement of community social cohesion; enhancement of membership economic base; offering a spring board for political participation and general education and dissemination of information to co-operators (Banturaki, 2012).

In Africa, savings and credit societies or associations have a long history. They may not have been set up in accordance with the known principles of cooperatives, but they existed and were serving a closely similar purpose (ActionAid, 2013). They had different names according to the localities, but the impetus was the same across the board (Schwettmann, 2014). For example, SACCOs were called *Ubuntu* in Southern Africa or *Umoja* in East Africa (*ibid*). There were also the insurance type which pooled resources to help during sickness or bereavement (G.O.K, 2014). Each member of these groups would raise some money for a pre-determined period to pool enough for their purposes over time. Whereas these could be compared to modern health insurance schemes, they would also lend to their members at an interest when they had funds in excess (International Labour Organization, 2010). SACCOs are therefore grounded in African traditional values but adapted to a modern context. A SACCO is a co-operative society, whose objective is to encourage its members to save, thereby creating or accumulating capital, which can then be lent to members at a reasonable interest rate (Mwangi, 2011). It does this with a lot of ease as opposed to banks which are characterized with long, and sometimes unnecessary, formalities (International Labour Organization, 2010). They do not primarily seek to maximize profits but aim at creating both economic, social and societal benefits (ActionAid, 2013). This therefore means that they put people and their communities, rather than profit, at the center of their aspirations. They share common values such as democratic control, voluntary participation, flexibility, self-help, self-reliance, solidarity, and community ownership (ActionAid, 2013).

A SACCO is a legal form of a cooperative society whose business is to provide financial services to its members and are owned by their members through payment of share capital and membership fees to the institution (Mwangi, 2011). It is owned and governed by members who have the same common bond. In the strict meaning SACCO's membership is voluntary and open to all that belong to a group, regardless of race, religion, color, creed, and gender or job status. These members agree to save their money together in the SACCO and to make loans to one another at reasonable rates of interest. Cooperation and cooperative derive their origin from the idea of mutual understanding, respect and dependence with the major emphasis being self-help. Thus people cooperate because they realize that it's extremely difficult to achieve some goals by working alone. Humanity is ever faced with scarcity in almost all aspects of life; economically, politically and socially. By working together, people strive to achieve much by coordinating their efforts with each other and taking concerns of and talents of others into considerations. Wealth creation and making life enjoyable requires cooperation with each other in order to make the most valuable use of limited time, effort and resources. It is against this background that *boda boda* SACCOs were introduced in Kenya.

While regulation is an important tool of sustainability policy, it adds no value if it is not followed by those to be regulated. Individual compliance with regulation is motivated by a variety of factors, only some of which are targeted by regulation (Amanda, 2010). People's behavior focuses upon fear of penalty or desires for compliance, but individual behavior is also affected by beliefs and values or by perceived opportunities for greater satisfaction. As discussed earlier, Tyler (1990a, 1990b) held that individuals were motivated by self-interest and that their behavior was shaped through changes in tangible incentives and penalties. This, therefore, means that compliance may be encouraged by increasing the threat so that it outweighs any perceived benefits of disobedient behavior. However, this model had its shortcomings as it failed to explain situations where low threats still yielded compliance or even where the high threats were ignored and regulations not complied to. This study intended to fill this void by finding out other factors other than that discussed by Tyler which affected compliance. Amanda (2010), argued that Community-based social marketing has proven to be an effective method of affecting actual attitudinal and behavioral change. He argued that it does this by taking an interactive approach to information delivery. It focuses on overcoming barriers to change by informing the public about

issues so as to influence voluntary behaviour to benefit individuals. It must be supported by robust market research which identifies the target audience and its behavioral patterns. By making sure compliance risk is understood, it must be leveraged more effectively, and internal and external advisors involved in offering new ways to manage compliance. It does this through the use of behavior change tools drawn from social science research including: seeking commitments from participants; offering prompts as mental cues to encourage change and its benefits; developing and reinforcing norms; using captivating, credible and effective communication strategies; and using incentives that support the behavior change sought (McKenzie-Mohr & Smith, 1999). This is the theory behind the SACCO model proposed in the regulation. Starkey (2016) advocated for motorcycle operator associations which he saw as having the ability to improve compliance and safety through self regulation. Starkey however, did not explain why, despite being informed of the benefits of joining forces together, regulatees may still opt to avoid joining such associations. Other than discussing the role SACCOs have played in the motorcycle transport, this research extended Starkey's research by explaining why, despite the legal requirement to be members of SACCOs, some riders ignored the obligation.

In another research to identify causes of increase in accidents (Ohio Department of Public Safety; Governor's Highway Safety Office, 2006), it was established that non-compliance to traffic regulations was the major reason. The study identified implementation/enforcement of the rules, level of training of the motorcyclists, awareness of the rules and the associated benefits, and mismanagement of motorcyclists' cooperatives as some of the factors influencing the riders' desire to comply with the traffic rules. Closely associated with the above, as cause of non-compliance to traffic regulations by motorcyclists, was the desire to explore. This desire has been discussed as the "pushing your limit" concept in motorcycling industry (Watson , Tunnicliff , White, Schonfeld , & Wishart, 2007) and argued that it was a risky undertaking even though others that it enhanced the rider skills. In that process of pushing one's limit, there was likelihood of disobeying traffic rules of speed limits, overtaking and load limits amongst other traffic provisions (Manyara, 2013). Whereas the GHSO's study mentioned motorcyclists' cooperatives, it overlooked the role the model plays in the motorcycle industry. This research intended to fill this gap by looking at the cooperative model from a contributory perspective to the motorcycle industry. The design and governance of compliance functions is changing rapidly, prompting

some hard questions regarding how well these activities are integrated across the system and the effectiveness of oversight bodies. Regulations must be supported by a system, including law enforcement personnel and courts, meant to ensure that policy directives are carried out and responded to in the manner prescribed (Siddiki, 2011). It is not only the existence of these governance institution but their transparency, fairness and legitimacy accorded to the enforcement agencies. There is also need to proactively instill a strong sense of accountability for managing and mitigating compliance risks across members of the system. Goodfellow & Smith (2013) extensively discussed this strategy with reference to the successes of enhanced responsibility through solidification of *boda boda* cooperatives in Rwanda. In the 1990s and 2000s, the motorcycle taxi industry grew apace in Kigali, and this soon became associated with theft, drugs and ‘disorganisation’ among urban youth (Rollason, 2013).

The government responded by introducing strict regulations inclusive of SACCOs membership and a security department within the *taxi-moto* association itself, as well as encouraging them to undertake ‘voluntary’ work such as planting trees and building houses for genocide survivors (Goodfellow & Smith, 2013). A problematic industry was thus solidified and turned to the government’s advantage, incorporating the motorcyclists into city surveillance mechanisms and local development plans. Goodfellow & Smith (2013) proceeded to extensively discuss the role played by SACCOs in the Rwandan *boda boda* sector but failed to discuss what motivated riders from either joining or discerning these associations. This research made an attempt to contribute to this debate by exploring factors influencing compliance to the SACCO model provided for in the NTSA (Operation of Motorcycles) Regulations, 2015. The SACCO model in the *boda boda* sector in Kenya is premised on the economic development agenda to be achieved through a financial sector that is effective, capable of expanding access to credit and financial services, and to enhance saving mobilization for long-term capital for investment. It envisaged the enhancing of savings by the *boda boda* population and including them into the financial services, even though they are within the informal sector. This enhanced economic base, it was hoped, would enhance their compliance to regulatory policies (Magigi, 2013). It has not been known if the same has been realized or the progress being made towards the achievement of this vision. This research attempted an assesement on this front.

CHAPTER THREE

METHODOLOGY

3.1 Research Design

The study adopted a descriptive research design that allowed description of the behavior of motorcyclists towards the provisions of NTSA Regulations, 2015. The choice of descriptive design was informed by the fact that it has the capacity to handle social environment which, like compliance, contain many extraneous variables which cannot be controlled in an experimental situation. Although some people demean descriptive research as 'mere expressive', a good description can immeasurably add to the knowledge of the shape and nature of the society (Creswell, 2014). By demonstrating the existence of social problems, competent description can challenge accepted assumptions about the way things are by asking the exploratory question why and provoke action. This is the essence of public policy. Competent description of compliance, in this case, led to asking the exploratory question why. The strategy was also premised on the fact that it had the ability to employ a range of data collection strategies including interviews, questionnaires, observation and analysis of historical records. The design therefore enabled actualization of the three objectives because of its ability to: demonstrate the existence of compliance to the regulations or lack of it through questionnaires and direct observation; describe factors delimiting compliance to the regulations, through oral in depth interviews, so as to provoke action; and give an in-depth analysis of the contributions of SACCO model as a particular provision of the regulations. This way, the regulations was looked into in totality enabling the researcher to make informed conclusions and recommendations about the policy.

3.2 Study Area

This research was conducted in Mbita sub-County of Homabay County, Kenya. Mbita is one of the eight sub-Counties in Homabay County. The sub-County was curved from the greater Suba District in the year 2009 and is situated on the shores of Lake Victoria bordering: Suba South sub-County to the South; Homabay town and Ndhiwa sub-Counties to the East; Rarieda sub-County to the North (across the lake) and Uganda to the West (Ololtuaa, 2012). The sub-County is composed of several islands including Rusinga, Mfangano, Takawiri, Sukru, Ngodhe, Ringiti and Remba. With the exception of Rusinga and Mfanga'no islands the other islands entirely depended on motorcycles as the only motorized means of land transport because there was no means through which vehicles could reach and traverse these islands. The situation is no better in

the mainland. With only Homabay-Mbita road tarmacked, most residents of the sub-County have embraced *bodaboda* transport, especially, during rainy season when vehicles were most likely to get stuck on the bad roads. Though partly urban and partly rural, there was no intra-urban motor vehicle transport system in Mbita commonly known as *town service* in many parts of Kenyan towns. This left the Mbita town dwellers with no option but to embrace the *bodaboda* transport. The sub-County is geographically hilly with poorly maintained roads impassable by vehicles most of the time (UN-HABITAT, 2010). This hampers efforts by traffic officers in fulfilling their mandate in implementation of the policy. The many water locked areas, poorly developed road infrastructure at the mainland, lack of motor vehicle transport system and the residents' positive reception to *bodaboda* transport, have made it a predominant means of transport. These coupled with high rate of motorcycle fatalities (County Government of Homabay, 2020) in a county determined to be prone to motorcycle accidents (National Crime Research Centre, 2018) offered a perfect environment for a research to examine the riders' compliance to the NTSA regulations, 2015. Fig.3.1 below is a map of the sub-County.

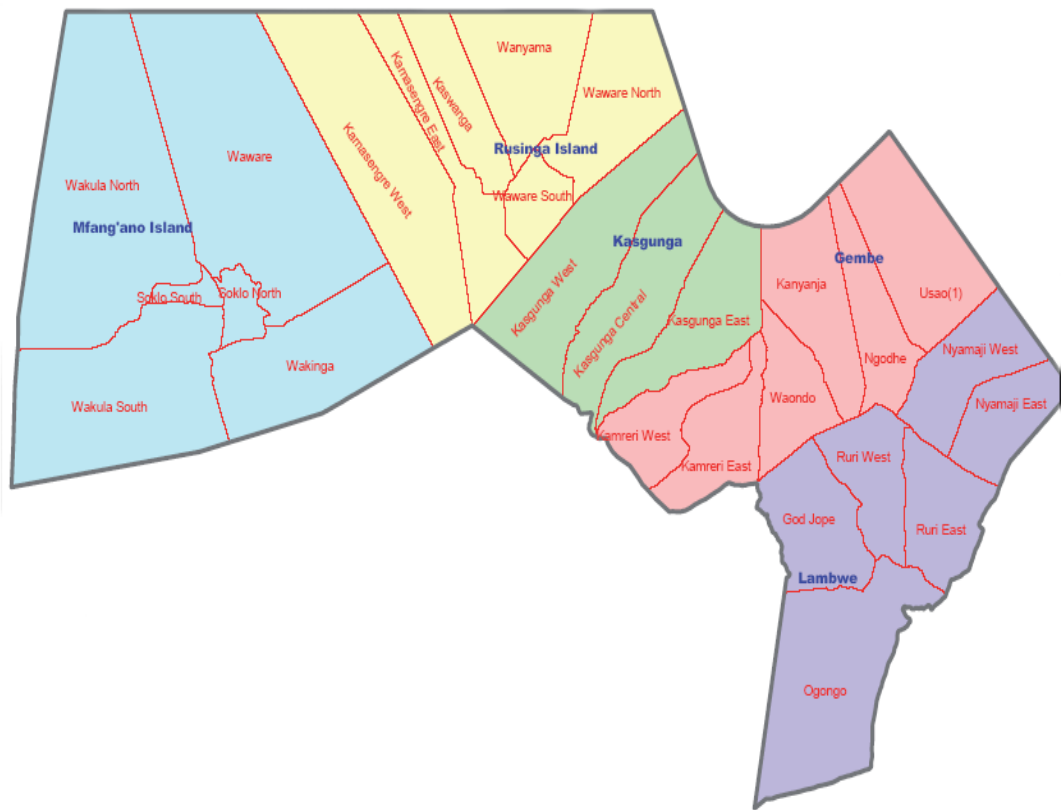


Figure 3.1. Map of Mbita sub-County

3.3 Target Population

There were no accurate records showing the exact number of *bodaboda* riders in Mbita Sub-county. However, the scanty available records obtained from the sub-County *bodaboda* office and District social development office revealed the number to be approximately 2000. The study therefore targeted the 2000 commercial motorcyclists and 6 trained and specialized traffic police officers who were the enforcers of the regulation. Amongst the 2000 riders, there were a special category of 10 riders who were leaders of registered *bodaboda* groups.

3.4 Sample Size

Since the target population was finite, the following formula (Krejcie & Morgan, 1970) was used to determine the sample size for motorcyclist riders. See also Krejcie & Morgan table attached as an Appendix 1 on recommended sampling proportionality.

$$S = \frac{X^2NP(1-p)}{d^2(N-1) + X^2P(1-P)}$$

Where:

S = Required Sample size

X = Z value (e.g. 1.96 for 95% confidence level)

N = Population Size

P = Population proportion (expressed as decimal) (assumed to be 0.5 (50%))

d = Degree of accuracy (5%), expressed as a proportion (.05); It is margin of error

$$S = \frac{1.96^2 \times 2000 \times 0.5(1-0.5)}{0.05^2(2000-1) + 1.96^2 \times 0.5(1-0.5)} = 322.39547$$

This therefore means 322 motorcyclists were sampled from the motorcyclists' population size of 2000. Since there were only six traffic police officers and 10 heads of *bodaboda* groups, all from the two groups were selected.

3.5 Sampling Techniques

3.5.1 Stratified Sampling

There were five strata formed according to the wards in Mbita Sub-county. These were Kasungu, Rusinga, Mfangano, Gembe and Lambwe wards from which the samples for the

riders were drawn. Each stratum had a proportionate representation computed from its percentage representation in the sample population. The functional formula below was thus derived from the field survey to give sample size representation for each ward;

$$W_{SS} = \frac{\left(\frac{W_p}{sCp} \times 100\right) \times sC_{SS}}{100}$$

Where Wss is the ward Sample Size,
 Wp is the ward *bodaboda* population,
 sCp is the sub-County *bodaboda* population,
 sC_{SS} is the sub-County Sample Size and,
 100 is a percentage constant

Source. Derived Formula

The figure below gives a summary of this distribution.

Figure 3.2. Sample Size per County Assembly Ward

County Assembly Ward	Riders' population	percentage	Sample size
Kasungu	452	22.6	73
Rusinga	446	22.3	72
Mfangano	318	15.9	51
Lambwe	380	19	61
Gembe	404	20.2	65
TOTAL	2000	100	322

With the help of structured questionnaire, responses from this group helped the researcher ascertain the level of compliance to the regulations, factors affecting compliance and how to mitigate them and the SACCOs' influence on riders.

3.5.2 Systematic sampling

Because there was already constructed list of riders for each ward, the researcher got copies of these lists and from each list systematically picked respondents based on the sixth unit interval until the number required for every ward was achieved. This unit interval was arrived at by dividing the sample population by the target population since the available list provided an

interval data and such a division would place each point at equal distance from one another. For example the sample population for this research was 2000 (N)riders and the sample size 322 (n) (Krejcie & Morgan, 1970), the interval $k = N/n = 2000/322 = 6$.

3.5.3 Purposive sampling

Purposive sampling offered an opportunity for deliberate choosing from the population target individuals to involve in the research. The study purposively picked 10 *bodaboda* SACCO leaders and the six traffic police officers. By means of oral in-depth interview and FGDs, these respondents shed light on the challenges and opportunities for realizing full compliance; and the place of SACCO model in making better the *bodaboda* transport.

3.6 Data collection

Since the research was descriptive, both primary and secondary data was used in the study. Secondary data was obtained from NTSA reports and published articles while first hand data was collected through a field research. The entry point to collect data was observation where the researcher observed the *bodaboda* riders in their natural settings. This was followed by administering questionnaires to the 322 riders and finally conducting in-depth interviews and FGDs with the traffic police officers and *bodaboda* SACCO leaders. These three methods are discussed below.

3.6.1 Observation

At the initial data collection stage observing motorcyclists going through their business and interacting with their clients, with the provisions of NTSA Regulations at the back of the mind, enabled the researcher to obtain first-hand information without any form of distortion. Observation method also helped cure the shortcomings of interview and questionnaires, which rely heavily on the respondents' willingness to respond. The researcher observed the *bodaboda* operators in their natural setting to get at the form and content of verbal interaction between them, their non-verbal behavior and patterns of actions or non-actions with reference to the provisions of NTSA Regulations. This method allowed for the collection of data on participants' unconscious thoughts and actions. The field notes recorded from the observations provided important data used to answer questions on level of compliance and also generated possible reasons for their behavior towards the regulations. The observation checklist is attached as appendix 3.

3.6.2 Questionnaire Interview

Questionnaires, constructed in English, were administered to 322 *bodaboda* riders. The English language was settled on as a result of high literacy levels reported in the sub-County, estimated to be around 74% for persons aged between 15 and 45 years (County Government of Homabay, 2013), and which forms the age bracket of the majority *bodaboda* riders in the sub-County. The questionnaires contained both closed-ended and open-ended questions. The researcher, with the help of trained native research assistants, administered questionnaires (see copy attached as appendix two), to the 322 *bodaboda* riders to learn about the distribution of characteristics, attitudes, or beliefs in the provisions of the NTSA, Regulations. This method helped cover a wide area and equally, with the help of open-ended questions gave respondents room to express themselves freely and also include some aspects that the researcher might not have envisaged.

3.6.3 Individual In-Depth Interviews (IDIs)

The researcher, using In-depth interview guide, herein attached as appendix four, interviewed the six traffic police officers and the ten *bodaboda* group leaders. This category of respondents was settled on as a result of the fact that the burden of compliance with the regulations lies with the riders, *bodaboda* group leaders being part of riders, assisted by enforcers who are traffic police officers. This technique allowed probing for clarification on important issues related to compliance and the possible ways of improving the same. Through this, the researcher explored the respondents' views on what affected compliance, what could be done to improve compliance and how the SACCO model influenced riders' compliance. It also allowed for immediate follow-up and clarification through probing. Combined with observation, interviews allowed the researcher to understand the meanings that everyday activities held for people and also allowed for verification of facts.

3.6.4 Focused Group Discussions (FGDs)

The researcher organized three FGDs: one for the *bodaboda* leaders, the other for the traffic police officers and the last one combined both the two groups. The first two FGDs allowed for collection of homogeneous data while the last FGD enabled discussions on divergent opinions for purposes of creating consensus and helping the researcher make conclusions from an informed position based on the ideas of participants. All the discussions were moderated by the researcher. Both the oral in-depth interview schedule for the *bodaboda* and the traffic police officers were turned into FGD schedules and guided FGDs for the leaders and the traffic police

officers respectively with the two schedules combined to guide the joint FGD for the *bodaboda* leaders and traffic police officers. It must well be remembered that for so long there has been a blame game between the riders and the traffic police officers as to who is responsible for the laxity in compliance to traffic regulations. This method allowed participants to agree or disagree with each other so that it could provide an insight into how different groups perceived riders' compliance with the law, factors influencing riders' behavior towards NTSA Regulations and the influence of SACCOs on riders' compliance. Areas of disagreements and consensus were recorded and further used to triangulate the other data sets obtained in this study.

3.7 Data Analysis and presentation

The research generated both quantitative and qualitative information. In assessing the adherence to the provisions of the NTSA Regulations, the only two possible response values of “yes” or “no” generated from the questionnaires relating to the 15 specific provisions of the regulations was presented on a binary scale. The total number of responses that depicted positive behavior towards the provisions of the regulation were used as an overall measure of compliance while those that depicted negative responses represented non-compliance. Quantitative data was coded, cleaned and entered into Statistical Package for Social Scientists (SPSS 21). SPSS was used to generate descriptive statistics from quantitative data. Descriptive statistics was used to categorize variables by summarizing patterns in the responses of people in the sample. This was because it provided simple summaries and graphs, frequency distribution tables as well as percentages and also described the characteristics of the population that was of interest. It was therefore necessary in this study because it helped to visualize and summarize large amounts of data to make them more manageable. The researcher also used content analysis to analyze qualitative information received by means of observation, Focused Group Discussions and in-depth interviews. Such analysis revealed the key themes determining ability or inability to comply with the NTSA regulations, intentions, as well as suggested ways of improving on compliance. Coding of major themes was carried out in view of looking for patterns that brought out or described the factors defining compliance as well as thematically categorized the contribution of SACCO model proposed in the regulations on riders' compliance. Findings from the qualitative data informed the study arguments and presented, where appropriate, as verbatim quotes. Those from quantitative data were presented in tables and figures. Since this was a study on an existing policy issue, besides writing a thesis out of this study, the findings can also be used to formulate

a policy brief. That brief could be used to disseminate information in the County and sub-County offices in an effort to educate the in-charge officers and make recommendations for rightful action to be taken.

3.8 Validity and Reliability

Reliability refers to the temporal stability or consistency of measurement of a test from one measurement session to another preferably done by a different researcher though with the same tool (s) (Drost, 2011). The procedure is to administer the test to a group of respondents and then administer the same test to the same respondents at a later date. Embodied in this definition is the idea of repeatability. To create an effective survey and test reliability, the researcher used a test-retest method by pretesting the structured questionnaire to 32 *bodaboda* riders, systematically picked, two weeks before rolling out the exercise. The number 32, who were not part of sample size, was a 10% of the 322 sample size informed by Baker's suggestion that 10% to 20% of the sample size for the actual study is a reasonable number of participants to consider enrolling in a pilot (Baker, 1994). The research team asked the same interviewees the same questions twice in two weeks but changing the interviewer in each occasion. Quantitative data collected was coded, cleaned and entered into Statistical Package for Social Scientists (SPSS 21). SPSS and used to generate descriptive statistics. The descriptive statistics for the two separate occasions were compared and found to have remained almost same and within the intentions of the questionnaire. This was a clear illustration that the questionnaire was stable. For validity of information, triangulation of data collection methods was used to ensure consistency and establish the worth of information gathered. Observation and FGDs were particularly useful follow-up mechanism for information received from questionnaires and in-depth oral interviews.

3.9 Ethical Considerations

It was the researcher's responsibility to maintain ethical practices throughout the study. A number of ethical issues and procedures were considered before, during and after data collection and presentation. The four major ethical issues considered included: voluntary participation; informed consent; confidentiality or anonymity and; sources of potential harm to the participants. The researcher, for instance, explained to the participants that they would be accorded anonymity and confidentiality and their right to reject participation in the research or the use of some data-gathering devices would be respected. These commitments were honored by the researcher so as not to put the respondents at any form of risks. The researcher also explained to the respondents

the aims of the research: who was undertaking it and for what purpose; it's likely duration; the possible consequences of the research and; how the results would be disseminated. To this end, consent forms were presented to respondents to be signed by those willing to participate in the study. The data collected was stored safely in a computer and protected with password only known to the researcher. The data will be discarded two years after this thesis defense. The researcher also sought ethical approval of this research from Maseno University Ethics and Review Committee (MUERC) as well as from the National Commission for Science, Technology and Innovation (NACOSTI). The written granted permission from the two bodies are herein attached as appendices seven and eight respectively. For the whole period of the research, the researcher was committed to scientific research procedures and never manipulated data collection, analysis, interpretation and presentation.

CHAPTER FOUR

AN ASSESSMENT OF THE LEVEL OF COMPLIANCE TO THE PROVISIONS OF THE REGULATIONS

4.1 Introduction

A survey of the provisions of the NTSA (Operation of Motorcycles) regulations, 2015, outlined in the background information of this study revealed that the theory behind the regulations had to do with the protection of riders as well as affording other road users a broad range of rights. Here, we turn to each provision of the regulations and report how riders related to them. Worth noting is the fact that motorcyclists did not, until coming to effect of the NTSA (Operation of Motorcycles) regulations, 2015, have specific rules organizing them but lumped together with motor vehicles in the Traffic Act. This was despite different challenges and experiences faced by each mode of transport. This chapter presents the results of the study on the *bodaboda* motorcyclists' compliance with the 15 regulations provided for in the NTSA (Operation of Motorcycles) Regulations, 2015 in Mbita Sub-County, Kenya. It discusses riders' compliance level to each provision of the regulations in the sub-titles that include: riding license; insurance; protective gears; passengers to be carried; passengers' sitting style; day headlights; load carried; rear number plates' visibility; overtaking; parking areas; and, SACCO membership.

4.2 Valid driving license issued by the Authority

Data collected from the riders, through survey questionnaires, concerning their possession of valid driving license showed that 65 riders representing 20.2% of the respondents had driving licenses. The remaining 257 riders representing 79.8% of the respondents were yet to conform to the requirements signifying low level of compliance to the policy requirement. Table 4.1 below shows this distribution.

Table 4.1. Distribution frequency of riders with valid Driving License

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	65	20.2	20.2	20.2
No	257	79.8	79.8	100.0
Total	322	100.0	100.0	

A further probing of how the riding licenses were obtained revealed that of the 65 riders in possession of valid riding license, only 33 representing 10.2% of the respondents underwent formal training. The remaining 32 representing 9.9% of the respondents learnt the trade informally, especially from friends before, going through riding test and acquiring the license. Surprisingly, two riders of the 257 who did not have driving licenses, reported to have underwent formal training. Follow up interviews with the *bodaboda* leadership revealed that the two were among 10 riders trained by a local NGO and who did not facilitate the acquisition of their licenses in accordance with the agreement entered into with the NGO. Table 4.2 below shows the distribution of those riders who either underwent formal training or learnt the trade informally before acquiring riding licenses.

Table 4.2. Possession of Valid Driving License and Formal Training Cross-tabulation

		have you received formal training			Total
		Yes	No	Have no License	
Possession of Valid Driving License	Yes	33	32	0	65
	No	2	0	255	257
Total		35	32	255	322

A study conducted across African cities showed that over 50 percent of the motorcycles in Lagos and Kampala were estimated to be operating without a valid license while only 18 percent of moto-taxi drivers acknowledged having driving licenses in Doula (Kumar, 2011). The study was however done in towns. The current study, carried out in a rural set up, has shown that low compliance to traffic regulations demanding possession of riding licenses for riders is not only an experience of African towns but rural areas too. Acquisition of a valid license requires training which cannot be possible without financial investment. GFT, in *gaingoal*, postulates that people would pursue the motivation to preserve or increase their resources hence ignored seeking licenses that would mean using part of their earnings to facilitate their training. Rider licenses are used as a legal indication that some basic level of competence in riding has been achieved. Obtaining a license is often based on tests of skills and knowledge as well as other criteria, which might include tests of driving behavior, knowledge of road rules and regulations, and understanding of road signs. The police have identified unlicensed driving as a factor in many

fatal crashes (Australian Transport Council, 2011). Obara (2009) equally attributed motorcycle injuries in low and medium-income economies to lack of knowledge on road safety as a result of motorcyclist having graduated from the *BodaBoda* in its original form of bicycle riders. Many unlicensed riders are likely to express cases of dangerous behaviors responsible for traffic insecurity due to their lack of knowledge of traffic rules (Tunde, Taiw, & Matanmi, 2012; Chitere & Kibua, 2004; Nyachio, 20015).Asingo and Mitullah (2004) reported a problem of driver training,examination and certification in Kenya citing weak legalframework. They criticized the Traffic Act (GOK, 2018)for simply empowering alicensing officer to refuse to grantan applicant a driving license when not satisfied that the applicant has passed a test of competence but neither offered a standardcurriculum nor set textbooks for drivers. During this research, it was however, realized that NTSA has attempted the standardization of driver and rider training in Kenya, through publication of a training manual, albeit with limited enforcement mechanisms. It was observed that some riders would start training in the morning and in the afternoon they were carrying passengers! In another report at the *International Conference on Transportation and Road Research* held in Mombasaon 15-17 March 2016,it was reported that most motorcycle taxi riders in rural Kenya did not have driver's license and very few had any training relating to safe riding, traffic regulations or road safety(Starkey, 2016). The mere existence of standardized training manual without proper enforcement mechanisms will still give room for actors in the sector to flout training standards. Riders trained without strict adherence to standards are likely to express cases of dangerous riding behaviors hence endangering traffic security.

The findings of this research therefore showed that, despite the existence of NTSA (Operation of Motorcycles) Regulations, 2015, which demanded for proper riders' training evidenced by holding license, very few complied. It follows therefore that a high number of riders lacked formal training that would have otherwise equipped them with techniques of safe riding thereby reducing motorcycle related traffic injuries. The lack of formal training can be attributed to riders' ignorance on the benefits of formal training and certification through licensing.This coincides with Goal Framing Theory's indication that ignorance is a factor in regulatory noncompliance (Etienne, 2011).

4.3 Insurance

Despite the benefits of holding a valid insurance policy and being a legal requirement for commercial motorcyclists within the NTSA Act, data collected from the riders by the use of questionnaire revealed that only 12 riders representing 3.7% of the motorcycles had insurance covers while 310 riders representing 96.3% reported not having an insurance policy signifying low level of compliance to this provision. Table 4.3 below shows this distribution.

Table 4.3. Those in Possession of Insurance

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	12	3.7	3.7	3.7
	No	310	96.3	96.3	100.0
	Total	322	100.0	100.0	

Upon further interrogation to ascertain the validity status of the insurance held, the questionnaire data revealed that 3 out of the 12 insurance certificates held by the riders had expired at the time of the research. Subsequently, there were only 9 valid insurance covers. The cross tabulation table 4.4 below captures this.

Table 4.4. Having an Insurance policy and status of the Insurance cover

		Insurance Cover Status			Total
		Valid	Expired	Not Applicable	
Having an Insurance policy	Yes	9	3	0	12
	No	0	0	310	310
Total		9	3	310	322

This finding revealed that 9 of the riders representing 2.8% complied with the policy requiring each rider to have Third Party Public Service Vehicle Insurance. The other 310 riders representing 96.3% did not comply and cited lack of faith in insurance companies' willingness to compensate for eventualities as a reason for non-compliance. This means riders framed a gain goal for taking up insurance and when they lost faith in the insurance companies' willingness to offer this gain, even when one was paying premiums, their gain goal was shaken thus

noncompliance. However, the few who complied and cited legal requirements pursued normative goals. In a research on Insurance Policy uptake by motorcycle riders in Nandi County, low count on riders who opted for insurance as a means of cushioning themselves from unseen adversaries was reported (Ng'etich, 2012). Another report on Compliance with Road Safety Regulations by motorcyclists in Kitale municipality estimated non-compliance to insurance requirement at 67% (Nasong'o, 2015). The current research reported only 2.8% compliance to insurance requirement subsequently revealing a very low compliance level by riders compared to what other researchers have reported.

The findings of this research therefore showed that, despite the existence of NTSA (Operation of Motorcycles) Regulations, 2015, which provided that for two wheeled motorcycle taxi, the motorcycle owner and rider must ensure that the motorcycle has Third Party Public Service Vehicle Insurance, very few complied. It follows therefore that a high number of riders lacked insurance that would have otherwise cushioned them from eventualities. Ignorance on the benefits of insurance and mistrust in insurance companies which threatened the riders' gain goal frame were listed as the exacerbating factors. The GFT argues that people will always evaluate the gain they are likely to acquire before deciding to either comply to or ignore a regulatory policy. When no economic benefit is foreseen, like in the case when riders lacked confidence in the willingness of the insurers to compensate premium holders, some riders chose not to comply.

4.4 Protective gears

Compliance to protective gears was assessed from two points of view; helmets and reflective jackets. The component helmets was further divided into rider, passenger, child helmets and helmets labeling. Reflective jacket on the other hand was assessed in terms of riders' jackets, passengers' jackets and their labeling. A discussion on each of these items is hereunder.

4.4.1 Helmet

In Kenya, the compulsory use of helmets finds its impetus in the NTSA (Operation of Motorcycles) Regulations, 2015 in regulation 4(1) (a) demanding that any motorcycle sold or transferred by any person must have two helmets which shall have the registration number of the motorcycle indelibly printed in letters on its both sides. The regulations further demanded for the

use of helmets by all motorists. The findings on the use of helmets by motorists in Mbita sub-County is discussed below.

4.4.1.1 Rider Helmet

From questionnaires, it was reported that 127 riders representing 39.4% of the riders had helmets while 197 riders representing 60.6% were found to be operating without this vital protective gear. The table 4.5 below gives this distribution.

Table 4.5. Frequency of Riders having helmet

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	127	39.4	39.4	39.4
No	195	60.6	60.6	100.0
Total	322	100.0	100.0	

At a frequency of 127 riders, representing 39.4% of the questioned riders, compliance to helmet requirement was evidently low in Mbita sub-County as compared to world target of 100% by 2030 (WHO, 2018). Helmets are estimated to be 37% effective in preventing fatal injuries to motorcycle riders and 41% effective for motorcycle passengers (NHTSA, 2013). WHO (2018) puts the estimates at 42% and 69% respectively. The findings in Mbita sub-County therefore implied that the 60.6% of noncompliant riders missed on this risk reduction and instead exposed themselves to fatal and head injuries in case of crashes. WHO (2004) argued that road traffic crashes and injuries are preventable and gave an example of high-income countries where an established set of interventions including the use of helmets contributed to significant reductions in the incidence and impact of road traffic injuries to two and three wheeled motorcycles.

Helmet is one's single most important piece of protective kit (Matheka, Omar, Kipsaina, & Witte, 2015). Injuries to the head and neck are the main cause of death, severe injury and disability among users of motorcycles (WHO, 2018, WHO, 2004). Even though the regulations does not expressly define the specifications of the helmet to be used, it says it should be compliant with the standards established by the Kenya Bureau of Standards (Government of Kenya, 2015). Even though the research did not intend to measure the quality of helmets or proper use of the gadgets but rather their mere usage, there are certain fundamental things one

needs to understand about helmets as having and using them alone might not necessarily produce desired results. Choosing a helmet that fits correctly is vital. If it moves around on your head, it won't offer the best protection in a crash (SHARP, 2019). As mentioned, mere presence of the protective gears is not enough. Worth noting is the assumption of this research that helmets' presence translated to usage in the most appropriate manner. A research conducted in Nigeria to ascertain the level of Compliance with Road Safety Regulations among Commercial Motorcyclists reported 16% compliance to helmet use (Tunde, Taiw, & Matanmi, 2012). Together with the current results, it is true that the argument that compliance to use of helmets in the developing countries is low despite the big increase in the use of two wheeled motorcycles being factual (World Bank, 2009). The low level reported in this research means therefore that riders in Mbita sub-County, like in Nigeria, are exposed to head injuries which would have been avoided if the requirement for helmet use was adhered to. When the regulations provided for two helmets, it envisaged that both the rider and the passenger was expected to each have a helmet. We now turn to passenger helmet.

4.4.1.2 Passenger Helmet

Data collected on passenger helmet sought to determine the frequency of those riders who had customer helmets. This enabled the study to determine the frequency of passenger helmet use. The findings showed that only 22 riders, representing 6.8%, reported having helmets in pairs. Table 4.6 below presents this data.

Table 4.6. Riders having helmet and whether single or a pair of helmet Cross-tabulation

		Single or a pair of helmet			Total
		Single	Pair	No helmet	
Having Helmet	Yes	105	22	0	127
	No	0	0	195	195
Total		105	22	195	322

In a situation where there was only one helmet, most likely, the passenger would be without a helmet. These results revealed that the passenger crash helmet usage was far lower when compared to the riders' case. Moreover, observations on various days revealed perhaps the greatest irony; on several days, two policemen, without crash helmets, were seen travelling

together as passengers on a single motorcycle en route to a 'regulatory barrier', where they would stop motorcycles to inspect them for regulatory compliance. Compliance theorists such as Tyler (1990) argued that normatively, those to be regulated would assess the right of enforcement agencies based on their behavior in respect to the regulation in question. When traffic officers flout the requirement on helmets, their legitimacy to enforce the regulation is punctured. This equally explained why some passengers ignored complying with helmet requirement.

A research conducted by the ministry of health and sanitation and WHO on Motorcycle-related road traffic crashes in Kenya estimated passenger crash helmet use at 3% (WHO, 2012). Another research on *Helmet wearing in Kenya: prevalence, knowledge, attitude, practice and implications* reported that overall helmet wearing among motorcycle passengers was 2.77% in Thika and 2.43% in Naivasha (Bochani, et al., 2017). The findings by Nyachieo (2015) reported that the use of helmet by passengers in Kisumu was 24.6%. These studies, together with the findings of this study, however, contradicted Obey and Njagi (2016) whose report on *Establishing Possible Risk Factors Associated with Motorcycle Use and Safety between Baraton and Chepterit, Nandi County, Kenya* reported passenger use of helmet at 73.7%. Obey and Njagi (2016) cited high level literacy levels amongst motorcyclists in their study area as the reason behind reported high compliance rate. This could also be the reason for variation in their report with those that reported below 25% compliance levels.

For the present study only 22 riders representing 6.8% having customer helmets revealed low compliance rate. This implied that 300 riders representing 93.2% non-complied despite the existence of the NTSA (Operation of Motorcycles) Regulations, 2015. And this can explain the high cases of fatal injuries amongst motorcyclists in Mbita sub-County, especially amongst pillion passengers. This part has only discussed adult passenger helmet use. However, the regulations allow children to equally travel on motorcycles in so far as they wear a helmet specifically designed for children. We now turn to the use of helmets by children in Mbita sub-County.

4.4.1.3 Child Helmet

Questionnaires and direct observation revealed 0% compliance to this requirement. It was observed that riders carried school going children every morning and afternoon/evening but none of the children wore a special helmet designed for them. When asked if they used child helmets, no rider reported having used them. In fact, most riders confessed their ignorance of the existence of child helmets. Goal Framing Theory defined ignorance as one of the factors that could impede compliance to a regulation. This means that riders in Mbita are ignorant of the child helmets requirements, thus putting the lives of children who use their services in great danger.

There is very little written by scholars concerning child helmet use. Most scholars concentrate on rider helmet use and when they discuss passenger helmet use the attention is on adult passengers. Nyachieo (2015) attempted a discussion on the safety of child passenger. However, she also presented regulation 7(2) (a) of the NTSA regulations, 2015 halfway by only discussing the demand to have children travelling on motorcycles superimposed between an adult and the rider. She thus only questioned the safety of the child passenger in relation to motorcycle carrying capacity leaving out safety gear usage provided for in the motorcycle regulations. Safety of children who are transported unaccompanied, like school-going children have also been ignored in the discussions. The current study chose to pick and continue this discussion left halfway by Nyachieo. In its finding, this study has reported zero percent compliance to child helmet regulation.

The above finding implied that child helmet, for so long, had been ignored not only in practice but equally in previous studies which should have assessed its uptake, magnitudes and results for purposes of restructuring and repackaging of the motorcycle safety policy for children. It is therefore a fact that children, in Mbita sub-County, travel on motorcycles unprotected and exposed to head injuries in case of an accident. Other than the presence of helmets, the regulations demand for proper labeling of the helmets. The section below reports on helmet labeling in Mbita sub-County.

4.4.1.4 Helmet Labeling

Data collected from the riders through observation showed very few helmets labeled. Survey questionnaires data concerning helmet labeling revealed that 48 of the riders with helmets, representing 14.9% of riders under study, had their helmets properly labeled. The remaining 79 riders, representing 24.5%, had helmets that were not labeled. It must not be lost that the remaining 195 riders representing 60.6% did not have helmets hence pushing non-compliance to this requirement to 274 representing 85.1% of the riders under study. Table 4.7 below shows this distribution.

Table 4.7. Riders with properly labeled helmets Cross-tabulation

		Correctly Labelled			Total
		Yes	No	No helmet	
Having Helmet	Yes	48	79	0	127
	No	0	0	195	195
Total		48	79	195	322

Like child helmet, compliance to helmet labeling has been ignored by many scholars. Most studies always stopped at helmet existence and not evaluation of their proper labeling. This has inhibited the availability of existing research for comparison reasons. An establishment of low compliance level by this research has shown the rationale behind this provision which envisaged ease of identification has been inhibited. This meant that a high number of riders with dangerous behaviors could go unidentified consequently disadvantaging monitoring them on various aspects. Other than labeling, the regulations provide for a specific colour to augment labelling in motorcycle visibility.

4.4.1.5 Helmet Colour

Findings from the questionnaires revealed that only 97 riders representing 30.1% of the riders had their helmets in the right colour, yellow. Red colour were 26 representing 8.1%, 4 riders representing 1.2% had other various colors with 195 riders representing 60.6% reported to were operating without helmets. Figure 4.1 below shows this distribution.

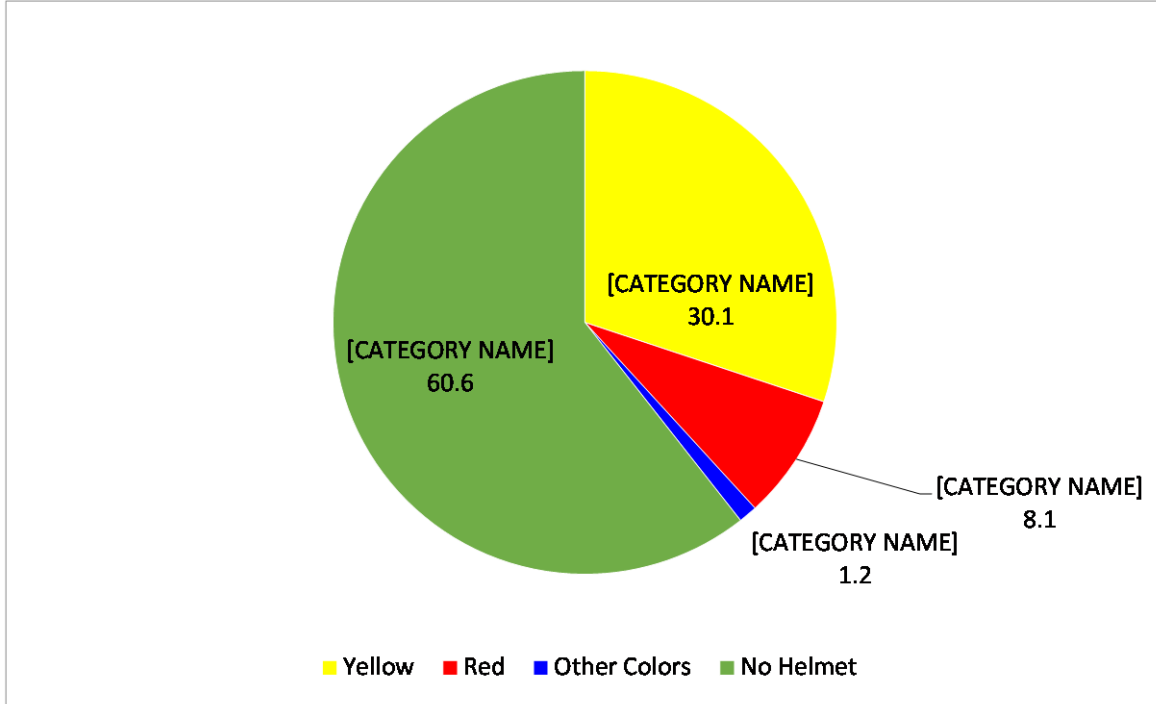


Figure 4.1: Percentage Representation of Helmet Colour

As had been mentioned, there was very scanty information concerning the specifics of standard helmets and the required colour. The NTSA Regulations, 2015 settled on yellow colour for its luminous nature and as a distinct colour reserved for *bodaboda* motorcycles. Most studies simply reported on their general use. However, this study has reported low compliance level on helmet colour. This therefore meant that the expectation of the regulations, which settled on the yellow colour for its illumination and ability to be identified by other traffic from far, has not been complied to. This could be used to explain the numerous cases of motorcycle coalitions in Mbita Sub-County hence high rate of crashes. The other important protective gear provided for in the regulations is the use of reflective jackets. The section below turns to this discussion.

4.4.2 Reflective Jacket

Other than luminous helmet, reflective jacket is yet another very important conspicuous gear that could be used to increase visibility of the cyclists while on the road. The *Traffic (Amendment) Act, 2012*, Cap 403; Section 103B (1) states that a person, including a passenger, shall not ride on a motor cycle of any kind, class or description without wearing a helmet and a reflector jacket

or jacket that has reflectors (GOK, 2018). The provision on reflective jacket is equally divided into riders' jacket, passengers' jacket and jacket labeling as reported below.

4.4.2.1 Riders' Reflector Jackets

The study first assessed if the riders had reflective jackets/vests as provided for in the regulations. Data collected revealed that 148 riders representing 46% of the sample size reported having reflector jackets. The other remaining 174 riders representing 54% of the sample size reported lacking reflector jackets. The table below shows this distribution.

Table 4.8 Riders Having Reflector Jacket(s)

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	148	46.0	46.0	46.0
No	174	54.0	54.0	100.0
Total	322	100.0	100.0	

Compliance level of 46% reported, though not ideal, could be defined as average compared to other requirements scoring less than 40% compliance level. WHO(2009) has identified safety as one of the biggest challenges facing commercial motorcycle transport. It therefore followed that when riders lacked protective clothing then they were much more vulnerable than users of other transport modes like cars or buses. The bright / reflective jackets were meant to enhance visibility so that the *bodaboda* riders were visible to other road users. This was because *bodaboda* riders shared the road with other motorists. The jackets were also useful at night. Compliance level of 46% reported was average compared to 16% reflector jacket use reported by Matheka *et al* (2015) in a research on *Road traffic injuries in Kenya: a survey of commercial motorcycle drivers* in Thika town. However, 46% compliance level was still below WHO's expectation of 100% compliance with reflector jacket use by motorcyclists. In another report, Nyachieo (2015) reported 45.9% compliance to reflective jacket requirement amongst *bodaboda* riders in Kisumu. Most riders, in Mbita sub-County, reported that compliance was boosted by low cost of reflector vests, selling for as low as KES 200. Various commercial companies in the sub-County distributing vests for free in an attempt to promote their businesses was also reported

to have improved compliance. The above findings show that compliance to reflector jacket usage is average across regions in Kenya though still low as per world expectation.

4.4.2.2 Passenger’s Reflector Jackets

The second aspect of reflector jacket requirement was that they had to be two, including passenger’s, as required by law. Data from the field showed that only 26 riders out of 148, representing 8.1% of the sample size met this condition with 122 riders representing 37.9% of the sample size failing to comply. The other remaining 174 riders representing 54% did not have reflector jackets at all. The table below captures the statistics.

Table 4.9: Customer Jacket Representation

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	26	8.1	8.1	8.1
No	122	37.9	37.9	46.0
No jacket at all	174	54.0	54.0	100.0
Total	322	100.0	100.0	

One important thing to note is that reflector jacket was meant to increase visibility of the rider to other road users. When the rider carried a passenger, his/her reflector jacket is not visible from behind. This meant therefore that even the passenger needed to wear a reflector jacket for all front visibility. Obey and Njagi (2016) reported compliance to passengers reflector jacket use between Baraton and Cheptiret at 100%. They cited high literacy level and the fact that most passengers along this route were students from Baraton University well informed of the law. The caliber of respondents in their research differed significantly from the respondents of the current study. Whereas Obey and Njagi interviewed University students, highly literate and informed of their legal rights and obligations, the current study interviewed riders, most of them being village folks with very little legal knowledge. When only 26 representing 8.1% of riders reported having reflector jackets in pairs, it therefore followed that the remaining 306

riders representing 91.9% carrying passengers were exposed to threats of in conspicuity including collisions leading to injuries.

4.4.2.3 Labeling of Reflector Jacket(s)

Just like helmet, there is a legal requirement that the reflector jacket(s) be properly labeled in order to attach each jacket to a specific motorcycle. The data collected on this revealed that 40 riders representing 12.4% of the respondents had their reflector jackets properly labeled. The other 109 riders representing 33.9% of the respondents had reflector jackets not properly labeled with the remaining 173 riders representing 53.7% did not have reflector jackets. Cumulatively, 282 riders representing 87.6% did not comply with this specific provision. This is a high level of non-compliance resulting into low motorcyclists' visibility hence high level of crashes experienced in the Sub-County.

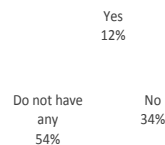


Figure 4.2. Properly Labeled Jackets

Since motorcycle number plates are fixed at the back of the motorcycles and very low from the ground, this requirement is meant to make it easy to identify the motorcycle from far using the indelible labeling on the reflector jackets. The great advantage of clearly visible numbers is that riders know they can be recognized, and reported for dangerous behavior (Starkey, 2016). Labeling on reflector jackets, like on helmets, was a deterrent strategy used by the drafters of the regulations to have riders' behaved responsibly.

4.4.2.4 Important considerations for protective gears

Despite research suggesting that hand gloves, boots and chest guard could reduce injures to motorcyclists (Lagos State University, 2017; RST, 2019), the NTSA (Operation of Motorcycles)

regulations, 2015 did not mention them. It therefore followed that even when reflective jackets and helmets were properly used, motorcyclists were still vulnerable and exposed to injuries and other motorcycling related health complications which would have been avoided when the use of hand gloves, boots and chest guards was made mandatory. There is need for a relook into the NTSA regulations for purposes of including and making mandatory the use of these protective gears that were omitted.

4.4.3 Hygiene of Protective Gears

To assess the hygienic conditions of the protective gears the research sought to understand how frequent the riders cleaned the reflector jackets and helmets. The findings on the hygiene of reflector jackets, based on how often they were cleaned, are represented in table 4.10 below.

Table 4.10: Reflector Jackets Cleaning Frequency

	Frequency	Percent	Valid Percent	Cumulative Percent
Daily	13	4.0	4.0	4.0
Twice every week	11	3.4	3.4	7.5
Once every week	107	33.2	33.2	40.7
Once every Month	10	3.1	3.1	43.8
Never	7	2.2	2.2	46.0
Do not have one	174	54.0	54.0	100.0
Total	322	100.0	100.0	

The findings revealed that 13 riders representing 4% of those sampled reported that they cleaned their jackets daily, 11 representing 3.4% reported twice every week, 107 representing 33.2% reported weekly, 10 representing 3.1% reported monthly, 7 representing 2.2% reported to have never cleaned them and 174 representing 54% did not have the jackets hence nothing to clean. On the hygiene of helmets, the same question on how long they took to clean them was asked. The responses were captured in table 4.11 below.

Table 4.11: Helmets Cleaning Frequency

	Frequency	Percent	Valid Percent	Cumulative Percent
Daily	15	4.7	4.7	4.7
Twice a week	8	2.5	2.5	7.1
Once a week	16	5.0	5.0	12.1
Once a month	25	7.8	7.8	19.9
Never	63	19.6	19.6	39.4
Not applicable	195	60.6	60.6	100.0
Total	322	100.0	100.0	

It emerged that 15 riders out of the 322 sampled representing 4.7% reported cleaning their helmets daily, 8 representing 2.5% reported twice a week, 16 representing 5% reported to be cleaning once every week, 25 representing 7.8% reported once every month and 63 representing 19.6% reported to have never cleaned the helmets while 195 representing 60.6% did not have helmets to clean.

When 96% and 95.3% of reflector jackets and helmets, respectively, were not cleaned daily then it was concluded that compliance to the NTSA (Operation of Motorcycles) Regulations, 2015 requirement that the protective gears be kept in a clean, dry and generally wearable condition was low. Since the gears were used for the whole day on dusty roads in a region exhibiting tropical climate features and by different people, in most cases not less than ten, they needed daily cleaning if their cleanliness was to be guaranteed. The sweat generated during the day could make those gears taking more than a day to be cleaned dirty, sweaty and smelly. Since *hedonic goal frame* activates one or more sub-goals that promises to improve the way one feels in a particular situation, motorcyclists in this frame would reject the use of dirty protective gears which brings negative thoughts and uncertainty consequently inhibiting protection and conspicuity envisaged by the drafters of the regulations.

Notably, this was not an exclusive experience of Mbita sub-County alone. Nyachieo (2015) underscored the hygienic component of protective gears in her study of the *bodaboda* riders in Kisumu County and reported hygiene as one of the factors determining the use of helmets and reflector jackets among passengers in the area. She reported that passengers never used some protective gears for they were dirty, smelly and sweaty. They feared chances of contracting skin diseases by using those gears. Nyachieo however, did not give statistics for her assertions. While reflector jackets were worn on top of other clothing, helmet was always worn on the head not covered at all and coming to direct contact with the body of the wearer and very close to the nose capable of detecting the slightest pong. The low compliance level to protective gear hygiene established by this study meant that even when properly used by motorcyclists, there would still exist a likelihood of other health complications associated with skin reactions. Though without giving specific statistics, the United Nations in its Motorcycle Helmet Study argued that low use of helmets was as a result of their unhygienic status (United Nations, 2016). With the climatic conditions in Mbita sub-County, characterized by high temperatures and dusty roads due to their poor state, daily cleaning of the protective gears was necessary if they were to remain in wearable condition. The study revealed riders' failure on this front hence discouraging the use of the gears and subsequently exposing their clients and themselves to dangers of unprotected riding. This was due to pursuit of hedonic goals which elicited comfort seeking sub-goals that promised to improve the way one feels in a particular situation.

This study has therefore shown that having a pair of helmet and a pair of reflector jacket did not necessarily mean they would be used. When travelling on a motorcycle these gears formed part of one's dress bringing into play several factors such as cultural beliefs, superstitions, grooming and hygienic conditions of the gears. Consideration of all these factors defined their usage.

4.5 Number of Passengers Carried

The study sought to understand the level of compliance to this provision by riders. The findings are presented in table 4.12 below.

Table 4.12: Percentage Representation of Passengers Always Carried at a Time

	Frequency	Percent	Valid Percent	Cumulative Percent
One	22	6.8	6.8	6.8
Multiple	220	68.3	68.3	75.2
Dependent on the number found	80	24.8	24.8	100.0
Total	322	100.0	100.0	

Data collected from the field using questionnaires and direct observation revealed low compliance to this provision by riders. It was observed that they carried multiple passengers, sometimes up to four adult passengers in one motorcycle. Asked about the number of passengers they always carried in the questionnaire, 22 riders representing 6.8% reported one passenger with 220 riders representing 68.3% reporting multiple passengers and 80 riders representing 24.8% saying that depended on the number of passengers they found at ago. Notably, even though illegal under the existing regulations in most jurisdictions, the problem of carrying multiple passengers was not unique to Mbita sub-County alone. It has been equally experienced in other African countries. In Liberia, for example, motorcycle operators carried, on average, two passengers on one motorcycle and sometimes more (Wachira, 2012). In Tanzania, it was also established that 70.7% of riders carried multiple passengers (Parego, 2018). Whereas Wachira (2012) and Parego (2018) conducted their studies in the capital cities of the respective countries and cited security considerations as the main factor influencing passengers' resolve to travel in multiples, the current study was done on a rural set up with high returns being cited as the motivating reason behind carrying multiple passengers. This therefore follows that carrying of multiple passengers in Tanzania and Liberia is customer initiated while in Mbita sub-County, Kenya, the act is rider initiated. In both cases however, there is specific goal framed. Passengers in Tanzania and Liberia framed *hedonic goal* while the riders in Kenya pursued *gain goal*.

At 68.3%, the proportion of riders carrying multiple passengers in Mbita sub-County was bigger compared to 40.5% reported in Kisumu by Nyachieo (2015). This variation could be as a result of geographical difference of the two places: Kisumu being a town setup with good roads and many mobility options as well as high presence of traffic officers compared to Mbita sub-County

which is largely rural islands with very limited transportation means and limited number of law enforcement officers. That geographical difference could also explain the variation between this study and one conducted in Kakamega County which reported carrying of multiple passengers at 52% (Luchidio, 2015). In Bungoma South sub-County, the sub-County commandant admitted that overloading was the order of the day as riders carried two to three passengers per trip (Kipngetich, 2017). Whereas this is an open admission of enforcement failure, riders in Mbita sub-County reported high returns and absence of traffic officers in most of the routes they ply as some of the motivating factor for carrying multiple passengers.

From observation, it was established that only three schools in the entire sub-County had school vans. This therefore meant that an alternative had to be used by parents to transport their children to school. Motorcycles were observed to be this alternative means. This led to an interest in the treatment given to child passenger with reference to this particular regulation. The results of riders’ responses are shown in table 4.13 below.

Table 4.13: Number of Children Carried per Trip.

		How many children do you always carry at ago					Total
		One	Two	Three	More than Three	Don't carry children	
Do you always carry Primary school going Children Unaccompanied	Yes	4	8	48	254	8	322
	No	0	0	0	0	0	0
Total		4	8	48	254	8	322

Out of 322 riders sampled, 314 representing 97.5% admitted carrying school going children unaccompanied. Only 8 riders representing 2.5% said they never carried children unaccompanied. When further asked the number of children they usually carried at ago, 4 out of 322 sampled riders and representing 1.2% reported to always carrying one child at a time, 8 representing 2.5% reported two children, 48 representing 14.9% indicated three children while 254 representing 78.9% said they always carried more than three children at the same time. Children are inexperienced and unable to make a hard grip on the rider. They equally lack knowledge of dangers associated with motorcycling. Despite this, 97.5% of riders reported

transporting children unaccompanied. This meant the risk of chances of children falling off motorbikes existed. The NTSA (Operation of Motorcycles) Regulations, 2015, regulations directed riders not to carry more than one person at a time. It however, allowed for carrying of an adult and a child less than thirteen years old provided the child is seated between the rider and the adult and wears a helmet designed for children. This finding revealed low compliance to these provisions. Kumar (2011) reported that across African cities, riders carried up to six school children signifying the manifestation is not only Kenyan. Nyachio (2015), other than questioning whether children were legally allowed on motorcycles, argued that the trend was as a result of the silence of the law on where children should sit on a motorcycle. The finding of this study has established the existence of a provision allowing children on a motorcycle and where they should sit. The present research further probed into the factors leading to this non-compliance and revealed in chapter five.

4.6 Passengers Sitting Style

Through direct observation and by the use of questionnaires, the study assessed how pillion passengers sat on the motorcycles in Mbita sub-County. The data collected is presented in table 4.14 below.

Table 4.14 Distribution Frequency on How Passengers Sit on Motorbike

	Frequency	Percent	Valid Percent	Cumulative Percent
A stride	277	86.0	86.0	86.0
Sidesaddle	21	6.5	6.5	92.5
Men a stride/Women sidesaddle	24	7.5	7.5	100.0
Total	322	100.0	100.0	

The questionnaires revealed that 277 riders representing 86% of the respondents reported that their passengers sat astride, 21 representing 6.5% reported that sometimes their passengers sat sidesaddle and finally 24 representing 7.5% reported that how passengers sat on a motorcycle was sex determined. These results showed a high level of compliance consequently reducing cases of instability. Equally, riders reported confidence and an assurance of stability by passengers as the motivating factors behind sitting astride on a motorbike. It also emerged that traditionally, people sat astride on motorbikes and this influenced passengers. For those sitting

sidesaddle, it was reported that they were influenced by the Luo culture which abhorred women sitting astride. Nyachieo (2015) and the Association of Media Women in Kenya (2014) have extensively discussed the Luo culture in respect to how women should sit. At factory, the pillion passenger footrests are fixed on both sides of the motorcycle. In order to use the footrests effectively one must sit a stride. There was no way one could maximize the utility of both the footrests seated sidesaddle. Moreover, those footrests were purposefully fixed on the motorcycle. One uses their legs to grip the bike and hold themselves on, along with pressure on the foot pegs and their weight on the seat. When riding sidesaddle, you lose the ability to use your legs and feet to steady yourself, and are actually more prone to falling off (NHTSA, 2013).

As had been mentioned, most research on motorcycles have been concerned with helmet and reflector jackets inhibiting information on other aspects such as pillion sitting style. However, Nyachieo (2015) on her research on how cultural beliefs determined pillion passengers' sitting style and hence safety in Kisumu reported that 75.1% of her study sample supported sitting with legs astride contrary to the predominant culture in the area which taught women that sitting legs apart was indecent. This cultural belief counted for the 24.9% who believed women should sit sidesaddle on motorcycles. The current study has reported 86% in support for astride sitting showing a positive deviation despite Mbita sub-County being predominantly Luo like Kisumu and sharing the same cultural beliefs. The percentage variation between this study and Nyachieo's could be as a result of timings of the two studies. Nyachieo's findings were reported just four months after the regulations became effective, suggesting people needed time to adjust to the new regulations. Moreover, Nyachieo's findings did not take cognizant of physically challenged passengers since it was based on culture which regarded disability as a curse and never considered it in any of her decisions. The current report however, has come more than four years after the commencement date of the regulations giving people ample time to adjust and comply.

4.7 Day Headlights

This part was more concerned with headlights during the day. Other than making observations, the research used questionnaires with a specific intention to quantitatively measure riders' behavior as far as day headlights was concerned. Data collected is presented in table 4.15 below.

Table 4.15: Headlamp status during the day

	Frequency	Percent	Valid Percent	Cumulative Percent
Always	50	15.5	15.5	15.5
Occasionally	83	25.8	25.8	41.3
Frequently	93	28.9	28.9	70.2
Never	96	29.8	29.8	100.0
Total	322	100.0	100.0	

Of the 322 riders interviewed, 50 of them representing 15.5% reported to always riding with their lights on, 83 of them representing 25.8% reported to occasionally riding lights on, 93 of them representing 28.9% reported to be frequently riding lights on and lastly 96 representing 29.8 reported to never driving their lights on during the day. Even though one might take this distribution normal, the truth of the matter was that only 15.5% complied with daylight requirement. The remaining 84.5% representing those who reported frequently, occasionally and never using their lights during the day failed the test.

NTSA (Operations of Motorcycles) Regulations, 2015 provided that headlights of the motorcycles must be on at all times when riding. It is obvious that lights should be on during the night when riding to avoid the risks of hitting an animal, misjudging a curve or not seeing a problem on the road surface. It is advised that if you must ride at night, slow down to a speed that takes into account these risks and the effective range of the motorcycle’s headlight (State of Carlifonia, 2016). However, day time headlights had a hidden function of conspicuity hence the need for legislation. Conspicuity of motorcycles is a critical factor in the attempt to reduce multiple accidents. Other than the use of yellow helmets and reflective jackets, the use of day headlights was advised by the regulations. The best way to help others see your motorcycle is to always keep the headlight on when riding. Research has it that a motorcycle with its light on is twice more likely to be noticed than the one whose lights are off (State of Carlifonia, 2016). During field work, it was observed that a substantial number of riders were riding with their lights off despite the existence of a legal requirement that they should always be on. The respondents, in the questionnaires, also confirmed this phenomenon. Riders reported costs in replacing blown off headlight bulbs as the major reason why they rode lights off during the day.

They explained that the influx of counterfeit bulbs, which easily blew off when left on for longer periods in hot climatic conditions characterizing Mbita sub-County, necessitated non-compliance to this provision.

Nasong'o (2015) reported that 30% of the riders occasionally put on lights, 30% frequently used headlights, and 22% always used headlights while 18% never used headlights while riding during the day in Kitale Municipality. Analytically, this translated to compliance level of 22%. At 18%, compliance level in Mbita sub-County is low. Consequently, conspicuity and noticeability of these riders was reduced hence increased chances of collisions of the motorcycles with other motorists. Riders reported costs of replacing blown off bulbs as a factor in driving lights off. This was a *gain goal frame* since it made riders very sensitive to changes in their personal resources.

4.8 Loads and Passengers to be carried

The researcher observed that passenger and load were carried at the same time against the regulation's requirement. Equally, riders were asked what they would do when they found a passenger who had some load exceeding ten kilograms. Faced with three choices; 1) declining the contract; 2) accepting the contract despite being against the law and 3) giving advice on the best thing to do, the riders responses were captured in table 4.16 below.

Table 4.16: Handling a Customer with Load

	Frequency	Percent	Valid Percent	Cumulative Percent
Carry Both	246	76.4	76.4	76.4
Advice for Extra-motorbike to carry the load	49	15.2	15.2	91.6
Leave Both the Passenger and the Load	27	8.4	8.4	100.0
Total	322	100.0	100.0	

Out of the 322 riders sampled, 246 representing 76.4% confessed they would carry the passenger together with the load, 49 riders representing 15.2% reported that they would advise the

passenger to get an extra motorcycle to carry the load. And finally, 27 riders representing 8.4% reported they would decline the offer. These results show low compliance level to the regulation by riders in Mbita sub-County. Further, out of the 49 riders who said they would advise for another motorcycle to carry the load, 33 of them said they would go ahead and carry the passenger together with the load in the event their advice was rejected while 16 said they would reject the offer. It therefore follows that of the 322 riders sampled only 33 representing 13.4% would reject an offer to carry passenger and load exceeding 10 kilograms at the same time. The remaining 279 riders representing 86.6% would not care to break the law and carry a passenger with load exceeding 10 kilograms together. This summary is presented in table 4.17 below.

Table 4.17. When a Customer with Load Rejects to Hire an Extra-Motorcycle

		Advice rejected			Total
		Carry Both	Reject the Offer	Non Responsive	
What did When Customer had Load of more than 10 Kgs	Carry both	0	0	246	246
	Advice for Extra Motorbike to Carry the Load	33	16	0	49
	Leave Both the Passenger and the Load	0	0	27	27
Total		33	16	273	322

Even though the regulations determined the number of passengers to be carried and that no passenger and load should be carried at ago, it did not however, fix the tonnage of load that could be carried at ago. Riders took advantage of this legal loophole to carry heavy loads, sometimes up to four bags of cement weighing 200kg. Such heavy loads make controlling motorcycles difficult and sometimes involved in crashes that would have been avoided had it not been for the heavy load. As had been mentioned, data on some of these specific requirements were hard to come by except some general statements. Starkey (2016) argued that loading levels on motorcycle taxis in African rural areas are often high, with two passengers common or passengers carried with load bundles, and sometimes live animals not unusual. Nasong'o (2015) while studying compliance with traffic regulations amongst the *bodaboda* motorcyclists in Kitale Municipality showed that 42% occasionally overloaded, 35% always overloaded, 20% frequently

overloaded while only 3% never overloaded their motorcycles. Likewise, without citing statistics and not necessarily invoking the practice of carrying passenger with load at the same time, Nyachieo (2015) decried loading behavior of commercial motorcyclists and cited it as one of the reasons behind motorcycle accidents in Kisumu County. It was observed that when large loads are carried the driver was forced forward adopting a cramped position that made it more difficult to control the motorcycle should there be other road users or adverse road conditions. This was the situation a rider who carried a passenger and heavy load at the same time found himself in. It emerged that the *gain goal frame* that activated the sub-goals dealings in resources was inspired by this culture.

4.9 All Time Rear Number Plates Visibility

The study first sought to determine whether the riders had number plates envisaged by various traffic laws before assessing their visibility. Figure 4.6 below shows this data.

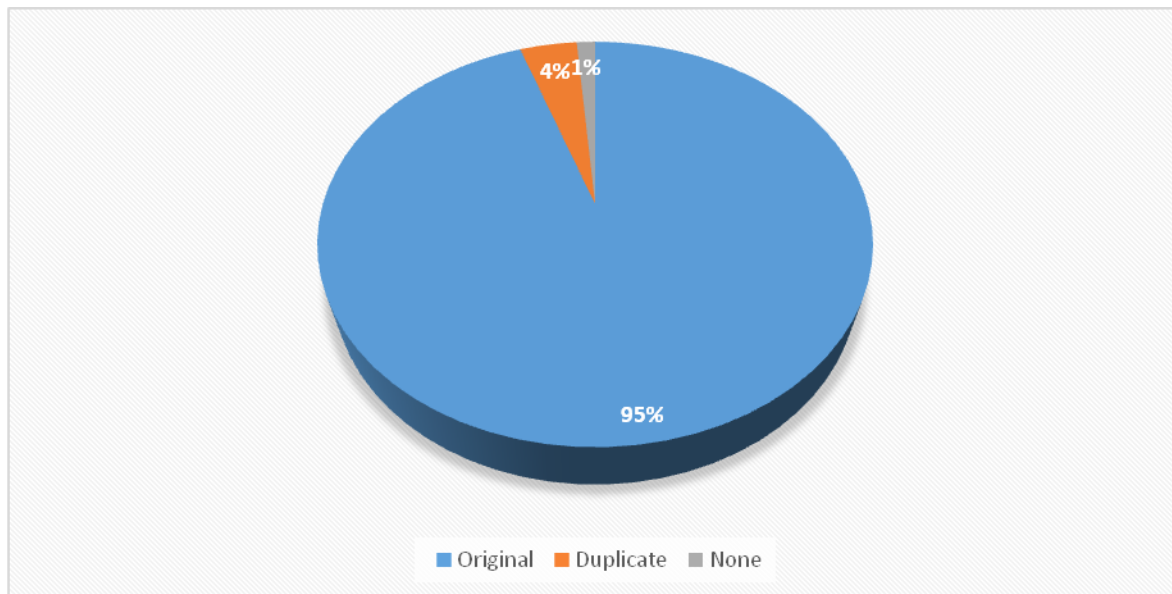


Figure 4.3. Types of Number Plates Owned

Figure 4.3 above shows that of the 322 riders sampled, 305 representing 95% reported to be holding original plates, 13 riders representing 4% reported to be having duplicate number plates and 4 riders representing 1% did not have any form of number plates for their motorcycles. By duplicate we mean that what the rider held were the true reflection of the true number registration of the motorcycle even though the plate on which the number was inscribed did not originate from the motor vehicle registration authority: it could be a locally made plate or

registration number written on a piece of paper and laminated. Traffic control and motorcycle owner identification has become major problem in every country (Patel, Shah, & Patel, 2013). This research however, was not about how this is done and the difficulties faced by traffic officers insofar as number plates identification was concerned. Suffice here to mention that rear number plates are used to identify motorcycle owner and when he/she violates traffic rules he can be caught and punished for his/her mistakes. Section 12 of the Traffic Act (CAP 403) provided for the need to have number plates fixed thereto motor vehicles in the prescribed manner, design and colour(GOK, 2018, p. 17). For a better understanding on the specifications of registration plates, the numbers and the manner they are to be fixed on a motor vehicles, reference should be made to the Traffic (Identification plates) Rules, 2015 (Government of Kenya, 2016). At 95%, compliance to this regulation was high and hence the capacity to effectively identify the riders. This is however, subject to the number plates' visibility.

Having ascertained the existence of these number plates, the research then sought to assess their visibility by administering questionnaires to the riders. Out of the 322 riders sampled, through questionnaires, 313 representing 97.2% were verified to have ensured the visibility of their rear number plates irrespective of whether they were original or duplicates. The other remaining 9 out of whom 4 did not have any form of number plates and representing 2.8% had tampered with the visibility of their rear number plates. Table 4.18 shows this distribution.

Table 4.18: Rear number plate Visibility

	Frequency	Percent	Valid Percent	Cumulative Percent
Visible	313	97.2	97.2	97.2
Not visible	9	2.8	2.8	100.0
Total	322	100.0	100.0	

It emerged that the high level of compliance to existence and visibility of rear number plates were as a result of the fact that these plates came attached to the motorcycle. This was the mandate of the registrar of motor vehicles making it a normative gain frame. Because the normative goal frame is dependent on external support the registrar of motor vehicles is the supporting institution here. As earlier indicated, most studies are rarely concerned with the visibility of number plates but rather concentrated on their availability. This study has reported

97.2% compliance level which is a high level hence high chances that identification of motorcycles as envisaged by the regulations is enhanced.

4.10 Overtaking

To ascertain level of compliance to this provision, riders were asked of their opinion about their colleagues on overtaking. This was informed by the researcher’s awareness that naturally people would not want to rate themselves lowly (Shavelson & Bolus, 1982). The question was thus put to look like each rider was evaluating other riders and not himself. This way the true picture would be captured. Data collected from the field is presented in figure 4.19 below.

Table 4.19: Riders Overtaking Rating

	Frequency	Percent	Valid Percent	Cumulative Percent
Good	33	10.2	10.2	10.2
Fair	77	23.9	23.9	34.2
Poor	212	65.8	65.8	100.0
Total	322	100.0	100.0	

Out of 322 riders sampled, 33 of them representing 10.2% rated their experiences with colleagues’ overtaking as “good”. This meant they were satisfied with how their colleagues maneuvered past other motorists. The other 77 riders representing 23.9% reported fair satisfaction meaning they neither approved nor disapproved their colleagues’ skills in overtaking but gave room for improvement. The remaining 212 representing 65.8% riders reported poor meaning they were dissatisfied with their colleagues’ overtaking skills. This was a very low compliance level. Research on motorcycle overtaking accidents is comparatively high and typically fairly serious (Clarke, Ward, & Jean, 2004). Overtaking a lead motorist in a two lane highway with both following and oncoming traffic is a highly complex task that requires a drivers’ wide viewpoints allocation in the horizontal plane and further in the longitudinal direction other than paying more attention to the more narrow scope in front. It is of importance to improve their capabilities to skillfully detect potential hazards which can be affected by (i) his personal initial judgment (i.e., prior to overtaking initiation) about whether there is sufficient time to complete a riding maneuver before colliding with an oncoming motorist or the motorist

being overtaken and (ii) the dynamic nature of the hazards during the overtaking (e.g., sudden appearance of a new oncoming motorist or even one cruising at high speed from behind), leading to some modifications or even to a drastic change of the initial maneuvering plan (Clarke et al., *ibid*). Consideration of the above three situations is both normative goal frame and hedonic goal frame in nature. Normative in the sense that focuses on factors that make people act pro-establishment or making best judgments beneficial to all actors in a given situation. Hedonic in the sense the considerations focused on behaviors whose results would ultimately make riders feel good and comfortable after overtaking. The low compliance level reported by the current study reflected poor judgment skills amongst riders in Mbita sub-County. Consequently, chances of accidents were predicted to be high unless the provisions of the regulations were adhered to.

4.11 Observation of all Traffic Rules

Observation of all traffic rules principally related to the specific areas of concerns contained in the NTSA (Operation of Motorcycles) Regulations, 2015 and any other traffic rules contained in the Traffic Act CAP 403 Laws of Kenya. The purpose of this provision in the regulations was thus to cater for any other provisions of the Traffic Act which might have been left out by the regulations. The provision also sought to regularize motorcycle operations into the NTSA Traffic Offences and Fines in Kenya for ease of administration by the judiciary. An observation was made on what actions riders took before, while and after overtaking another motorist or any other road users. In this particular area, riders in Mbita showed a low level of compliance as most of them did not observe the use of directional indicators. Quite often, a number of riders were observed to have their directional indicators on, regardless of which direction they were moving to: the left side indicator could be on when the rider was branching right and vice versa and; sometimes either of the indicators were on even when there was no intention of making a turn. Traffic in Mbita sub-County consisted of traffic ahead; traffic behind; on-coming traffic; and, traffic from tributaries. In typical situations, great precaution must always be taken when dealing with all the motorist and pedestrians from any direction. This made the use of directional indicators of paramount importance. Indicators and brake lights tell other drivers what you are about to do. Before turning or changing lanes, one must use indicators in order to send clear messages to the other traffic. After that maneuver, one should turn indicators off, because leaving them on after one has made the turn gives a wrong message, which could be dangerous.

Taking all the compliance percentages for specific areas of concern as reported in subtopics preceding this, just like many researchers (Chitere & Kibua, 2004; Clarke, Ward, & Jean, 2004; Nasong'o, 2015; Nyachio, 2016) have observed, non-observance of traffic rules is the major cause of collapse of traffic safety in most countries. Low compliance to the use of directional indicators meant a number of riders were sending wrong signals hence increasing chances of collisions and crashes leading to injuries.

4.12 Parking Areas

The regulations provide that riders should not park in undesignated areas. This provision was premised on the hope that County governments, as the available local authorities, would designate such areas as provided for in Sec 72A of the Traffic Act (GOK, 2018). In the interest of assessing riders' compliance to this provision, the researcher first strived to find if those places had been designated in Mbita sub-County. From the interviews conducted with the *bodaboda* groups' leadership and the police, it emerged that there were no such special places designated for *bodaboda* parking by the authority. What existed was a parking place for public service vehicles. However, this was only in Mbita town. Equally, there was no policy by the county government of Homabay on *bodaboda* parking places. What existed for the *bodaboda* were spontaneous places referred to as "stages" by the riders and which were created and manned by the riders themselves. In the absence of designated parking places, it was difficult to assess riders' compliance. It was illogical to expect riders to park at places that had not been designated in the first place. From observational data, parking in the area was spontaneous. Non-existence of designated parking areas exposed deficiency in implementation since the county government of Homabay in which Mbita sub-County is part of had failed in her statutory mandate. In a functioning system, this designation would have been made and the county government security mandated to enforce compliance to parking in those areas. Other County Governments such as the County Government of Uasin Gishu (County Government of Uasin Gishu, 2015) and the County Government of Nakuru (County Government of Nakuru, 2016) had county government policies defining how and where motorcycles should be packed within their respective sub-Counties. Motorcycle transport is a reality within the County Government of Homabay to which there is a need to formulate a county government policy around it.

Rollason (2013) reported that the police and Kigali City Council had a robust policy towards regulating the parking places of motorcycle taxis. As had been mentioned, this variation with the situation in Mbita sub-County could have been as a result of the difference in leadership styles in Kenya and Rwanda. The former portraying characteristics of pseudo-democracy (Khadiagala, 2011) while the latter portraying benevolent dictatorship tendencies (Russell, 2012). The current study also established the non-existence of those areas in Mbita sub-County. In the absence of created parking places, it was observed, many riders would stop and park anywhere to pick, drop and wait for customers. This consequently, led to cases of rampant obstruction resulting into some unnecessary collisions which the NTSA regulations intended to minimize.

4.13 Membership of a body corporate (SACCO Model)

Data collected from riders showed that 164 of the 322 respondents representing 51% reported that they were members of one of the *bodaboda* groups in the sub-County. The remaining 158 of them representing 49% did not belong to any of the *bodaboda* groups in the sub-County. Table 4.20 below shows this distribution.

Table 4.20: SACCO Membership

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	164	50.9	50.9	50.9
No	158	49.1	49.1	100.0
Total	322	100.0	100.0	

From the data, it was evident that slightly more than a half of the *bodaboda* membership were registered as SACCO members. This compliance level, though average, did not offer full regulatory envision of the NTSA regulations when almost half of the riders population were not registered members of any syndicate. This finding contradicted Rollason (2013) who reported 100% enrolment of riders as members of a co-operative or syndicate organization in Rwanda. This deviation could be explained by the difference in the administrative culture of the two areas as derived from their national government. As had been mentioned, Rwanda is under benevolent dictatorship (Russell, 2012) where non-compliance to regulations attracts heavy punishment which can sometimes be arbitrary. On the other hand, Kenya is a pseudo-democracy (Khadiagala, 2011) with long procedures of administering punishments. Moreover, Rollason's

study was conducted in Kigali with a city status and different from Mbita sub-County which was largely rural. The study was also contrary to various studies in the Matatu industry which have reported 100% compliance with the SACCO membership demand for Public Service Vehicles in Kenya (Okwako, 2017; Mwendwa, 2016). This could be explained by the existence of an elaborate policy on the operations of public service vehicles. The NTSA (Operation of Public Service Vehicles) Regulations, 2013 succinctly explained how public service vehicle SACCOs were to be registered and structurally managed. The demand for motorcycle SACCOs in the NTSA (Operation of Motorcycles) Regulations, 2015 did not offer any guidelines on how they should be formed neither did it suggest any management structure for the same. It seems the provision was an afterthought included without any clear guidelines save for mentioning that one hundred motorcycles could form a motorcycle SACCO.

4.14 Conclusion

While NTSA (Operation of Motorcycles) Regulations, 2015 was well intentioned, 100% compliance to its provisions was necessary if reduction in motorcycle crashes that has resulted to injuries and deaths were to be realized. Table 4.21 summarizes percentage level of riders' compliance with each provision of the regulations.

Table 4.21: Summary of Compliance to Each Regulation

Regulation's Provision	Riders Behavior	
	% Non-compliance	% Compliance
Child helmet	100	0
Insurance	96.3	3.7
Customer helmet	96	4
Passengers carried	93.2	6.8
Customer jacket	91.6	8.4
License	79.8	20.2
Passenger& load	74.5	25.5
Day headlights	71.7	28.3
Overtaking	65.8	34.2
Rider Helmet	60.6	39.4
Rider Reflector jacket	54	46
SACCO membership	49.1	50.9
Sitting style	14	86
Rear Plates Visibility	2.8	97.2

This study has established that compliance with the regulations by the *bodaboda* motorcyclists is mixed. While there was high compliance with a few of the provisions of NTSA such as rear number plate visibility, there was zero compliance in others such as the use of child helmet. There were varying degrees of low compliance with others, especially with respect to rider license holding, insurance, protective gear usage, and number of passengers carried per trip. Averaging these percentages reveals a low compliance level of 32% and a high non-compliance level of 68%. Generally, a close look at the table shows laxity in compliance to many of the provisions. Since these are mainly safety measures provided to the motorcycle riders and passengers, an implication of this low compliance is insecurity in the mode of transport characterized with accidents and injuries. These findings needed to be explained through an examination of reasons and factors that influences the different levels of compliance. Chapter five delves into answers to this question.

CHAPTER FIVE

FACTORS DETERMININGNON-COMPLIANCE (OR COMPLIANCE) TO THE PROVISIONS OF THE REGULATIONS

5.1 Introduction

Having assessed the level of compliance with each provision of the regulations by the riders, the next task was to understand factors that determined the riders' ability or inability to adhere to the provisions of the regulations. The study therefore, through a descriptive research design used questionnaires, in-depth interviews and FGDs to obtain information on factors contributing to compliance or non-compliance. The questions asked using these methods were responded to by riders, *bodaboda* leadership and traffic police officers. These were better placed to provide data to this objective because riders were direct actors in the field while *bodaboda* leadership as well as the police had some classified information in the *bodaboda* industry. Lindenberg and Etienne identified and summarized compliance determinants into hedonic goals, expected gain, normative goals, incapacity, ignorance and misunderstanding (Etienne, 2011; Lindenberg & Steg, 2007; Lindenberg S. M., 2001b; Lindenberg S. , 2001a). This study however, needed to understand these factors on the basis of compliance levels discussed above. The GFT has been applied in analyzing and discussing these factors. The study looked at each and every provision of the regulations and collected data explaining riders' (non)compliance with each of them and portioning those specifics to Lindenberg's and Etienne's broad categories of determinants for compliance. Because an outline of the regulations had been given in the background section, we shall not revisit the same but focus on factors determining (non)compliance levels. It would be useful therefore to put the factors under each of the NTSA (Operation of Motorcycles) Regulations, 2015 provisions so that they are not mixed up. The sub-titles will therefore reflect the regulations but the contents bear factors determining (non)compliance to these regulations.

5.2 Valid Driving License

The reasons given for low level of compliance to the provision of valid driving license varied from the cumbersome acquisition process, high cost of acquisition, slow processing of applications, and riders not seeing the need in having one among others. Data collected by questionnaires showed that 27 riders representing 8.4% of the sample population reported cumbersome acquisition process as the reason why they were not licensed, 158 representing 49.1% reported high costs, 17

representing 5.3% said they did not see the need to have one and 55 representing 17.1% gave other varying reasons common amongst them was the argument that “*the fact that one did not have a driving license did not mean he did not know how to ride*”. Of the total number of riders interviewed 65 riders, representing 20.2% and who were non responsive, were those with licenses. This distribution is shown in table 5.1 below.

Table 5.1: Reasons for not having License

	Frequency	Percent	Valid Percent	Cumulative Percent
Acquisition process cumbersome	27	8.4	8.4	8.4
Acquisition process costly	158	49.1	49.1	57.5
No need to have one	17	5.3	5.3	62.7
Any other reason	55	17.1	17.1	79.8
Non responsive	65	20.2	20.2	100.0
Total	322	100.0	100.0	

The provisions with respect to rider license are stated in regulation 5(c) and 6(a) of the regulations. The same is also to be found in Article 30 (1) of the Traffic Act (GOK, 2018). As had been mentioned, a driving license act as evidence that one is trained and authorized to ride on the road. This research established that only 65 riders representing 20.2% had riding licenses with 257 representing 79.8% lacking this vital document (Table 4.1). The study sought a deeper meaning of the above data by way of in-depth interviews and FGDs. In interviews with the *bodaboda* groups’ leadership, the issue of process and costs in the license acquisition were discussed. Generally, these leaders accepted high cost and cumbersome process as inhibiting factors. They however, argued that, this should not be an excuse as their counterparts in the *matatu* industry complied and almost all public service drivers were licensed. One of the leaders interviewed said:

The cost of acquiring a riding license is far away from our reach. Consider that most of us are school drop-outs or school leavers who are forced into this business by our poor economic situations. We have not worked anywhere to earn any money with which to sponsor our training. Coupled with the fact that some of us get married immediately after school or have some siblings to take care of, our financial burden is already heavy making us opt to operate without the license. On the acquisition process, we cannot complain much except that we lack the facilities

around and travelling all the way to Kisii town for the test makes it look a long, tedious and cumbersome process. In addition to these, processing of the document sometimes take too long since the concerned authority is very slow. However, because our counterparts in the matatu industry have complied, we have no option but to strive to comply.

The traffic police officers interviewed equally shared these sentiments. They agreed that training cost was a factor in license acquisition as licensing services are centralized in Kisii town, very far from Mbita sub-County. This, they reported was coupled by the fact that most of the riders did not own the motorcycles they were riding but made “returns” every evening to the owners. In short they were loaned to work with the motorcycles at some agreed commission. This finding expressed the argument that younger riders became motorcyclists directly out of school lacking experience and savings with which to fund their training and license acquisition (Rollason, 2013). In an FGD composed of both the *bodaboda* leadership and the traffic police officers, participants agreed that, despite the challenges, the law on acquiring a driving license must be obeyed. This, as observed, was the only way to secure the motorcycle sector. For those riders who reported that it did not matter to them to have riding license, the study sought to understand why they expressed this attitude. In an FGD, a participant stated:

Riding license has become just a mere piece of paper that serves no purpose in our business lives. Whereas the license should tell the police that one is authorized to ride on the roads, the police would not bother even to look at it. Instead, they value the little bribe you offer when caught in a traffic mishap. Sometimes it serves no purpose and hence no need to spend money on its acquisition. That is the feeling and that is the meaning when riders argue that they do not need them!

In this statement there was a silent theme of corruption and problems of enforcement. However, interviewed police officers neither confirmed nor refuted this argument. Their indication was that it was better if one had a riding license so that he could be on the safer side of the law. One of the police officers, in an FGD composed of *bodaboda* leadership and the traffic police, made a joke with far reaching implications that the accusation could be true. He said:

Life is all about helping one another and getting help from others too. And that is exactly what we are doing. We help them run their business without much trouble as they also help us augment the little we get to live a better life. Though it is done on personal basis. We must also understand that it is sometimes difficult to enforce the law to the letter. When you are so strict with the law then the politicians: Member of Parliament; Member of County Assembly; Woman Rep; Senator and sometimes

even the governor will intervene in the name of protecting their people. Insisting on implementing the law will earn you a transfer, sometimes to a very remote region. Some of these people are so powerful that can even instigate your dismissal from service if you do not listen to them.

The above statement epitomized two things: corruption and political interference in administration of the regulations. Though this finding was similar to the findings of a study done in Nigeria which reported corruption as an ailment in the *bodaboda* sector (Tunde, Taiw, & Matanmi, 2012), the Nigerian report blamed commercial motorcyclists union for being so powerful to the extent of constituting themselves into another ‘government’ able to influence every Nigerian enforcement agency. The Kenyan SACCOs on the other hand were found to be weak and poorly structured to influence governance decisions (SACCOs are discussed in chapter six). The Nigerian study thus presented an institutionalized corruption while the Kenyan case, denoted by this study, was an unstructured case happening between individual traffic officers and riders. In either case, it was evident that enforcement of the law for compliance was affected by *gain goal* framed by enforcement officers who valued bribes at the expense of enforcing the law. Lindenberg & Steg (2007) have defined expected gain as a factor guiding actors’ behaviors in regulatory compliance. Further, as opposed to the Nigerian study, which blamed the syndicates, this study blamed politicians and traffic officers for interference in the enforcement of the regulations.

Secondly, it emerged that enactment of good policies alone could not create desired results. The development and effective enforcement of legislation was critical in reducing traffic risks in the *bodaboda* industry. Addressing road safety in a comprehensive manner necessitated the involvement of all actors including the traffic police. The above statement also illustrated the powerful role of politicians in legislative compliance. In spite of the fact that they were the law makers, they would not hesitate to criticize and threaten the enforcement agencies in order to protect their own interest; galvanization of voters around him/her. Another enforcement difficulty identified by the traffic officers and which they said contributed to riders’ noncompliance with, not only license requirement but other provisions, had to do with their much applauded maneuverability. In this advantage lied another nightmare to the police officers mandated to enforce traffic rules on the operators. One of the officers decried this by saying:

The maneuverability of motorcycles is both a sword and a shield, as much as it is one of the advantages of the system, it makes it difficult to monitor and enforce legislation upon riders. Unlike motor vehicles which can only operate on the road, motorcyclists will disappear into the village through footpaths once they realize that

checkpoints are mounted on the main roads. Pursuing them in those villages is further a big risk. Once in the village they may corner to injure or even kill an officer pursuing them. The villagers equally collude and join them in harassing police officers once they get to the heart of the village.

The question on reasons for compliance to the provision of having a riding license, in the questionnaire, was further opened to give riders the latitude to express themselves as wide as they desired. Four major reasons emerged from the riders' responses. The four included: fulfilling a legal requirement; protection from police harassment; training sponsorship from National Government and NGOs agencies and; a way of paying tax.

It therefore followed that the findings of this study on factors determining the acquisition of driving license by riders could be explained in four components of GFT. One, there were those who reported legal requirement. This is a *normative goal* having to do with acting in all manners associated with appropriateness and showing exemplary behavior resonating with the societal norms (Etienne, 2011). Two, those who reported high costs and cumbersome process as the limiting factors in acquiring driving license expressed characteristics of hedonic goal frame. A *hedonic goal frame* make people very sensitive to changes in their personal resources (Lindenberg & Steg, 2007). This second group were weary of expenses to be met in license acquisition which ultimately would reduce their resources.

The third group belonged to those described as ignorant. They reported seeing no need to have a driving license. This meant they did not understand the rationale behind having a driving license. They did not appreciate the benefits of undergoing training and being licensed. The fourth and the last group, composing the corrupt police officers and the politicians were in gain goal frame. To them, their personal gain, expressed in bribes and votes respectively, was more important than benefits of compliance. The study further sought from the riders what they thought could be done in order to enhance compliance to riding license. Given three options to choose from, table 5.2 shows the distribution of the findings:

Table 5.2: Recommendations on Riding License Compliance

	Frequency	Percent	Valid Percent	Cumulative Percent
Introduce Compulsory and Include rider training in Secondary Syllabus	104	32.3	32.3	32.3
Empower <i>bodaboda</i> Leadership to Manage the <i>bodaboda</i> sector	155	48.1	48.1	80.4
Build Driving Schools Specific to Motorcycles in the Constituency	63	19.6	19.6	100.0
Total	322	100.0	100.0	

From table 5.2, 104 of the respondents representing 32.3% believed that introducing compulsory rider training in secondary education syllabus was the best way to handle the matter. They argued that this way, learners could graduate with driving license. This suggestion was put forward in support of an argument that a different type of training program was needed in the motorcycle sector. Education programs delivered over several years, perhaps through secondary schools, to foster development of safe attitudinal /motivational factors, have also been suggested as an alternative to short-term rider training (Jordan, 2007). However, the effectiveness of such programs in effecting changes in attitude, behavior or crash risk should be proven as it might only be theoretically sound. Those against this form of training argued that not everyone is able to access secondary admission, so those who are unlucky will still need to undergo short-term rider training at the driving schools.

Another 155 of the respondents representing 48.1% believed in empowering the *bodaboda* groups. In an FGD of traffic police officers and the *bodaboda* leadership, it was very clear that this route was the most favored one. The police reported that their success in the recent time has been as a result of good working relations with the *bodaboda* leadership. The *bodaboda* leadership was however, very clear and supported a statement from one of them who invoked the old adage of “*set a thief to catch a thief*”. He went ahead to swear that: “*mandate the police to manage us for the next 100 years but be assured of failing. Give us the mandate to manage ourselves and you*

will see results in the next three months". The traffic officers, however, maintained that care must be taken not to turn those SACCOs into a parallel government. Goodfellow (2013) argued that empowerment of *bodaboda* syndicates in the capital Kigali had become a blessing in management of the sector. The other 63 representing 19.6% believed that building driving schools specific to motorcycle rider training in the constituency could help alleviate the problem. They further suggested that these schools should be facilitated by the county government to offer free training with trainees only paying a commitment fee not exceeding Ksh 1000.

5.3 Insurance

Even though insurance served a number of valuable economic functions largely distinct from other types of financial intermediaries, only 3.7% of riders in Mbita sub-County reported having an insurance policy for their motorcycles (Table 4.3). Asked why they opted to operate without insurance, 173 of the sampled riders representing 53.7% reported high cost of premiums while 137 riders representing 42.6% gave other varying reasons for not having insurance. Table 5.3 below shows this distribution.

Table 5.3: Reasons why Riders do not have Insurance

	Frequency	Percent	Valid Percent	Cumulative Percent
Expensive	173	53.7	53.7	53.7
Other reasons	137	42.6	42.6	96.3
Have one	12	3.7	3.7	100.0
Total	322	100.0	100.0	

The 3.7% who had insurance, cited legal requirement and protection from unseen eventualities as the main reasons for purchasing insurance policy for their motorcycles. This suggested pursuance of normative, gain and hedonic goal frames by those riders with insurance for their motorcycles. Normative in the sense that they conformed to the law; gain goal in the sense that they anticipated compensation in the event of an eventuality and; hedonic in the sense that they anticipated the avoidance of spending in the event they were hit by unforeseen eventualities. Though it is not viable to calculate emotional cost faced by survivors of transport misfortunes in the absence of insurance, the economic cost of road trauma has been enormous (Kibet, 2016). The study sought to understand the factors that created the low levels of compliance. Because most studies have

reported cost as a limiting factor in purchasing insurance for motorcycles (Chitere & Kibua, 2004; Howe, 2003; Howe & Maunder, 2004), the study sought to understand if the same was the case in Mbita sub-County. At 53.7%, costs emerged as a significant factor in purchase of insurance policy by riders. At the same time, the study wanted to understand other reasons for low level of compliance to the provision on insurance. As a result, the riders were given the two options in the questionnaires: that is, costs and other reasons. A running theme from riders who gave other varied reasons for not having driving license included lack of faith in insurance companies. A follow-up question to both the *bodaboda* leadership and traffic police officers who participated in the FGDs showed that most insurance companies were never willing to compensate for losses unless dragged through a court process. This process was also reported to be long, costly and unpredictable. Riders further argued that insurance served no purpose in their business as compensation would not come in the event of an accident or loss of the motorcycle. At one point, it emerged that, motorcycles would be bought along with an insurance policy but even those motorcycles with active insurance policy would not get compensation in the event of a misfortune.

The other issue reported by riders and which was discussed at the FGDs and during the in-depth interviews was the motorcycle owners referred to as “*bosses*” negating their responsibility of paying premiums. Discussants and interviewees argued that insurance uptake in the public motor vehicle industry has been high since the responsibility to pay premiums has always been promptly taken by the vehicle owners. In the motorcycle industry, these *bosses* were never willing to take this responsibility. Moreover, they were never reprimanded for this failure to comply. It was always the riders who got arrested when found not complying with the requirement. This could be explained as a pursuit of hedonic goal as neither the rider nor the motorcycle owner was willing to incur expenditure in acquiring insurance. What ensued was non-compliance. Similarly, riders mentioned lack of incentives, by both the government and insurance service providers, to those diligently complying with this requirement as another inhibiting factor. The *gain goal frame* of the GFT suggests that people will behave positively when they anticipate positive reinforcement as a result of their actions and negatively or do nothing about a situation when they anticipate no reward for their positive actions (Lindenberg, 2001a). At the FGDs it emerged that incentives would have motivated the non-compliant riders to comply in order to equally enjoy as their counterparts. In the absence of this, riders saw no need striving to comply. It also emerged that

those with or without insurance suffer the same fate in the hands of traffic police officers. Consequently riders saw no need to spend extra money in acquiring insurance when it could not protect them from police harassment. One participant in the statement below succinctly captured this feeling:

Insurance has been of no help in our business. With or without, everything is the same. The police will not handle you differently from that who has no insurance. To be sincere, insurance is what you can give the police and not that piece of paper which they will look at and continue to lock you in for another offence which they have never failed to identify. That aside, the insurance companies are never ready to compensate: you will be taken round in circles; asked silly questions about how the misfortune occurred; and finally adjudged to have been the cause of the adversity. In our lifetime we have never seen a motorcyclist compensated for a loss unless it is a collision with a car in which the car's insurer pays. Lastly, our bosses, for those who do not own the motorcycles, are never willing to pay premiums: if that motorcycle came with an insurance at purchase, that is the end; they will never renew that subscription.

In evaluating riders' understanding of this requirement and the meaning of a third party insurance policy it emerged that they had no clear understanding of what is covered under this policy. The essence of third party insurance cover is to compensate for injuries or loss suffered by other road users due to accidents occasioned by the insured (Kibet, 2016). Since riders were ignorant of the principle of third party insurance policy, their goals were framed contrary to NTSA regulations' envision. In-depth oral interviews revealed that riders did not understand the meaning of the phrase "third party" in the regulations. To them, insurance companies were to compensate for their injuries or a lost or a written-off motorcycle. Ignorance ensues when expectation does not meet reality. In a third party insurance policy, the insurer only compensates losses incurred by a third party and not the rider or the motorcycle. Such an expectation is covered under comprehensive insurance policy.

From the above discussion it was evident that riders expected compensation, which would directly reinstate them to their previous position after an eventuality. They equally expected a differential treatment for compliance from their non-compliant colleagues. In the absence of the two, both their gain and hedonic goals were not met leading to noncompliance. Kibet (2016) did an analysis of the efficacy of the Insurance (Motor Vehicle Third Party Risks) Act and established that the Act had resulted in compensations taking a very long period to be finalized making so many people

unsatisfied with the particular law. He also cited lack of understanding of the particular Act by common people hence confusions in times of misfortunes. He further reported that the Act exacerbated corruption in the insurance sector. Kibet's findings were however, based on one provision of the law, Insurance Act. Moreover, he focused on public service vehicles. Effectively, his study collected and analyzed data on the impact of capping of compensation of the insurance claims as established by the Act and did not explore levels of compliance to the Act by the insured. The contextual factors are also important in understanding how the target group responds to regulatory policies. While Kibet's study was majorly on provisional appropriateness, this study was based on provisional compliance. The Kenyan senate also decried this uncertainty and confusion in insurance for motorcycles when on the 18th October 2018 they discussed the implementation of the regulations. Speaker after speaker mentioned confusion in motorcycle insurance suggesting the need for proper procedures for licensing and issuance of insurance covers (Parliament of Kenya, 2018). The senate however, based their arguments on personal experiences backed with no data. They decried and wished there was some data on which to base their arguments. The current study brings in data which could be relied on in the future to inform discussions by parliamentarians for purposes of improving motorcycle policy.

Understanding factors limiting compliance alone was however not enough as it initiated a question on how best these conditions could be alleviated and improved. When that question was posed, all the 12 riders with insurance mentioned civic education as one of the ways through which compliance could be improved. During interviews and in FGDs it emerged that most riders needed to be educated on insurance. This way, they would be able to understand and differentiate facts and myths about insurance. In the researcher's view, both riders and motorcycle owners needed education on insurance: risks, various insurance options and associated benefits. This could be done through public awareness campaigns with three goals: to inform the public of the nature of problems and prepare for change (e.g. in the law); to change attitudes, and; to change behavior (Alnsour & Meaton, 2009). The traffic police must not be left out in this behavior change campaign. Insurance companies should be encouraged to sponsor existing programs within the *bodaboda* SACCOs while including education on insurance on the activities. This should replace one-off publicity campaigns that have been adopted by insurance companies since they were easily forgotten.

Secondly, through the study, it was realized that riders were positive and enthusiastic about being organized in syndicates able to understand their dynamics. Rollason (2013) and Goodfellow & Smith (2013) underscored the positive contributions of motorcycle syndicates in Rwanda. Riders in Mbita sub-County said these groups could be used to mobilize their membership to take up insurance especially if there could be modalities for group insurance. By group insurance they meant that a number of motorcycles from one syndicate could be grouped together and insured, their premiums being collected by that particular group leadership and transmitted to the insurance company. However, care must be taken not to turn these syndicates into parallel governments resulting into governance menace. Tunde *et al* (2012) discussed powerful union as a rallying point for negative influence on compliance issues in Nigeria. He reported the syndicates to have penetrated every transport governance structure in the country with the ability to influence policy formulation and implementation in a manner that benefited their egoistic course.

Thirdly, as a result of expenses and also to manage effects of culture shock associated with rushed change, some riders suggested that to maximize compliance to the regulations, there was need for the government to consider progressive implementation of the regulations. Their argument was based on the fact that riders have developed their ways of doing things and changing that abruptly was likely to cause depression, anxiety and feelings of helplessness amongst the riders. Accumulation of depression, anxiety and feelings of helplessness is likely to push individuals in paying no attention to the learning of new cultures and delimiting their abilities to solve problems and to make decisions (Xia , 2009). Such conditions are likely to decrease the motivation for adapting to the new conditions. Most important is that when people fail to defeat the symptoms of culture shock, they are likely to become hostile to host nationals, in this case the police, which may lead to a handicap of interpersonal relationship (*ibid*). Though the case, a few riders who had insurance covers did so for normative purposes; they reported legal requirement as the reason for acquiring insurance for their machines. Some also mentioned expected compensation in times of misfortunes reflecting gain goal frame.

5.4 Protective Gears

Since they are associated with direct protection of the body, protective gears are some of the most studied provisions of the motorcycle regulations. Other than high costs, discomfort and ignorance, the study opened the questionnaire to enable riders list other factors limiting the usage of

protective gears. These ‘other reasons’ informed the basis of in-depth interviews and FGDs. The table below shows this distribution of findings.

Table 5.4: Factors Enhancing Non-usage of Protective Gears

	Frequency	Percent	Valid Percent	Cumulative Percent
Discomfort	101	31.4	31.4	31.4
Expensive	128	39.7	39.7	71.1
No need	66	20.5	20.5	91.6
Any other reason	27	8.4	8.4	100
Total	322	100.0	100.0	

Questionnaire data to riders revealed, as presented in table 5.4, that 101 respondents representing 31.4% did not use protective gears as a result of discomfort, 39.7% reported high cost as a limiting factor, 20.5% did not see any need using those gears and lastly 8.4% gave other reasons.

As a principle in Goal Framing Theory, avoidance of expenditure occurs when one frames a gain goal. Consequently, it could be rightly argued that 39.7% of riders who reported high costs avoided the purchase of protective gears in order to avoid a decrease in their resource base. Linderberg and Steg (2007) theorized that those pursuing a gain goal seek to reduce expenditure or those actions that threatens their financial base. The 31.4% who reported discomfort were in pursuit of hedonic goal frame whose horizon is very short with the criterion for goal realization being an improvement in the way one feels (Lindenberg & Steg, 2007). Hedonic goal frames one’s behavior in seeking pleasure and being free from direct uncertainties but direct improvement in self-esteem and excitement. The 20.5% who did not see the need to have and use helmets represented the ignorant proportion. They lacked knowledge and information about the benefits of using protective gears (Etienne, 2011). Equally, there were 8.4% of riders who gave other reasons limiting their compliance to protective gears’ provision. Common in their reasons were hygiene, disobedience, impaired vision, unawareness and fear for black witchcraft. A follow-up was made by use of interviews and FGDs to understand the meaning of these reasons. On hygiene, two things emerged. One, most gears were dirty and passengers feared that, by using them, they could

contract skin diseases (Tables 4.10 and 4.11 confirmed this claim). Consequently, they chose to ride without them. Two, some passengers, especially women and a few men, refused to use helmets since they would mess up their hair styles. This was confirmed when one of the interviewees said:

Because we work on dusty roads, some of our jackets and helmets become dirty and smelly, especially in the evenings. This has made some customers reject using them. Sometimes, especially for women and a few men with hairstyles refuse to use helmets saying those helmets will mess their hair styles.

At an FGD comprising the *bodaboda* leaders and traffic police officers, the issue of impaired vision was seriously contested. The police maintained that helmets could not impair riders' vision since they were internationally proven effective. The *bodaboda* leadership on the other side, invoking experience, maintained that helmets would sometimes impair their vision. As a result some riders avoided them. The discussion reconciled that impaired vision could be as a result of scratches on helmet lenses or counterfeit helmets in the market. Disobedience was another factor that the participants contested in an FGD that brought together the riders and traffic officers. Whereas riders were appealing to high costs and sometimes ignorance as some of the reasons for noncompliance to protective gear requirements, the traffic police personnel insisted riders' noncompliance to this provision was sometimes caused by disobedience. One of the police officers commented:

On reflector jackets I don't agree that the main reason can be cost. These clothing are not expensive. A reflector vest costs only Ksh 200, moreover, most business enterprises in this area often give them for free. I have seen a trend amongst the riders confirming that they just care very little about their safety. How do you explain the absence of helmets or even reflector jackets anytime we relax and their return anytime we announce an operation? I can explain the non-usage of helmets and reflector jackets/vests in terms of "I don't care attitude amongst the motorcyclists". It is disobedience to the law.

The above statement, other than speaking of disobedience as a factor in noncompliance, equally portrayed enforcement of traffic policies as weak and relaxed. The officer admitted that they sometimes relaxed. Interviewees mentioned ignorance as the reason behind noncompliance to children helmets. They also reported unawareness of the existence of the same and also not knowing where to source them. A check on motorcycle and motorcycle accessories shops around revealed non-existence of child helmets.

Another factor which originated from the questionnaires and discussed in the in-depth interviews and FGDs was fear of witchcraft. Interviewees reported that some customers dreaded using helmets for fear of sorcery which would affect them negatively. There was however, no clear testimony of a passenger that had been affected as a result of sorcery. It also emerged that some feared the possibility of some unscrupulous riders drugging them. Once unconscious, those riders would rob them their valuables. Consequently, they found it better to ride without the helmets. They further reported that some riders were afraid their bosses would put magic in the helmets. This way, they would remain loyal to the boss but retarded their own development. As a result, these riders never used the helmets.

Again, during observations, women were heard arguing with riders over their hair-styles and refused to wear helmets reasoning that the helmets would mess up their hairstyles. It however, emerged that those who complied with protective gears requirement did so as a result of the need to: obey the law; enhance personal safety and; identification. As had been mentioned before, obeying the law is a normative goal pursued by those seeking to accept the societal demands. Compliance for identification purposes was equally normative. In seeking personal safety, the riders were expressing hedonic goals. Their reported reasons for compliance was to increase comfort while driving. It emerged from the FGDs that Mbita sub-County was generally dusty, hilly and rocky. Riders used protective gears to protect themselves from adversaries of such environments.

5.5 Carrying Capacity and Passenger Sitting Style

Table 4.12 and 4.13 showed that 83.2% of riders did not adhere to one passenger per trip rule while 98.8% would carry more than one child per trip respectively. This showed very low levels of compliance to these regulations. The research questionnaire provided three options for riders to justify why they would carry multiple passengers. These were: high returns; passengers' choice; and an option to suggest other reasons. The last option offered riders an opportunity to reveal as many reasons as possible. Of the riders sampled, 273 representing 84.8% reported high returns as the major factor pushing them into carrying multiple passengers, 30 riders representing 9.3% reported that the passengers requested to be carried in multiples while, the remaining 19 riders representing 5.9% gave other various reasons. This distribution is shown in table 5.5 below.

Table 5.5: Why Carry More Than One Passenger per Trip

	Frequency	Percent	Valid Percent	Cumulative Percent
High returns	273	84.8	84.8	84.8
Passengers' favorite	30	9.3	9.3	94.1
Other reasons	19	5.9	5.9	100.0
Total	322	100.0	100.0	

Those who reported other reasons mentioned transportation of special persons (the sick, the disabled and expectant mothers) to the hospital as one reason that necessitating transporting multiple passengers at ago. It also emerged that they carried multiple passengers when they needed a backup for security. These factors were discussed through in-depth oral interviews and FGDs conducted with the *bodaboda* leadership and traffic officers. All those interviewed and all participants in the FGDs accepted gain goal as the driving factor behind non-compliance to the requirement of carrying one passenger per trip. A summary of the discussion on carrying multiple passengers is here below:

The driving factor in the bodaboda sector is profit maximization. Carrying multiple passengers actualizes this. Even though it is fuel consumptive, comparatively it gives high returns than carrying a single passenger. It is also a strategy that has been used by both the passengers and riders for security purposes. When either does not trust the other an extra person becomes vital for backup. Some passengers use it as a strategy to save on fair. The cost of carrying multiple passengers is always less if two people are travelling at the same time. Compliance to 'one passenger' rule would greatly increase transport costs, and inhibit travelling for many rural folks.

Other than using expectation of high returns as a justification for carrying multiple passengers, the above statement revealed the pursuit of hedonic goals as a justification for passengers to board in multiples. The issue of security backup also came up from the statement. Participants in the FGDs agreed that there were cases of some riders mugging passengers and riders equally being attacked by criminals posing as passengers. Under such circumstances, inviting an extra person by either motorcyclist was justified on security grounds. Secondly, it emerged that the regulations only recognized the disabled. It however, assumed that the disabled could support themselves on motorcycles when they sat sidesaddle by only exempting them from sitting astride but not allowing an extra passenger to give them support. The regulations however, did not envisage

transporting the sick, the old and expectant mothers. From interviews with the *bodaboda* leadership, it emerged that the sick and expectant mothers regarded motorcycles as extremely beneficial, as they were generally the only available fastest and trusted motorized means to take them to clinics and hospitals. The *bodaboda* leadership reported that they needed an extra passenger to offer support to these special categories of people while aboard. The traffic officers reported confusion on how to deal with such cases. On several occasions, they reported, they would not reprimand a rider carrying a passenger of this special category and an extra person offering support. To this end, there was a suggestion that there was a need to relook into the regulations to accommodate this special category of persons by the policy.

Also mentioned in the other categories was that some people (mostly young couples or those courting) would insist on boarding motorcycles in pairs. On various occasions, during observations, the researcher would see a young male and female who insisted on riding on the same motorcycle. Theirs was ignorance disguised as an expression of strong love. The passengers either did not understand or just ignored the dangers of mounting a motorcycle in multiples as well as the illegality of their actions. Thirdly, carrying multiple passengers was for extra care to riders. The *bodaboda* leadership insisted that those with more than one passenger were more careful while riding than those on their own or with single passenger. They further reported that having two passengers was actually safer than one, since the two would support each other, and jointly they could exert greater influence on the driver to drive slowly and safely. Reasons for carrying one passenger by riders is presented in table 5.6 below.

Table 5.6: Why Carry One Passenger per Trip.

	Frequency	Percent	Valid Percent	Cumulative Percent
Legality	18	5.6	5.6	5.6
Customers abhors travelling in multiples	4	1.2	1.2	6.8
Non responsive	300	93.2	93.2	100.0
Total	322	100.0	100.0	

From the table, 18 riders representing 5.6%, reported a normative goal for their action by indicating that they never carried multiple passengers since it was illegal to do so. Furthermore, 4 riders representing 1.2% reported that they did not carry multiple passengers since their customers

detested it. The remaining 300 riders representing 93.2% were non-responsive since they reported carrying multiple passengers. This distribution is in table 5.6 below. In the FGDs, it emerged that sometimes others would comply in order to respect the culture on how people should sit depending on how they relate. Riders reported that fathers would not share a motorcycle with their adult daughters or daughters in law since the Luo culture did not allow them to sit so close to one another. So was the case with mothers and their adult sons or son in-law. The other reason reported for compliance was pursuit of comfort. It was reported that some passengers were pursuing hedonic goals of comfort and hence did not accept to share a motorcycle with another person.

Having looked at riders' carrying capacity, it was necessary to find out factors influencing passengers' sitting style. What emerged from the discussions with the *bodaboda* leadership and the traffic police officers was that men did comply with the sitting astride as provided for in the regulations. Problems would only arise in women, some of whom would not want to sit astride but sidesaddle. It was also revealed that some children would not want to sit between the rider and an accompanying adult but ahead of the rider. Because riders had contact with passengers, questionnaires were sent to them asking why some passengers would or would not comply with the regulation of sitting astride. From the responses, 270 riders representing 83.9% of respondents cited religion as a major determinant of passengers sitting style on a motorcycle. This was followed by culture at 32 riders accounting for 9.9% of the respondents, while societal status of the passenger and those who had other reasons was each represented by 10 riders representing 3.1% of the respondents. For those who mentioned other reasons, disability was the most common reason listed. This distribution is in figure 5.1 below.

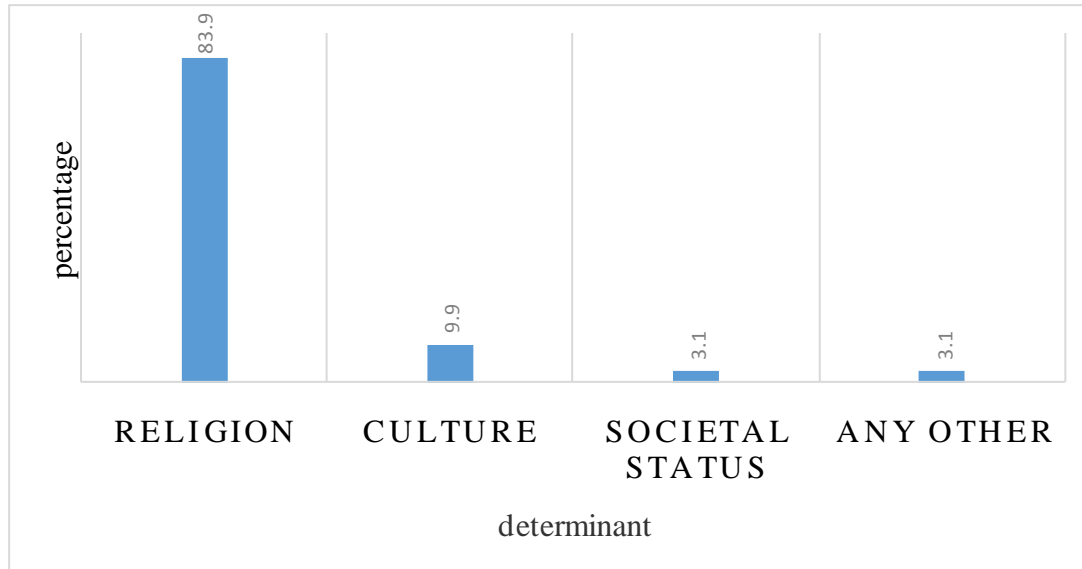


Figure 5.1: Sitting Style Determinants

During observation, the researcher confirmed that indeed religion determined how women would sit on motorcycles. The women followers of Repentance and Holiness Ministry associated with Prophet Dr. David Owuor were seen sitting sidesaddle. They were easily identified by their unique dress code. In an interview with one of the traffic officers it was revealed that the adherents of this denomination would rather accept to be arrested than sit astride on a motorcycle. In FGD, one of the *bodaboda* leaders had this to say:

There is no woman who detest sitting astride on a motorcycle than a follower of Prophet Owuor. In their long robes, they still refuse to sit astride. Surprisingly, they are the most in this area. When I started this, some five years ago, women would invoke culture as the reason for sitting sidesaddle. Today, the reason is religion. Very few, maybe the age of my mother, would want to sit sidesaddle for cultural reasons¹.

A discussion on sitting style on a motorcycle and culture found itself on the floor of Kisumu County Assembly. One member, citing Luo traditions, which prohibited women from sitting “*angewa*” (legs apart), introduced a motion to force women within the county to maintain side-ways sitting while travelling on motorcycles. Even though her motion was defeated, she maintained that women ought to be weary of how wearing skirts and sitting position reflect on their culture and mien as a people hoping to preserve their culture and heritage (Association of Media Women in Kenya, 2014). She further noted that the traffic regulations banning the side-

¹ When the researcher probed about the age of the mother, he said she was 52 years old.

ways sitting position on bikes was ill informed since the drafters did not have first-hand experience on that mode of transportation and therefore could not purport to understand the predicament of women, such as herself, bound by culture, status in society or sheer comfort, to sit sideways and were happy doing so (*ibid*). Similarly, Nyachieo (2015) discussed the issue of culture and *bodaboda* transport in Kisumu at length and posited that culturally, society expected women to be decent. By decency she meant that women had to conform to generally accepted standards of respectable or moral behavior. Whereas Nyachieo's study underscored culture as a determinant to sitting sidesaddle by women, the current study underlined religion as a major determinant. This could be as a result of cultural contamination being experienced in the recent past. The Luo culture is being replaced by the white man's culture including religion. The current Luo woman is putting on trousers and is not shy to expose her thighs! In the Luo culture, anything above a woman's knee was private. Similarly, the Kisumu County Assembly Members' arguments were never based on any scientific data but alleged personal experiences.

On children refusing to sit sandwiched between the rider and the adult, one of the riders reported that the desire to explore and derived satisfaction by imagination of driving pushed children to sit ahead of the rider and holding the handle bars. It was also reported that they derived pleasure when they were asked to hoot in order to notify the traffic ahead on the rider's intention to overtake. Lastly, the police officers reported that the definition of a child in the regulations is more Lombrosic in its approach to matters law. In an interview, one of them said:

The definition of a child as a person below the age of 14 years is more theoretical than practical. It is a preserve of the law courts, or else how would you judge someone to be below 14 years by just looking at them on the road? It is the law courts that can call evidence like birth certificates to ascertain one's age. Implementing this requirement is extremely tricky.

Having discussed the determinants, one recommendation strongly emerged from the riders and the traffic officers. That was that sitting astride rule should be relooked into in order to consider the special category of motorcyclists. Those obeying the sitting astride rule reported doing so for their own stability and consequently their safety. This is a *hedonic* goal whose main motivation is to achieve pleasure and avoiding pain associated with injuries due to crashes.

5.6 Day Headlights

Day headlights enhance conspicuity and hence visibility of the motorcyclist by other road users. With a low compliance rate of 15.5% (Table 4. 15), the study sought to understand why someone would ride lights off, especially during the day. While 156 riders representing 48.4% of the sampled riders chose savings on bulb expenses as the reason, 110 riders representing 34.2% reported no need to have lights on when there was sunlight. The remaining 56 riders representing 17.4% gave other reasons including disparagement from colleagues. The table below shows this distribution.

Table 5.7: Day Headlights

	Frequency	Percent	Valid Percent	Cumulative Percent
Savings on bulb expenses	156	48.4	48.4	48.4
No need with sunlight during the day	110	34.2	34.2	82.6
Any other reason	56	17.4	17.4	100.0
Total	322	100.0	100.0	

Comparison on this finding was rather inhibited by failure of existing research on daytime headlights. In the oral in-depth interviews and FGDs, these reasons were discussed in details. Members agreed that indeed the cost of replacing blown off bulbs was enormous. One of the participants had this to say:

When you ride long distance during the day, when the temperatures are high, with the low quality bulbs in the market, there is a likelihood that the bulb will be blown off by the accumulated heat. Buying those bulbs every now and then is very expensive. So I decided that I would ride lights switched off during the day when there is sunlight. This way I am able to lengthen the life span of my bulbs hence saving me on costs. Again, most of my colleagues would always ridicule you when your lights are on during the day. They will always tell you: “keep the lights for the night!” Some of my colleagues have also claimed that headlights consume fuel and mask other oncoming motorcycles.

The reasoning that there was no need to have lights during the day when there was sunlight and ridicule from colleagues gave an analytical indication that most riders misunderstood the meaning of the requirement. This is misunderstanding which has been identified as a factor in compliance by GFT. To them, the headlights were needed for provision of light and not the envisaged role of

conspicuity of the motorcyclist. Some existing studies (Luchidio, 2015; Roads and Maritime Services, 2013) however, while discussing day headlights, concentrated on its role on motorcycle conspicuity and risk of crashes as a result of ignoring day headlights. They avoided a discussion on reasons why some riders opted to ride lights off during the day. In an attempt to define reasons for driving lights off during the day, in the United States of America, Paine (2006) alluded to riders' fear of increased risk of a headlight bulbfailure at night having been used for long times during the day. He also cited myths associated with day time lights including high fuel consumption and masking of vulnerable road users. The findings of the current study have confirmed that indeed ignoring daytime headlights is partly as a result of some unfounded reasoning such as fuel consumption and masking of other road users. To enhance compliance to this provision, the headlights could be connected to the ignition. This way, once the ignition was on, the headlights would be automatically ignited. Those who complied however, mentioned conspicuity and respect for the law as the factors behind their compliance. This is a normative goal.

5.7 All Time Rear Number Plates Visibility

At 97.2% (see Table 4.18), this was the most complied with regulation. Interviewees reported that this was as a result of the existence of a separate subsidiary legislation specific to number plates (Government of Kenya, 2016), which demanded motorcycles to come with an identification plate fixed on it at the time of purchase. The cost was included in the motorcycle price and so riders and owners needed not struggle to acquire the same separately. For the few that did not have the original number plates, the report was that some had lost theirs. This was due to loose nuts which were not identified and tightened in time. Replacement, they said, was a tedious process. As a result, some decided to get replicas made by local tinsmiths. Other riders simply laminated a computer printout and fixed them as number plates. Those who did not have them at all blamed the registrar of motor vehicles for being slow in performing their duties. Intention to commit crime was also mentioned as a reason for not complying with all-time rear number plate visibility. In an FGD, one of the participants noted:

Having an original number plate is good for the safety of our motorcycles. However, we are sometimes forced by circumstances beyond our help to operate without one. These plates are fixed on the motorcycle by nuts. Due to bad condition of our roads, the nuts loosen with time. If not detected in good time, the plate will fall off. Because replacement is a long process, despite illegal, we opt for a short cut and get replicas

from the local tinsmiths. Sometimes we simply have laminated yellow computer printouts and use them. Worse is when you buy a new motorcycle and it is sold to you without a number plate fixed on it. The blame here goes squarely to the registrar of motor vehicles who allows “numberless” motorcycles into the market. Again, what some of us fail to reveal is the fact that criminal elements amongst us use “numberless” motorcycles for purposes of committing crimes and making tracing them difficult!

Nyachieo (2015) undertook a deeper analysis of the Motor Vehicle Registration Act (CAP 403) and reported the existence of a loophole in the regulation. She reported that the Act provided for registration of a vehicle not more than fourteen days after purchase but did not provide guidance on how noncompliance with this provision would be treated. She further argued that some people exploited this loophole to operate their motorcycles without registration. The current study has however, established the existence of the Traffic (Registration Plates) Rules, 2016 which gives guidance on motorcycle number plates registration and associated punishment for noncompliance. Nyachieo must however, not be vilified for misrepresenting facts as her study was based on Motor Vehicle Registration Act which indeed did not give further guidance on non-compliance. Her study was equally done before the coming into place of the Traffic (Registration Plates) Rules, 2016 which were enacted in furtherance of the Traffic Act and the Motor Vehicle Registration Act.

5.8 Overtaking

The regulations provide that every rider of a motorcycle shall overtake on the right hand side and not to overtake in the same lane occupied by vehicle being overtaken. Table 4.19 showed that 212 riders representing 65.8% of respondents rating their colleagues poor in overtaking, 33 representing 10.2% were satisfied with their colleagues while 77 representing 24% reported fair rating for their colleagues. Generally, this was a low rating on compliance to the requirement for overtaking by the regulations. To gauge riders' knowledge of overtaking rules, the questionnaires presented an open ended question asking for factors to consider before overtaking. Common among their answers was traffic behind, traffic ahead, the motorist to be overtaken and their speeds. This question was then followed by another which wanted riders to justify why they would consider what they had mentioned above. Most riders answered personal security and avoidance of crashes. Personal security thus was reported as a major factor contributing for complying with responsible overtaking. In an FGD, one of the traffic officers explained compliance to rules of overtaking in the following words:

In my service as a traffic officer, I have come to learn that riders with several years of experience in the art or those experienced in life as shown by their age are likely to overtake safely. They are very careful and we rarely have overtaking issues with them. Sometimes this could be explained by some sense of responsibility in them as they have families to take care of. They also care for the lives of other road users. The second category of those overtaking responsibly are those who underwent formal training and licensed.

The above statement revealed three factors responsible for compliance to regulation on overtaking; experience, responsibility and formal training. The *bodaboda* leadership accepted that indeed the three factors contributed immensely to responsible overtaking. They however, underscored personal security as a major factor pushing riders to be responsible while riding. Care for personal security is a hedonic goal propagated by GFT as a goal responsible seeking to maintain a favorable condition. Various reasons were reported to contribute to careless overtaking by riders. When asked why some riders would ignore safe overtaking, riders reported rush, over excitement, showing off and the urge to feel new experiences as those factors pushing riders to engage in risky overtaking behaviors. One of their leaders in an in-depth interview described his members as follows:

Most of my colleagues are youths who have refused to outgrow teenage and adolescent characteristics. They are always in a rush to make money. And you only make more money by ferrying more passengers. They are always in a hurry to pick passengers hence overtaking from whatever space available regardless of the traffic. Some are over excited, especially when they have new motorcycles. Others want to express themselves as heroes amongst their mates. The only way to do this is by defying the rules and attempting acrobatic moves with their bicycles. Lastly, some try expressing their riding expertise through speeding and overtaking other motorists even when it is not advisable to do so.

The above statement carried with it two concepts of GFT; *hedonic* and *gain* goal frames as factors shaping compliance. By being in a hurry expecting to ferry more customers, the riders expressed gain goal by seeking to rake in more money. Excitement and expressing heroism, riders were expressing hedonic goal seeking personal fulfilment and glorification. Nyachieo (2015) noted about four types of overtaking related crashes: motorcycle and other vehicle collisions; motorcycle and pedestrian; motorcycle and motorcycle; and lone motorcyclist crash. Her study however, simply described crashes associated with overtaking without giving leading factors. The current study has expanded Nyachieo's study by describing the leading factors in the crashes she outlined.

Kipng'etich (2017) equally reported risk-taking behavior as one of the reasons that propelled young motorcycle riders to engage in risky activities such as speeding, overtaking from wrong sides of the road and drunk riding. His study however, described risk taking as a cause of commercial motorcycle accidents in Kenya and not as a factor in risky overtaking and noncompliance to overtaking rules. The current study has however, defined risk taking as a reason for noncompliance to traffic rules. This study concluded that behavioral characteristics determined riders' overtaking tendencies. It emerged that riders' poor judgment and pursuit of hedonic goals seeking to actualize personal aggrandizement as well as gain goal pursuing more returns motivated noncompliance with the rules of overtaking. To alleviate this, it was suggested that there was a need to enhance formal *bodaboda* riders' training in order to equip them with the necessary driving skills and safety traffic maneuvers for responsible overtaking.

5.9 Parking areas

Despite the regulations providing that “*every rider of a motorcycle shall not park in undesignated areas*” parking in Mbita sub-County was haphazard and unplanned. This resulted from the fact that there were no designated parking areas for motorcycles. The absence of these designated areas thus became a limiting factor to compliance. This was the reason given in all the interviews and FGDs. In particular, the traffic officers lamented that their work was inhibited by this scenario as it was difficult to hold down an offender on obstruction which is always based on flouting designated parking places rule. In the opinion of those interviewed and who participated in the FGDs, the County Government of Homabay needed to urgently legislate and designate these areas to ease *bodaboda* management.

5.10 Membership to a Body Corporate (SACCO Model)

It was established that compliance with this requirement in Mbita sub-County stood at 51% (table 4.20). This was an average level of compliance. Riders indicated various reasons for this average compliance. Table 5.7 below shows the percentage distribution of these reasons as reported by the riders.

Table 5.8: Reasons for SACCO membership

	Frequency	Percent	Valid Percent	Cumulative Percent
Making savings	37	11.5	11.5	11.5
Loaning services	99	30.7	30.7	42.2
Pooling of ideas and sharing experiences	106	32.9	32.9	75.2
Social security	26	8.1	8.1	83.2
Legal requirement	27	8.4	8.4	91.6
Other reasons	27	8.4	8.4	100.0
Total	322	100.0	100.0	

From the questionnaires, sharing of experiences and pooling of ideas at 106 riders representing 32.9% of the respondents was reported to be the most reason why riders joined SACCOs. This was closely followed by loaning services at 99 riders representing 30.7% of the respondents. Making savings scored 37 riders representing 11.5% of the respondents, social security taking 26 riders representing 8.1% of the respondents and legal fulfilment scoring 27 riders representing 8.4% of the respondents. Other reasons took 27 riders also representing 8.4% of the respondents. Whereas Etienne (2011) had described ignorance as a factor in regulatory noncompliance, it could also be a reason for compliance. Fulfilment of legal requirement as a reason for SACCO membership was only 8.4% of riders. This therefore meant that the remaining 91.6% would join SACCOs for other reasons hence complying to the law albeit ignorantly.

Equally, riders reported various reasons why some of them non-complied with the requirement of being members of any of the groups. Table 5.8 below shows the percentage distribution of those reasons.

Table 5.9: Reasons for Non-Compliance

	Frequency	Percent	Valid Percent	Cumulative Percent
Mismanagement of the groups	24	7.5	7.5	7.5
Lack of membership requirements	91	28.3	28.3	35.7
Don't see the need	32	9.9	9.9	45.7
Any other reasons	100	31.1	31.1	76.7
Non Responsive	75	23.3	23.3	100.0
Total	322	100.0	100.0	

These factors were further followed in the interviews and FGDs. One interviewee had this to say on the *bodaboda* SACCOs' membership:

When we took leadership of this group it was financially broke. It had been mismanaged and resources embezzled by the previous management. Nobody could account for members' contributions and other donations extended by well-wishers. The membership base was shrinking and participation reducing. So far we have revamped its operations and realizing membership growth. Another thing we are grappling with is vital documentation from riders. Most of them are not licensed and have no insurance covers. Some do not even have national Identification Cards. Consequently, we have a challenge in registering them since we cannot easily trace their backgrounds. Still others do not just care. They do not see the need for cooperation. However, we must also blame the leadership of these groups for low membership. There is constant internal quarrels and power struggle for the leadership of these groups. Under such conditions, potential members are scared and opt not to join.

This statement has confirmed the argument by 24 riders representing 7.5% of sampled riders (see table 5.8) that mismanagement was a factor scaring them from joining SACCOs. Since SACCOs are allowed, by law, to engage in SACCO business (Sacco Societies Act, 2008, Sec2), their management was of paramount consideration before someone decided to either join or not. The fear for losing their hard earned resources to inept SACCO officials with poor management skills scared riders from getting enlisted hence non-compliance. According to respondents in one of the FGDs, it was reported that there were other groups that had previously mobilized money from unsuspecting riders, embezzled it and fled or, using riders name got cash from politicians or through their connections, swindled it and closed down. These factors had the integrity and popularity of groups/SACCOs eroded. In pursuit of hedonic goals, that is for fear of losing their hard earned cash, some riders decided not to be enlisted. A study in Tanzania reported that most SACCOs were plagued with mismanagement, irresponsibility, corruption, non-accountability, and thievery leading to insolvency (Banturaki, 2012). Schwettmann (2014) summarised this scenario as the *Crisis of Management* in the SACCO movement. Baka (2013) reported leadership crisis in the management of Cooperatives Societies across the world characterized by corruption and mismanagement leading to theft of co-operative resources and split of viable co-operatives into smaller ineffectual units. The above studies were however, based on big cooperatives with massive resources and so many years of existence as opposed to the current study which looked into small SACCOs in a new and less developed economic sector. *Boda boda* SACCOs came into existence from 2016 meaning they have not accumulated much resources. The results however, show that

problems of mismanagement, irresponsibility, corruption, non- accountability, and thievery are not unique to big and well established SACCOs but a universal problem to all the SACCOs regardless of size and duration of operations. Normally, meeting certain conditions are mandatory for group membership. Asked in the questionnaires of the requirements to join *bodaboda* groups/SACCOs riders mentioned five documents. These included copies of driving license, national identification card, certificate of good conduct, motorcycle logbook and insurance. During interviews and FGDs, it emerged that it was not mandatory that all these documents had to be produced before one could be registered as national Identification Card and any other two of the remaining documents would do. It was explained that they were not legal requirements but safety measures put by riders themselves. However, 91 riders representing 28.3% of the respondents mentioned lack of necessary documents as one of the reasons for noncompliance. This study has established low compliance level to driving license and insurance hence qualifying the report by the riders that lack of vital documents barred them from SACCO membership. Another 32 riders representing 9.9% of the respondents said they did not see the need to join the SACCOs and groups when they had their families to support them in the event they were hit by an eventuality. An analysis of Goal Framing Theory suggests this “*I don't care attitude*” was as a result of ignorance(Etienne, 2011) of that SACCO membership is a government regulatory policy and a social protection policy.

The other shared reason by riders for noncompliance was internal quarrels and power struggle amongst group leaderships. A synopsis of this power struggle was given in this study where one of the sub-groups maintained independence despite the expectation of Mbita Sub-County BodaBoda SACCO that both the sub-groups were to operate under it. An FGD comprising *bodaboda* leadership and traffic officers revealed that formation of most of these groups were politically motivated. They argued that the groups sometimes resembled political campaign machinery for hire, well equipped with goons. They argued that the two dominant groups in the sub-County were each being bank rolled by politicians, externally-driven and mainly formed for pure positioning to cash in on the expected political elections and cash donations. This is a pure case of gain goal frame in GFT. As a result those apolitical were reluctant to join the groups. Though similar to the findings of ActionAid (2013) which reported political interference as a problem in SACCOs' formation and management, the later's findings were based in rural Uganda having a different soci-economic characteristics with Mbita sub-County, Kenya.

The other factor enlisted by riders was inconsistency of the law. At an FGD, participants discussed the inconsistency of the law concerning SACCO membership. It was agreed that based on the provisions of Sacco Societies Act, 2008, SACCOs should be registered under the Co-operative Societies Act guaranteeing voluntary and open membership as one of the core principles (Co-operative Societies Act, Sec 4b). What emerged was therefore a contradiction of the law insofar as SACCO membership was concerned. Whereas the regulations, which was a subsidiary legislation, made it mandatory for riders to be members of SACCOs, the SACCO Societies Act, 2008 and the Co-operative Societies Act, which are substantive legislations enacted by acts of parliament, expected SACCO membership to be voluntary. The regulation therefore violated the very principle to which SACCOs were committed to as members initiated voluntary associations. This therefore meant that some riders exploited this legal loophole to avoid being enlisted. In order to improve compliance, it emerged that there was need to streamline the regulatory policies applicable to the SACCO industry. More specifically, there was a need to protect SACCOs against embezzlement of funds by technocrats and any other manipulators as well as cushioning of cooperatives against political interference and state capture. More important was the need for enlightening the riders on the benefits of collaboration.

5.11 Conclusion

From the findings of this chapter, it is evident that, compliance or non-compliance with the regulations was as a result of various reasons depending on the rule in question. The study established cross cutting reasons for non-compliance. These, amongst others, included corruption, poor or lack of training, costs, beliefs in witchcraft and magic and ignorance. For example, riders did not comply with the requirements of having a valid riding license, insurance, protective gears, SACCO membership and other provided rules since they did not understand their importance, or lacked the required finances and/or bribed their way through the traffic police officers. The study also established that culture, defined in terms of traditional beliefs and denominational doctrines, enhanced non-compliance to the sitting astride rule, especially for women. On rules that required vigilance and care while riding like rules on overtaking, adolescent tendencies and pursuit of personal glorification limited compliance. Legal provisional deficiency was another factor that hindered compliance. While the regulations required riders to park only at designated parking areas, the regulations, out of self-insufficiency, banked on County governments' compliance with the Traffic Act by designating parking areas in their respective sub-Counties. Another factor that

inhibited compliance was conflict of laws as experienced in the rule for SACCO membership. Whereas NTSA (Operation of Motorcycles) Regulations, 2015 directed compulsory riders' membership to SACCOs, the Sacco Societies Act, 2008, which is a substantive legislation, provided for voluntary SACCO membership. One main factor that enhanced compliance was riders' desire to enhance their security. Riders reported this as the main reason for using protective gears to shield them from harsh environmental conditions. So was the reasoning of those riders who took up insurance policies in the hope that they would be cushioned in times of eventualities. Membership to SACCO rule was equally complied with by those riders in search of social, economic and physical security.

Further the study explored ways in which the discussed factors, and reasons for non-compliance could be resolved. Amongst others, six important ways were suggested to attempt the overcoming of compliance limiting factors. These techniques included; one, offering civic education to all actors in the *bodaboda* industry about their rights and obligations in regulatory compliance as well as benefits thereof; two, gradual, as opposed to wholesome, implementation of the regulations; three, empowering riders' groups or SACCOs to help in the enforcement of the regulations; four, offering of incentives to those that have complied by the concerned agencies so that other riders could be motivated to comply in the hope of equally enjoying and five; reduce penalties charged on offenders though making them multiple and instant to close gaps for bribery. And lastly, the need to use reasons for compliance and non-compliance to help design intervention messages that could be used to support behavior change communication targeting the riders.

CHAPTER SIX

INFLUENCE OF SACCO MODEL ON THE MOTORCYCLE RIDERS' (NON) COMPLIANCE TO THE REGULATIONS

6.1 Introduction

The third objective was to assess the contribution of the SACCO model proposed in the regulations on riders' social, economic and political well-being and by extension how this influenced their compliance or even non-compliance in some cases with the regulations.

6.2 An Overview of SACCO Movement

A SACCO is a co-operative society, whose objective is to encourage its members to save, thereby creating or accumulating capital, which can then be lent to members at a reasonable rate (Schwettmann, 2014). They put people and their communities, rather than profit, at the center of their aspirations (Banturaki, 2012). Members of SACCOs share common values such as democratic control, voluntary participation, flexibility, self-help, self-reliance, solidarity, and community ownership (GOK, 2005). In Africa, savings and credit societies or associations have a long history. They may not have been set up in accordance with the known principles of cooperatives, but they existed and were serving a closely similar purpose to those of modern SACCOs (The Uhuru Institute for Social Development, 2013). The SACCO concept being new to the motorcycle industry and just coming to effect in January 2016, few studies on compliance to this regulatory provision in Kenya were available. However, there existed multiple studies on the *matatu* industry (Institute of Development Studies, 2013; Macharia, 2017; Mutoria, 2010), which other than underscoring the place of SACCOs as a vehicle for improving livelihoods, emphasized their role in influencing compliance to regulations in the transport sector. By and large, they reported mixed influence of SACCOs on regulatory compliance in the *matatu* industry. Depending on the goal framed by the every SACCO leadership, they would motivate their members to either comply or disobey the regulation in question. This section thus looked at and reported the role played by SACCOs in compliance to the NTSA (Operation of Motorcycles) Regulations, 2015, by riders in Mbita sub-County. In order to do this, the study looked at the contribution of the model in terms of its role in those areas that influenced the manner in which riders were likely to frame their goals leading to either compliance or non-compliance to the

provisions of the regulations. These areas included influence on riders' behaviour; security; economy; politics and; social life.

6.3 The SACCO structure in Mbita sub-County

In order to understand the SACCO policy in the *bodaboda* sector in Mbita sub-County, it was necessary to examine the structure and the internal organization of the riders in the area. In-depth interviews with the leadership of the *bodaboda* riders in Mbita revealed that there existed two main *bodaboda* self-help groups and one SACCO. Of the two, Mbita Sub-County PikiPiki Self Help Group (MSCPPSHG) was the biggest with a sub-County outlook having offices in all the five County Assembly Wards. The other, Mbita PikiPiki Self Help Group (MPPSHG), though intended to equally have a sub-County outlook, covered only Kasungu and Rusinga Wards with one office in Mbita town, Kasungu ward. Each of these two groups were referred to as the "Umbrella". The SACCO, Mbita Sub-County BodaBoda SACCO, was not highly pronounced. It had a membership of 50 riders who were also members of either of the other two self-help groups. The working structure between the self-help groups and the SACCO was not clear though the SACCO leadership maintained that MSCPPSHG and MPPSHG were subsidiaries of the SACCO. This position was supported by MSCPPSHG but vehemently opposed by MPPSHG which, citing regulation 9(2) of the NTSA (Operation of Motorcycles) Regulations, 2015, maintained they were an independent group. Reading regulation 9(2) revealed that the term SACCO and group could be used interchangeably. The regulation provided: "..... *For two wheeler motorcycle taxis, the name of the Group or SACCO which they are members of must be indelibly printedat the back of their jackets*" (Government of Kenya, 2015). The study adopted the use of the term SACCO to equally mean a group. Below the two Self Help Groups existed smaller groups in every ward known as sub-branch. Sub-branches were further divided into smaller groups known as stages. Figure 6.1 shows this ideal arrangement.

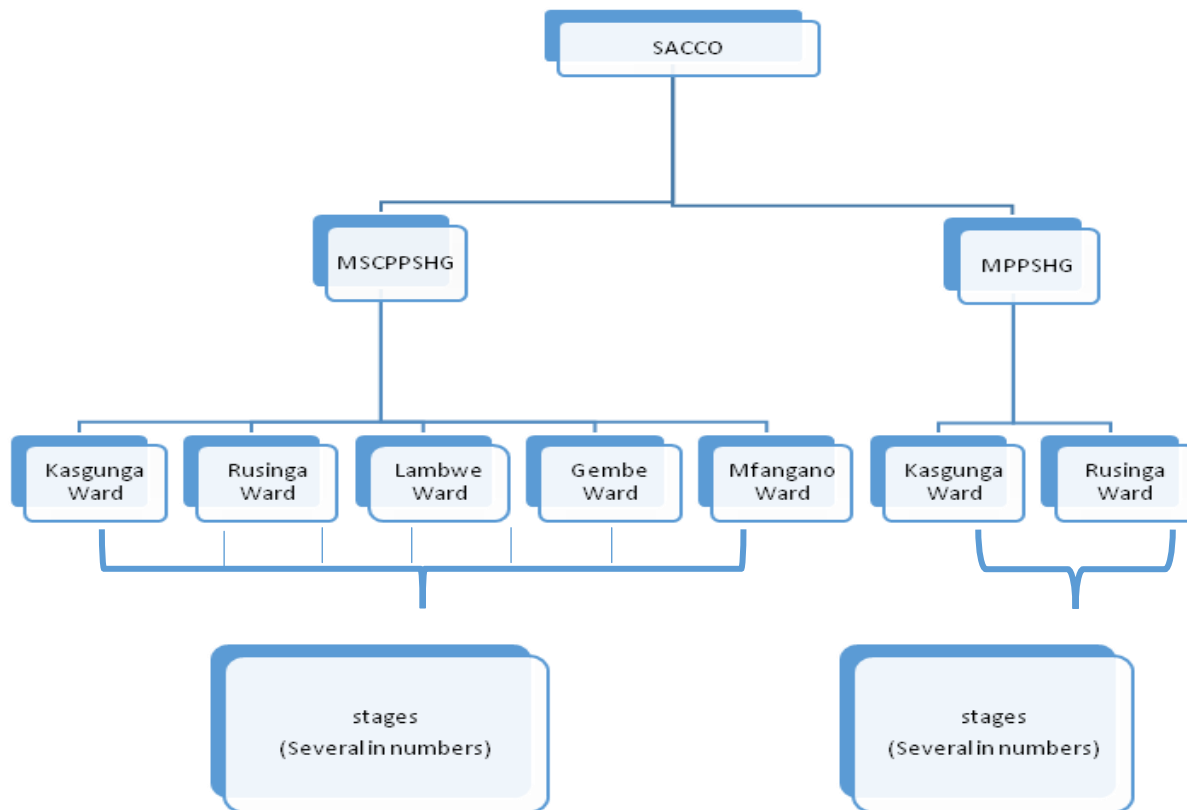


Figure 6.1: BodaBoda Groups hierarchical arrangement in Mbita sub-County

Most of the groups at the ward level and stages were not formally registered with the ministry of Labor, Social Security and services but with either MSCPPSHG or MPPSHG. Their main function was, through their leadership, to offer closest monitoring on riders on behalf of their respective “umbrella” groups. Specifically, groups at ward levels and stages collected information and intelligence about their members as well as monies from riders and submitting the same to the “umbrellas”. They also mobilized new riders to be recruited as members of either of the “umbrellas”.

6.4 Influence of SACCOs on Riders’ Behavior Change

The success of many government regulatory policies depend on those to be regulated achieving behavior change with the greatest effectiveness and efficiency. Social factors, which are concerned with how individuals relate to each other and the influence of other people on their behavior, seemed to have informed the change in the riders in Mbita sub-County. In interviews

with the *bodaboda* leadership, experience sharing as a reason for SACCO membership was reported. From these experiences, riders were able to learn and improve on their general riding and business behaviors. When asked of the achievements of the SACCOs and/or groups and why one would opt to join, one of the group leaders said:

Within our groups, we share our experiences on how we mitigate various challenges we meet while going through our day-to-day activities. We also borrow ideas from the neighboring counties and sub-Counties on how they handle their challenges and disseminate the same to our members. This way, we have seen a positive deviation on how our membership handle their customers; how they handle their machines; how they relate to the security officers; and their general perception on complying with the laws regulating the transport sector in Kenya. Other than the financial expectations, we learn from one another on how to become good and responsible citizens.

The above statement was an expression of the ideal but not what was always happening. It was observed, and it has been reported here, that compliance with the regulations was mixed and generally low despite the existence of SACCOs which ought to have helped in enhancing compliance and which was acknowledged by riders. The above sentiment by one of the SACCO's leadership revealed some important behavior change that SACCO model had awoken on riders in the sub-County and which, depending on the framed goals, enhanced or inhibited compliance with NTSA (Operation of Motorcycles) Regulations, 2015. These were: sharing experiences; copying and imitating others; cooperation with others; and taking responsibility for ones actions. These aspects were further discussed in an FGD with *bodaboda* leadership. On experiences, it was reported that in their meetings, held every fortnight, there were special sessions on experiences. During such sessions, members would share what they had gone through for the period ending and how they maneuvered through. Members would then discuss every particular experience giving all possible solutions. They would then settle on the best practice when faced with a similar situation. For example, they reported, when a bad experience had been faced as a result of non-compliance with, for instance, lack of license or insurance, they would not only advice on the acquisition of the same but equally marshalled resources, through the SACCOs, to help them obtain the documents. This way, SACCOs played both an advisory and enabling role in the NTSA regulation compliance. Secondly, it was reported that during those meetings, the leadership would have identified the best behaving riders and they would be used as yardsticks for other members to emulate. These standards could be in terms of dress

code, cleanliness and customer care or even compliance to the law. Other riders would be implored to emulate their best performing colleagues and where necessary assisted to reach those standards including regulatory compliance. Thirdly, they reported that they had a collaboration program with other SACCOs from neighboring sub-Counties for purposes of sharing ideas and intelligence on their members and on how to better their business. They however, indicated that not all riders are members of the SACCOs hence the observed pockets of regulatory deviance by riders. Furthermore, the SACCOs could only advise but had no legal mandate to enforce compliance, they added. At an FGD with the traffic police, it also emerged that rider collaboration was both positive and detrimental as riders shared both good and bad behaviors from their neighboring colleagues. Singling out rampant ferrying of multiple passengers per trip in other jurisdictions, the officers reported that deviance to one passenger rule would sometimes be observed, with riders questioning why the police was hard on them while the practice was happening in other jurisdictions. Lastly, through these SACCOs, it was reported that responsibility was imparted on riders by imposing sanctions, fines and punishments on those who had abdicated their responsible duties as transport providers, inclusive of compliance to simple rules such as having protective gears. For fear of such actions against them, riders would strive to comply.

Despite mixed influence reported above, traffic police officers still registered their pleasure with the SACCOs in transforming the behaviors of the riders from the mob mentality to a more diplomatic group, especially when dealing with the police and government agencies. During interviews, one of them said;

SACCOs have changed these people tremendously. Before, they knew no diplomacy; they knew not how to sit on the table and negotiate for what they wanted; they knew not how to tell the police to respect them; and all they knew was confrontation. Today, they are a changed lot who send their sober leaders for a round table discussion on matters affecting them. We listen to one another and make a win-win decision based on the legal provisions of the land. This way, we learn from one another and violent confrontations are seriously minimized. Moreover, SACCOs offer us a forum to train riders on the importance of regulatory compliance. We have trained them on the need to have protective gears and have, at least, seen some positive progress in the use of reflective jackets and helmets. Moreover, many partners have come on board, through the SACCOs, to sponsor some riders for training hence acquiring licenses as required by the regulations.

When SACCOs are involved in helping members acquire licenses and insurance, it enhances normative aspect of GFT in regulatory compliance. By training members on how to maneuver complications of their work, it enhances riders' hedonic goal. Rollason (2013) reported how SACCOs have changed riders' behavior in Rwanda. He noted that monitoring from SACCOs, through their own uniformed security personnel, for infringements discouraged riders from, for example, carrying multiple passengers and operating without protective gears. Good fellow (2015) described the *bodaboda* sector in Rwanda to had been, until recently, widely viewed as lawless and dangerous for it was characterized by robbery, theft and violent crime, with motorcyclists as both victims and perpetrators. He concluded by noting that the SACCOs model had made great efforts to improve this situation. Howe (2003) equally noted that some operational discipline amongst the *bodaboda* riders in Uganda have been provided by the SACCOs. In both Rwanda and Uganda motorcyclists' SACCOs enforcement powers given delegated by the state. This was unlike SACCOs in Kenya which neither had their own security officers nor any enforcement legal provisions. The Kenyan riders' SACCOs depended on the national traffic police for regulatory enforcement.

6.5 Influence of SACCOs on Riders' Security

On security, the research sought to understand whether the introduction of the SACCO model had influenced the security of riders and how this has further influenced their compliance to NTSA (Operation of Motorcycles) Regulations, 2015. From the riders' questionnaires, it emerged that 282 riders representing 87.6% of the respondents reported their belief that the model enhanced their security while 40 riders representing 12.4% were in disagreement. This was a very high percentage signifying high expectations and approval of the SACCO model by the riders on their security. Figure 6.1 represents this distribution.

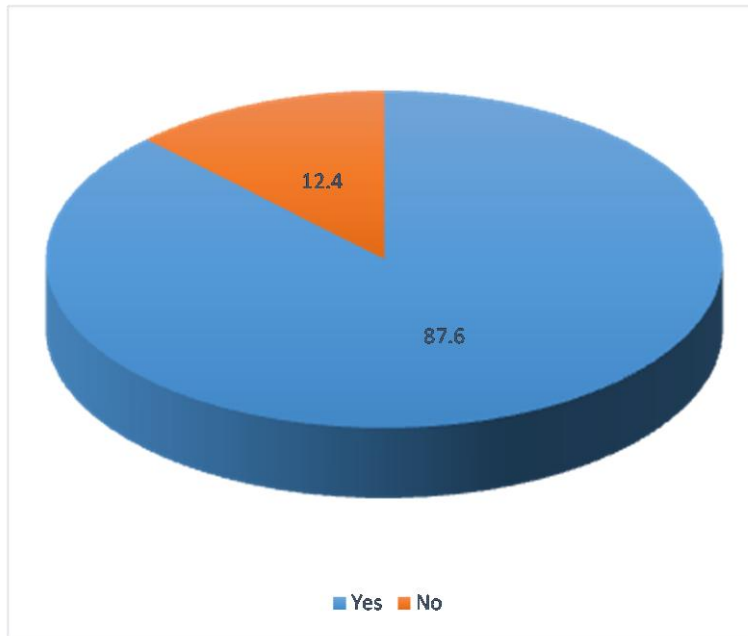


Figure 6.2: Has SACCOs Influenced Riders' Security (%)

The above data however, did not reveal ways through which the SACCO model had influenced riders' security. It was thus important to get the answer to this question from the interviews and FGDs. From the interviews, it emerged that riders, in search of hedonic goals capable of guaranteeing comfort, were concerned with three types of security. That was; (1) their physical security; (2) their economic security and; (3) their social security. By physical security is meant personal safety of riders while they conduct their business. In interviews with various groups' leaders, they were asked how SACCOs had influenced riders' personal safety and if this had any bearing on compliance to the regulations. One interviewee summarized his answer in the following words:

It is not any secret that bodaboda has been the most unsecure mode of transport. It has not been secure to the riders as they are targeted by criminals; some of the riders themselves are criminals targeting their passengers and their colleagues and; sometimes bodaboda riders or their bicycles have been used by criminals to escape from scenes of crime. With the SACCOs or groups as we call them, we have had several trainings on how to screen customers and find out those with ill motives. We have been trained on cues to look out in potential customers. Most often we consider the time they want to travel; routes they want to take; if they are alone or multiple; how much they are willing to pay over specific distance. We also get trained on traffic rules and the importance of protective gears for personal safety.

The above statement revealed that SACCOs were involved in training of their members. They did this by inviting and facilitating knowledgeable persons to train their members. This meant the content of the regulations was made simpler for riders to understand. It was also clear that while training their members on how to maintain their personal security, they were discouraged from carrying multiple passengers and encouraged to use protective gears. This ended up in enhancing compliance to the regulations demand for carrying one passenger per trip and the use of protective gears. In an FGD with the *bodaboda* leaders they reported that before such trainings, their members did not understand security reasons for some of the provisions in the regulations, especially those on the use of labeled protective gears. After trainings, they would appreciate the security rationale behind the requirement. They however, reported that the choice was with every individual rider to practice what they were trained on or ignore. This explained the attacks that some riders had faced in the past as a result of being lured by attackers posing as passengers. Traffic officers also echoed the role SACCOs had played in ensuring riders' physical security and compliance. One of the traffic officers interviewed said:

Despite problems here and there SACCOs have helped a lot in this sector which hitherto had been very insecure. It had been characterized by robbery, theft and violence. Through these groups, we have been able to have our informers who are doing a good job and through them we know those with criminal backgrounds and can keenly monitor them. Through our connections and coordination with their leadership, we have been able to botch several criminal plans against the riders themselves or the public in general.

One of the *bodaboda* leaders interviewed stressed the role of SACCOs in their security. He said:

With the SACCOs we have a formal way through which we can coordinate and share notes with the security institutions in the sub-County. We are able to report our suspicions to the authority and work together in making follow-ups. Because our members have given us the mandate, there is no feeling of betrayal when we work hand-in-hand with the police since they understand we operate in their best interest. We are more secure than we were before since we have tried to eliminate criminal elements amongst us; people that use bodaboda as a disguise but in real sense are surveying to attack and rob our members their motorcycles; people whose main intention is to rob passengers and the public in general their valuables.

The above assertion was a clear indication that the SACCO model organized the *bodaboda* industry in a manner that they understood the history of one another including their moral background. It made it easier for the security apparatus to penetrate the industry, collect

intelligence and act on them enhancing security provision to the riders. Rollason (2013) reported that Motorcyclists in Rwanda were organized into two competing syndicates which other than performing other duties provided security to their members. He concluded by noting that the two SACCOs had made great efforts to improve security through tougher licensing rules and a unified security branch with uniformed security guards patrolling the city to check noncompliant motorcyclists. This was however, different from how SACCOs in Kenya participate in both their personal and national security. In Kenya, the SACCOs are not allowed to run a separate uniformed security unless registered under the Private Security Regulation Act, 2016 making it a different entity from the SACCO. Similarly, Goodfellow (2015) reported that the involvement of Motorcycle taxi in Kigali, Rwanda, in the city surveillance mechanism enhanced the city security. This study was however, conducted in Kigali, a town with a city status in country with a different leadership style from Mbita, a town with a rural setup in Kenya. Rwanda has been defined as a benevolent dictatorship (dictatorship for the good of the people) while Kenya as a pseudo democracy (dictatorship disguised in democracy) (Khadiagala, 2011). From these cases, the current study therefore deduces that SACCOs, by considering and training riders on how to maintain their security, enhanced compliance to regulatory provisions seeking to enhance riders' security like transporting one passenger per trip and the use of protective gears.

6.6 Influence of SACCOs on Riders' Business

To understand the influence of SACCOs in riders' economic lives, they were asked to explain why they decided to join SACCOs/groups and their answers recorded for analysis. Figure 6.3 below shows this percentage distribution.

Figure 6.3. Reasons for SACCO Membership (%)

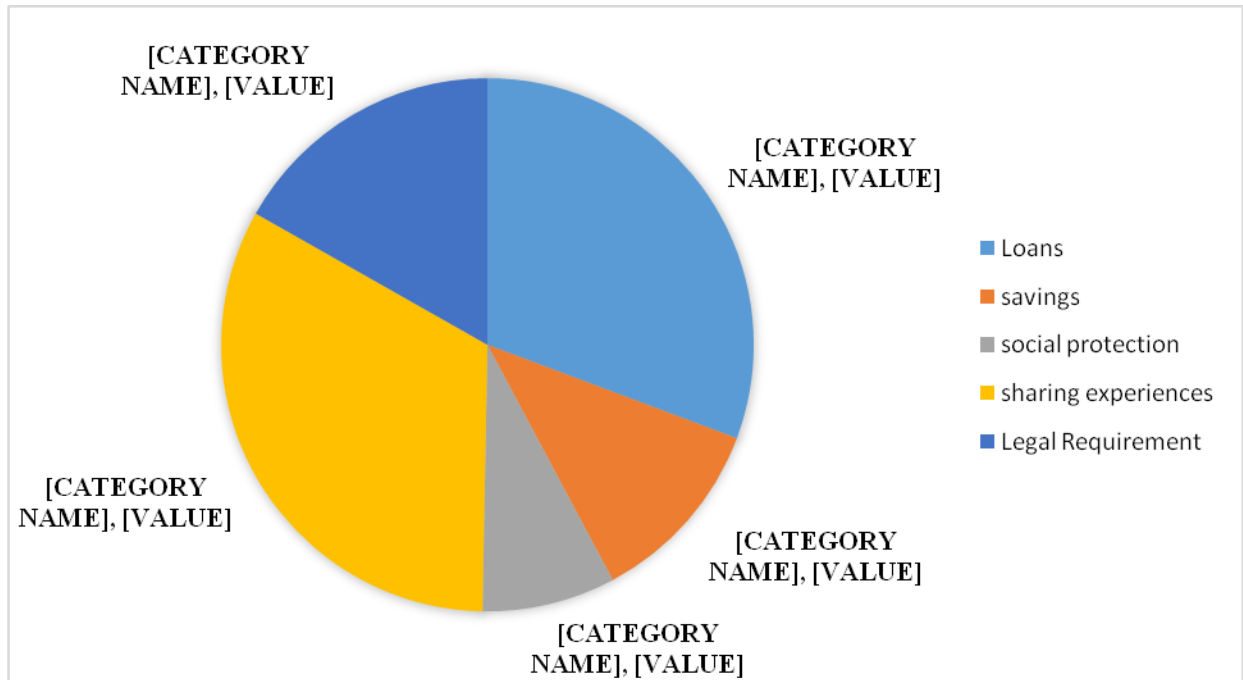


Figure 6.4. Reasons for SACCO Membership (%)

From the figure, 99 riders representing 30.7%, 37 riders representing 11.5%, 106 riders representing 32.9%, 54 riders representing 16.8% and 26 riders representing 8.1% of the respondents mentioned envisaged loans, savings, sharing experiences, legal requirement and social protection respectively as the reasons likely to influence joining SACCOs. In an FGD with the *bodaboda* leadership, it emerged that the existence of SACCOs in the sub-County made it easy for riders to join hence complying with the SACCO membership requirement provided for in the regulations. It saved them from trekking long distances to look for such outfits to join. In the same FGD, riders’ leaders decried low number of riders making savings with the SACCOs. They however, reported that the few making regular savings were able to take loans from the SACCOs enabling them acquire insurance for their motorcycles, pay for their trainings to acquire licenses and buy protective gears. This way, they argued, SACCOs had made its contribution, however small, in enhancing regulatory compliance. Shared experiences, they reported, both enhanced and limited compliance depending on the experience and the outcome. For example, some shared tricks they used to evade law enforcers. These tricks would be replicated by their non-compliant colleagues in evading law enforcement officers. This hindered compliance.

Sometimes they would share their learning experiences as a result of the use of protective gears encouraging their colleagues to use them hence enhancing compliance.

Asked why riders would opt for SACCOs for savings and loaning services despite the existence of other financial institutions in Mbita sub-County, a *bodaboda* leader stated:

The practicality of securing a loan from the formal financial institutions like banks is not as easy as the theory may put it. There is selective treatment especially in our banks. Whereas the extended loan is a debt which must be paid back and bearing in mind that there is a collateral that one must sacrifice in the event he fails to honor his instalments, most banks give loans on the basis of a relationship the intended borrower has with the personnel of the bank. In some cases there are bribes involved to facilitate loan approval! I opted to join this group of my equals who understand me and do not segregate but treat all equally. My money is safe here. And whenever I want a loan, it is always easily extended to me at very favorable terms. Moreover, we have volunteer collectors who visit us every evening to collect premiums and our savings. Remember most banks close at 4pm, sometimes when you have not collected enough to save part of it. This way, we are reminded and encouraged to save by the “bank” coming to you at an appropriate time.

On how they expended their savings and loans and if at all it helped them in achieving some of the legal requirements one *bodaboda* leader said:

A part from using those monies on various personal expenses, most of us have used our savings and loans from the SACCOs to get insurance for our motorcycles, pay for training to get license and buy the required protective gears.

From the above statements, it emerged that SACCOs had influenced how riders saved and borrowed. Instead of riders walking into banking halls to make saving deposits, SACCO collectors came to collect deposits from them. This way, riders were saved the costs and time of going to the banks. Secondly, they were reminded on a daily basis that they needed to make savings or loan repayment. And lastly, they were given an opportunity to submit their savings and loan repayments at a time appropriate for them. Under this arrangement, there was some hedonic fulfillment for riders. With SACCOs, riders enjoyed some comfort by not struggling to make long queues at the banking halls as well as racing against time in order to make deposits. Chances of forgetting to make deposits to cater for loan repayments were reduced hence reducing the agony of penalties levied on clients when a month goes without

repayment as is the case with commercial banks. SACCOs therefore relieved riders various hidden credit costs hence saving them funds for regulatory compliance.

In an interview with one of the groups' leadership, it also emerged that the SACCO model, other than influencing how members made savings, changed asset acquisition by riders through loaning. He said:

SACCOs have helped most of us make regular savings, get loans on easy terms and have been enabled to buy their own motorcycles. Before, we used to ride for others which shrunk our income but today a good number of us own the motorcycles courtesy of SACCOs. This has resulted into better returns at the end of the day. I am such an example who through, SACCO loans, have bought three motorcycles. Other than that, one of my former rider has just bought a new motorcycle by the help of this loan and hopefully he will repay the loan in the next one year.

The above statement revealed that SACCO loans were given at reasonable interest rates and terms. This enabled the freeing of some resources that could be used in fulfilling some requirements of the regulations which required finances such as insurance, licensing and protective gears. Loans taken from commercial financial institutions attracted high interests putting more pressure on riders' financial base. The statement is also an indication that some of the motorcycles had been bought through loaning from the SACCOs. This had expanded riders' financial base increasing their ability to pay for regulatory requirements. With good income, riders were able to sustain paying monthly subscriptions for insurance. By joining SACCOs riders pursue a gain goal and in the process they end up complying with the regulations.

Bantuaki (2012) discussed the influence of cooperatives in the distribution and acquisition of assets in rural East African communities. He concluded by asserting that asset acquisition improved people's living standards and enabled them meet their other financial obligations. Discussing the significance of the cooperative movement for development in Tanzania, the International Labor Organization (2010) argued that SACCOs played an integral part in poverty reduction through employment and extending income to some members employed by the SACCOs. While this study discussed the role of SACCOs' in bettering a population's lives through income generation, the current study revealed SACCOs economic contribution to a people's lives through investment which in turn helped them meet other financial obligations, compliance associated costs for this case.

6.7 Influence of SACCOs on Social Protection

On social protection, 26 riders representing 8.1 % of the respondents reported to have joined the groups for social security purposes (see figure 6.3). Social protection is a broad term with multiple considerations. However, for this study, the term was used to define social assistance extended to a SACCO member in order to overcome situations that adversely affect his or her wellbeing. These eventualities included death, sickness or fatal injuries to the rider himself; his nuclear family; or sometimes even members of his extended family. The study revealed that those who reported social security as their main reason for cooperating with other riders had previously seen colleagues or themselves assisted by members in times of difficulties through *harambees* (fund raising). It also emerged that *harambees* for colleagues involved in accidents would be effective for those riders who had protective gears at the time of accident. In an interview with one of the *bodaboda* leadership on how the SACCOs helped their members, he thus stated:

We do harambes for our members faced with difficulties like death or sickness in his nuclear family and death of either of a parent. However, for those involved in accident, they must meet certain conditions before we come to their aid. One, they must be licensed riders and donning protective gears at the time of accident. Two, they must have had one passenger and did not carry load together with a customer at the time of accident. Lastly, they must be up to date in our financial records. Other than that the assistance accorded will be on personal grounds and not SACCO initiated.

Due to these conditions, most riders tried to comply in order to benefit in the event of such a misfortune. This way compliance to licensing, insurance and the use of protective gears has been enhanced. Responding to an open-ended question in the questionnaire that required the riders to briefly explain the choice of social protection as the main reason for joining SACCO, one of the riders explained:

I had previously seen riders joining hands to comfort their colleagues in difficult situations. I was motivated and decided to join. And I was never disappointed when I lost my mother. Colleagues from my group supported me: they collected money for the funeral arrangements; they joined me in every night vigil for more than two weeks and; above all supported me morally. And we have done this to other people whenever they lost a close relative; spouse, parent, offspring and or even siblings. We have also come to aid of other colleagues involved in accidents, especially those who had protective gears at the time of accident.

Other riders shared similar testimonies on how they were assisted during their difficult times by colleagues and the need to comply with some rules in order to benefit. Such sentiments expressed SACCOs' fulfillment of riders' hedonic goals. Deaths and sicknesses are known to exhaust people's income hence reducing their economic power. SACCOs had been used by rider members as a cushion during these misfortunes. Because of such assistance, some riders were able to spare their little income and use it in financing themselves to acquire riding license or even pay for insurance premiums. One interviewee narrated how he used part of collections made to him when he was sick to sponsor his training at a later date. Other than financial assistance, SACCOs also participated in providing welfare services to members. One of the leaders had this to say on welfare services;

What we do is seriously stressing and as you know stress is a mental problem. SACCOs have become one of the more resistance resources one can exploit to keep him going as he sorts out his mental status. Just like social networks like marry-go-round for women, some of us are so strong to find these resources from within, we need them around the weaker members for positivity and encouragement. When left alone, such colleagues are likely to pose danger to other motorists by careless riding and overtaking.

Like any other profession, the above statement revealed riders too faced mind cracking problems and needed shoulders to lean on. SACCOs, composed of individuals with different abilities, offered a pool from which riders undergoing difficult times would turn to without rigid rules in the institutionalized centers. By offering options for riders to seek assistance, SACCOs try to maintain riders in their proper mental state and operate more carefully on the road. Though based on Ugandan experience, which has had a different political history compared to Kenya, ActionAid (2013) argued that associational cooperate activity was always a normal response or practice of people to minimize their individual disadvantages and maximize their collective good, without rigid rules of the structural form. In those gatherings, they helped one another cope with the societal norms. The International Labor Organization did a study on Cooperatives in Tanzania mainland and reported social protection as one of the reasons for their revival and growth. Even though the findings of this report is similar to what was reported by the International Labor Organization above, their study area differed politically. Tanzania had followed socialist approach to economy while Kenya historically known to be a capitalist society. It therefore followed that whether in a socialist or capitalist society, SACCOs were

influential and important for social protection. It also emerged that some riders saw SACCOs, especially at their committee meetings, as gossiping clubs where members peddled lies against others. This was social matter worth following up in an FGD. The *bodaboda* leaders vehemently denied this allegation. One of them said:

We meet regularly in our groups/SACCOs to discuss our experiences with various types of customers and how to serve them satisfactorily. We share ideas on various investment opportunities and how to venture into them. It is in these meetings that we forge a common ground on how to approach errant traffic officers frustrating us. We discuss behaviors of our members that we can change them. We collect intelligence, filter and establish their veracity before we can share with the security agents. I think this is not gossiping neither back biting.

The above statement is a pointer to the effect that indeed there existed some level of discussions about others in SACCO meetings. This behavior discouraged other riders from joining the SACCOs hence hindering compliance. In another FGD, traffic police officers supported *bodaboda* leaders against this accusation. They registered their satisfaction with the performance of those committees. One of them said:

It is not easy to impress everybody in a group of more than 100 riders. So far the bodaboda leaders are doing a good job. Those blaming them are criminals hiding in the motorcycling sector. They fear that they will soon be exposed. Collecting intelligence is not easy and involves discussing others to fully understand a situation.

This statement by the police was not surprising as most intelligence information is always collected in secret and in a gossiping manner. Kiza *et al* (2013) reported that rumor mongering and gossip was a factor influencing households' participation in the SACCO programs in Uganda. This study was however, based on Uganda which has had a long experience of SACCO failures (The Uhuru Institute for Social Development, 2013). The Ugandan study was based on households which is an institution as opposed to the current study based on riders who were individuals. A theme on HIV and AIDS also emerged from the field. Though not planned for, it could not be ignored because it touched on the riders' wellbeing as well as affecting their compliance with the regulations. HIV and AIDS have become a social problem in the present world with a highest prevalence of 25.7 per cent in Homa Bay County, Kenya (G.O.K, 2014). HIV and AIDS has robbed many families their able and productive members and also eating into their incomes as a result of medical expenses. As a result, such families are unable to meet their other expenses. During interviews, it emerged that through the SACCOs riders participated in

programs that promoted and scaled up universal access to voluntary medical male circumcision for HIV and AIDS reduction. During groups' leaders FGD one of the participants said:

In our group, we are not oblivious of the effects of HIV and AIDS. We are also aware that our members are at high risk of infection for they are young active citizens some of whom, without guidance, cannot control their sexual desires. Their situation is further complicated by fisher folk women, many of them single as a result of divorce or death of their partners due to HIV and AIDS and always preying on these young men for economic gain. It has always been in our interest to guide our members on how to remain negative or live a decent life when already infected and how to handle those already trapped in the mix, especially while performing our transportation duties. We do this through organizing sensitization seminars and skills training. During such trainings and seminars, riders are also trained on financial propriety. However, due to our financial status, we have not ventured into monetary assistance to the infected and the affected as other organizations do. Hopefully, we will do this as we grow financially.

The above statement revealed the role of SACCOs in the fight against HIV and AIDS scourge as well as the challenges they face. By organizing trainings for riders on how to remain negative or live positive and by including financial propriety in the training manuals, riders are introduced to best financial practices. This way, they are enabled to plan their finances, make savings and plough back some earnings to their *bodaboda* business. The riders' leader also intimated their desire to financially help those infected or affected by the menace but lacked finances.

A study on cooperatives in Tanzania mainland reported that cooperatives were engaged in activities that helped mitigate the impacts of HIV and AIDS such as publication and dissemination of HIV and AIDS related materials as well as educating children orphaned by the pandemic (International Labour Organization, 2010). They did this through interventions spearheaded by Cooperative Reform and Modernization Programme in the country. The current study, on the other hand, outlined what SACCOs had done in HIV and AIDS mitigation. It went further to highlight deficiencies of the *bodaboda* SACCOs in the fight against HIV and AIDS.

6.8 Influence of SACCOs on Political Empowerment

Empowerment can be argued to be a constant intrinsic transition which improves the capacity to engage in sound decision-making processes. It is the process of enabling people to increase control over their lives, to gain control over the factors and decisions that shape their lives, to increase their resources and qualities and to build capacities to gain access, partners, networks, a

voice, in order to gain control (United Nations Department of Economic and Social Affairs, 2012). In the questionnaires, some riders listed the need to have voice as a reason to why they enlisted as SACCO members. Interviews with the *bodaboda* leadership and the traffic police revealed that the SACCO model has contributed both positively and negatively to regulatory compliance. Positively, it led to riders' voices being heard in an organized and civilized manner. Negatively, it led to noncompliance to the regulations. One of the *bodaboda* leadership said:

Through our association, we have been able to raise our voice and be heard, especially by the government. There was a time when there existed an institutionalized corruption when every motorcycle would pay Ksh 50 to the police manning a barrier for him to operate for the day. We used our organization to dismantle this barrier through negotiations and planned social disobedience. Even though we still bribe the police, it is not institutionalized like it was before. Other than that, we are a political force with the ability to influence elections into political offices. We have used this strength to negotiate for fair share from most of devolved funds, especially to support training of our members. As of today, we have annual allocation for bodaboda training from the National Government Constituency Development Fund (NG-CDF) and the National Government Affirmative Action Fund (NGAAF).

The above statement showed how powerful the SACCO movement amongst the *bodaboda* had become, thwarting institutionalization of corruption by the traffic officers. It also portrayed the riders' ability to influence elections' outcome. In an FGD with the *bodaboda* leadership, it emerged that in the 2013 general elections they fronted one of their own for a position of Member of County Assembly position in one of the wards in the sub-County and won. His election however, a traffic officer argued in an interview, was a curse to compliance as he would from time to time lead demonstrations against law enforcement officers in the disguise that they were harassing *bodaboda* operators. As a result, riders became big headed and defiant. With strong and defiant leadership, members could form a formidable force capable of defying and rendering the police selfless. He however, maintained that these groups were not a real threat to their authority as they had legal means to deal with them. In fact, he hailed the groups as a complementary agency to their work. Observation however, revealed that these SACCOs would sometimes organize strikes, overwhelmed security agencies and force their will. The SACCOs, it also emerged, were capable of acting as intermediaries between motorcyclists and elected members, financial institutions and other well-wishers who invested in training riders. Using their numbers, they negotiated for favors, especially to secure funding from political offices. Some of these funding had been used to train their members hence contributing towards

increasing the number of those compliant with license requirement. Rollason (2013) reported SACCOs as a threat to the authority of the Kigali City Council police in Rwanda. Tunde *et al* (2012) while discussing the influence of *okada* SACCOs on compliance in Nigeria advocated for taming of these unions arguing that commercial motorcyclists' unions were so powerful and constituted themselves into another 'government' consistently opposing some rules. The *bodaboda* SACCOs in Mbita sub-County, though small entities for the moment, must be monitored and controlled lest they turn into a nightmare to the security agencies.

6.9 Conclusion

This chapter has shown that the SACCO model, as a result of various roles it played in the *bodaboda* sector, influenced riders' (non)compliance to NTSA (Operation of Motorcycles) Regulations, 2015. By sharing ideas within the SACCOs, facilitating riders' trainings and advising them on various issues including the rules, SACCOs shaped riders' general riding and business behaviors as well as simplifying to them regulatory requirements. The involvement of SACCOs in riders' financial needs like extending loans offered them strong economic base with which to meet their obligations. SACCOs equally cushioned riders from extreme financial shocks and also acted as the surest way to guide them through their difficult times. Further, SACCOs, in association with NGOs, spearheaded programs that promoted and scaled up universal access to voluntary medical male circumcision for HIV and AIDS reduction. Despite the fact that the decision to comply or non-comply with the regulations was individual's Group psychology derived from SACCOs would still come into play to sometimes enhance or inhibit compliance. When they organize for trainings they enhance compliance but there are times when they organized riders into a formidable force defy traffic rules and use their numbers to outwit the police. Sometimes this is supported by politicians who rely on them for support by threatening enforcement officers curtailing their efforts in implementation.

CHAPTER SEVEN

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

This study assessed compliance to the National Transport and Safety Authority (Operation of Motorcycles) Regulation, 2015. It specifically: (1) assessed the level of adherence to the 15 regulations provided for in the policy by the *Bodaboda* Motorcyclists; (2) examined factors that determined (non)compliance to the provisions of the policy and; (3) evaluated the SACCO's influence on riders' social, economic and political well-being and by extension their compliance to the regulations. The study was conducted in Mbita sub-County which, other than having poor roads, is composed of several islands depending on motorcycles as the only means of motorized land transport. The summary and conclusions in this chapter are therefore derived from the findings and discussions in chapter 4, 5 and 6. Equally, the interpretations made from the study findings have been used to come up with the recommendations to enhance compliance to the regulations and suggestions for further areas of studies.

7.2 Summary of Findings

The first objective of the study was to assess the level of adherence to the 15 regulations provided for in the policy by the *Bodaboda* motorcyclists. The findings revealed that the requirement for child helmet was the least complied with at 0%. The most observed rule was rear number plate visibility which stood at 97.2%. Other requirements had varying levels of compliance (refer to table 4.21). Generally, there was low compliance level to the regulations which could explain the continued numerous challenges facing the commercial motorcycle sector such as crashes resulting into injuries and sometimes deaths. The second objective was to examine factors determining compliance to the provisions of NTSA (operation of motorcycles), 2015. Research participants responded through filling questionnaires, responding to interview questions or participating in FGDs. They discussed various reasons to why some riders complied with various provisions of the regulations as well as why others were handicapped in complying with the regulations. On license acquisition, results revealed that high costs, ignorance, corruption and complex acquisition process were some of the limiting factors to compliance to this expectation. However, the existence of well-wishers participating through SACCOs and the need to obey legal requirements were mentioned as those factors that enhanced compliance to

this rule. On insurance, the study revealed high costs, lack of understanding of the third party policy rule and lack of faith on insurance companies by the operators in handling their protection as some of the factors demoralizing riders from complying with insurance rule. However, some riders complied in anticipation of compensation to cushion them during eventualities. Looking at protective gears, the respondents reported discomfort in those gears, high acquisition costs, ignorance and sanitation of the gears as the shaping factors. However, personal security motivated some riders to acquire the gears. Expectations for high returns, security purposes and passenger desires were reported to be the leading factors in influencing compliance to the regulations demanding transportation of one passenger per trip though sometimes riders opted to carry one passenger per trip for fear of their personal security.

Whereas high costs, ignorance and misunderstanding persuaded some riders to non-comply with the regulations demanding to always ride lights on, culture, religion, passengers' physical status and exploration desires determined compliance with astride sitting requirement. On overtaking, carelessness, inadequate training and the desire to express heroism were reported to determine compliance with this regulation requirement. On SACCO membership, respondents decried their mismanagement, lack of registration requirements, ignorance of both the law and benefits and conflict of the law as some of the factors determining riders' membership decisions. Their availability and participation on riders' financial needs however, encouraged compliance. Lastly, there emerged issues of corruption, conflict of law, political interference, and nature of the *bodaboda* business, as a determinant in compliance. All these determinants were associated with hedonic, normative and gain goals discussed by GFT theorists as determinants of compliance. The riders considered pleasure or gain they would derive from complying with every provision before deciding whether to comply or not. In this case, hedonic determinants including costs, discomfort as well as associated social gains were reported to determine rider behavior. On normative goals, it was revealed that some riders would comply with the regulations just to fulfill the law. They mentioned regulatory requirements for their behavior. Gain goal was observed to have driven most riders to ignore the regulatory requirement that called for actions that would reduce their income such as carrying of one passenger at a time. Because of monetary value attached to carrying multiple passengers or passengers with loads, riders would opt to pursue the gain in this.

The third and the last objective was to examine the influence of SACCO model provided for in the regulations to the *bodaboda* riders and its influence on compliance. It looked at SACCOs' contributions on riders' social, economic and political well-being and by extension their compliance to the regulations. The data collected revealed that the model was a significant player making riders better and motivating them to comply with the regulations in some instances and undermining compliance in some cases. On behavioral change, it was reported that within SACCOs, riders shared their experiences which others could learn from and improve on their general riding and business behaviors including compliance with the regulatory system. Some shared experiences also encouraged riders not to comply especially when some positive gain such as high returns could be associated with non-compliance. On security, it was reported that the SACCO model had connected the missing link between the security organs and the riders enabling sharing of vital information necessary for security management. It also helped in educating riders on their personal security and reducing risks hence freeing finances for compliance purposes. The model also played a key role in economic and social support to the riders. It was revealed that, SACCOs, as a financial intermediary, had the capacity to strengthen the financial sector making it stable, sound and sufficiently deep and broad enough to efficiently mobilize and allocate resources to address the development needs of the entire *bodaboda* population including compliance to licensing and insurance. SACCOs had the capacity to mobilize resources to cushion their members when they were struck by an eventuality such as death, sickness or loss of business ability. In the spirit of *harambee*, members came together and stood with their colleagues during such difficult times. The affected colleague was therefore enabled to pass through those hardships without further straining their little resources. It also had a role in the fight against HIV and AIDS. In a nutshell, the SACCO model educated members to appreciate the importance of complying with the regulations and at the same time financially supported members to acquire vital documents like license, insurance as well as protective gears.

7.3 Conclusion

This study generally established low compliance level with the provisions of the regulations by the *bodaboda* motorcyclists in Mbita sub-County. Such low compliance level limited the vision behind the enactment of NTSA (Operation of Motorcycles) Regulations, 2015 which intended to enhance road safety for motorcycle riders. Working on improving compliance level by the riders is necessary if safety is to be guaranteed for commercial motorcycle users.

Various reasons for compliance or noncompliance were identified. These levels were however, dependent on each regulation and informed by riders' framed goal. The study however, established some cross-cutting reasons across most of the rules. On compliance, it emerged that the riders' desire to enhance their personal, social and economic security enhanced the use of protective gears and SACCO membership. Factors limiting compliance included ignorance, corruption, financial considerations and lack of training. The study also established that culture defined in terms of traditional beliefs and denominational doctrines, adolescent tendencies and pursuit of personal glorification limited compliance with some rules. Legal provisional deficiency as well as conflict of laws left riders confused on what to do when it came to some provisions of the regulations. To overcome these limiting factors and enhance compliance, civic education, gradual or piece meal implementation of the regulations, empowering riders' groups or SACCOs to help in the enforcement of the regulations and offering of incentives to those who complied by the concerned agencies were suggested.

In respect to the third objective on SACCOs, the study concluded that, other than playing an important role in widening riders' financial base, the SACCO model was equally important in facilitating riders' training and social protection. The study however, revealed that the SACCOs could only create conducive environment for compliance while the final decision was every rider's prerogative as the SACCOs lacked legal enforcement authority. To this end, the study therefore, suggested empowerment of these outfits by extending them a legal enforcement mandate in order to complement the security apparatus in enforcing NTSA (Operation of Motorcycles) Regulations, 2015.

7.4 Recommendations

The drafters of NTSA (Operation of Motorcycles) Regulations, 2015 had immense expectations that the regulations was going to create a lasting cleansing to the *bodaboda* sector which had hitherto been unsafe for motorcycle riders and other road users. Below are some recommendations suggested by this study and which could be useful in the *bodaboda* public policy process, especially by policy makers and implementers. Firstly, on compliance with the regulations, there is a need to pursue piece meal and gradual enforcement of the provisions of the regulation starting from those that are easy to abide by within the shortest time such as the use of reflector jackets and those with financial implications such as having a license given a longer period.

Fines for non-compliance be made instant at the site of commission of the offence upon being receipted by the policy enforcer. Those fines should not be instantly enormous in order to close room for corruption from the enforcers but in multiple sites to discourage riders from flouting the rules. The fines should be ploughed back in training more riders. Two, there is a need to introduce a compulsory comprehensive SACCO/group insurance to motorcycles to replace the existing third party insurance in order to curb the mismatch between the insured expectations and the insurance reality. Under this model, riders, already organized in groups, get their insurance through the group which collects and pay premiums on their behalf.

It is also recommended that the County government should negotiate with the local driving schools and through the SACCOs train the riders that are already in the business at a lower cost. It is also recommended that the County government should negotiate with the local driving schools and through the SACCOs train the riders that are already in the business at a lower cost that will only cater for theory as they are well versed with the practical part so that they may be issued with driving licences. Any other well-wishers intending to sponsor some riders for such trainings should equally do so through those SACCOs. Thirdly, to encourage compliance, incentive schemes, public information campaigns and education resources for riders were recommended. And because the motorcycle industry is here to stay, there is need to introduce training on riding skills in secondary schools so that students graduate already trained and licensed in riding. More importantly, there is need to relook at the policy in order to reconcile all the inconsistencies from within and with other regulatory tools in Kenya.

Lastly, because SACCOs play a vital role in enhancing regulatory compliance, there is need to empower the existing SACCOs with full responsibilities to manage various stages by recruiting operators and managing them. This must however be done with great care lest the SACCOs are turned into a parallel government.

7.5 Suggestions for further research

Objective one aimed at assessing riders' compliance level with the NTSA (Operation of Motorcycles) Regulations, 2015. Part of what was not covered, and which remains key to the regulations in the *bodaboda* industry is an assessment of passengers' compliance level with the same regulations.

Objective two delved into those factors determining compliance or noncompliance with the NTSA (Operation of Motorcycles) Regulations, 2015. It however, did not pay detailed attention to the efficacy of the Regulations. Importantly, is the need for a study to establish the intra and extra inconsistencies and limitations of the regulations with the aim of suggesting ways of enriching and making it a better policy in efforts to strengthen its place in the management of *bodaboda* transport.

Lastly, the study evaluated the place of SACCOs in compliance with the regulations. Part of the SACCO system, which the study did not deeply focus on, is the corruption and how the SACCO model has fought it in the *bodaboda* transport industry.

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APPENDICES

Appendix 1 Table for Determining Sample Size of a Known Population

<i>Table for Determining Sample Size of a Known Population</i>									
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note: N is Population Size; S is Sample Size *Source: Krejcie & Morgan, 1970*

Appendix 2; Questionnaire

QUESTIONNAIRE (filled by *bodaboda* Riders)

Hi! I am Nyasio Walter Ouma, a Masters in Research and Public Policy student at Maseno University. I would like to ask you to assist me in filling this questionnaire seeking to generate data on compliance to the provisions of “*National Transport and Safety Authority (Operation of Motorcycles) Regulations, 2015* amongst the *bodaboda* riders in Mbita sub-County, Kenya. Feel free to answer the questions in the best manner you understand them and be assured that your views will be treated with utmost confidentiality. Participation in this research is voluntary and you are free to decline to answer any question you are not comfortable with. There will be no monetary appreciation for participation. If you consent to participate, please sign hereunder.

Consent by signing

Name.....

Signature.....

Thank you for accepting to take part in this research.

SECTION 1.0: DEMOGRAPHIC INFORMATION

101. County Assembly Ward

SECTION: 2 Compliance; Reasons for Non-compliance and the way forward.

201. Do you have a valid driving license? Yes () No ()

1. If yes why?

.....
.....

2. If answer no then why?

a) Acquisition process is cumbersome ()

b) Acquisition process is costly ()

c) Don't see the need ()

d) Any other reason.....

.....

3. If yes did you undergo any formal training before you acquired the license?

Yes () No ()

If No then how did you acquire your license?

-
4. Do you think it is important to have a driving license? Yes () No ()
Give reasons for your answer above
-
5. How best do you think the issue of acquiring license should be handled?
- a) Introduction of compulsory motorcycle driving skills as a subject of study in secondary schools ()
 - b) Establishment of motorcycle driving schools in each of the 290 constituencies in Kenya to offer free training and in-service services to those already in the industry ()
 - c) Enhance implementation of the requirement by giving *bodaboda* groups' officials authority to arrest and hand over to police all those operating without licenses ()
 - d) Any other suggestion
-
6. Do you have an Insurance cover for you motorcycle? Yes () No ()
- a) Status of the Insurance cover; Valid () Expired ()
 - b) If 'No' Why? (a) Highly costly
(b) Other Reasons.....
 - c) If 'Yes' Why?
-
7. What do you think should be done to help in this area?
-

202. Do you have protective gears as required by the NTSA Regulations? Select appropriately from the list below.

8. If yes tick the ones you have from the list below;
- a) Helmet Yes () No () () how many pairs ()
 - b) Reflector jacket Yes () No () () how many pairs ()
9. If No give reasons for your answer
- a) Helmet;
 - Too heavy making me uncomfortable ()
 - Too expensive to acquire ()
 - Don't see the need ()
 - Any other reason
 - b) Reflector jacket;
 - Too heavy making me uncomfortable ()
 - Too expensive to acquire ()
 - Don't see the need ()
 - Any other reason
-

10. Is your helmet(s) inscribed at the back and front with your motorcycle's registration number? Yes () No ()
11. What is the color of your helmet a) Yellow () b) Red () c) Other colors ()
12. Is your reflector jacket(s) inscribed at the back with your motorcycle's registration number? Yes () No ()
13. Do you think it is necessary to have and use those protective gears? Yes () No ()
Give reasons for your answer above
14. What do you think should be done to make all riders use the safety gears?
a) The police must be strict in ensuring all riders use the gears ()
b) There is need to create awareness on the need to use the gears and associated risks when they are ignored ()
c) Any other
- 203** How many passengers do you always carry at a time? () and why?
15. Have you ever carried more than one passenger at a time? Yes () No ()
16. If yes, why?
a) That gives high returns ()
b) Passengers like boarding in pairs ()
c) Any other reason
17. If no, why?
a) The law prohibits the same ()
b) My customers don't like sharing one motorbike ()
c) Any other reason
18. What do you think are the dangers of carrying multiple customers at ago?
19. What measures do you think should be put in place to make riders adhere to the legal requirement of one passenger at a time?
a) Reduce the passenger carrier of the motorbike to only accommodate the rider and one passenger ()
b) Passengers should be encouraged to refuse to share one motorbike with others ()
c) Those found flouting the rule should be punished severely and their licenses withdrawn for a period of not less than three months ()
d) Any other
20. Do you always carry school going children? Yes () No ()
21. If Yes, how many children at a time? a) one () b) Two () c) Three ()
d) More than three ()

22. Why would you carry two, three or more children at ago?

.....
.....

204. How do your passengers sit on the motorbike? A stride () Sideways () Depends on sex ie male a stride and female sideways ()

23. What are those factors determining how passengers sit on the motorbike?

- a) Culture ()
- b) Economic status ()
- c) Religion ()
- d) Any other

24. In your own opinion, how do you think people should sit on motorbike?

A stride () Sideways () should depend on sex ()

205. Do you always ride with headlights on? a) Always () b) Occasionally () c) Frequently ()

d) Never ()

25. If Yes, give reason for your answer

- a) It is a policy requirement that the lights must be on for visibility by oncoming traffic
- b) It is enjoyable always riding with lights on
- c) Any other reason

26. If No, give reason for your answer above

- a) Saves on the bulb expenses ()
- b) Don't see the need during the day when there is sunlight ()
- c) Any other reason

206. When you find a customer who has some load too to be carried, what do you always do?

- a) Carry the passenger with the load together ()
- b) Advice the passenger to get an extra motorbike to carry the load as you carry him/her ()
- c) Leave both of them ()

27. In the event you advice for an extra motorcycle and the customer rejects, what do you do? Do not answer if your choice in **206 above** is (a)

Carry both the customer and load () Reject the contract ()

207. Do you have a customer jacket? Yes () No (). What of a customer helmet? Yes () No ()

28. How often do you clean the jacket?

- a) Daily ()
- b) Twice every week ()
- c) Once every week ()
- d) Once every month ()
- e) Never ()

29. What of the helmet?

- a) Daily ()
- b) Twice every week ()
- c) Once every week ()
- d) Once every month ()
- e) Never ()

208. How is your rear number plate?

- a) Original ()
- b) Duplicate () Do you have a police abstract to justify this? Yes () No ()
- c) Do not have at all ()

30. Number plate visibility

- a) Visible ()
- b) Not Visible ()

209. How would you generally judge your colleagues' driving behavior as far as overtaking is concerned?

- a) Good
- b) Fair
- c) Poor

31. What factors would one consider before overtaking?

.....

32. Why would one consider the above factors?

.....

33. Why would one fail to consider those factors?.....

.....

210. Are there designated parking areas in this area?

- a) Yes ()
- b) No ()

34. If yes, do you always park in those designated areas?

- a) Yes ()
- b) No ()

SECTION 3: INFLUENCE OF THE SACCO MODEL

301. Are there Savings and Credit Cooperative Organizations (SACCO) or any *bodaboda* group in your area? Yes () No ()

35. List all the documentations needed for membership

.....
.....

302. Why would one take up membership of a SACCO or a *bodaboda* group as a rider?

- a) It is a government/policy requirement ()
 - b) It is a personal choice that one has to make ()
 - c) Any other
-

303. How would you describe the process of joining a *bodaboda* SACCO?

- a) Easy and relaxed ()
- b) Complicated and rigid ()

304. Are you a member of any SACCO or a *bodaboda* riders' self-help group? Yes () No ()

36. If yes, what are the benefits of membership?

- a) Making savings ()
- b) Ability to get loaning services ()
- c) Government requirement ()
- d) Pooling of ideas and sharing of experiences ()
- e) Social Protection ()

37. Elaborate on your choice above

.....
.....

38. If no, what are the reasons?

- a) Mismanagement by the group leaders ()
 - b) Do not have all the requirements for membership ()
 - c) Don't see the need ()
 - d) Any other
-
.....

39. Do you think organizing the *bodaboda* riders in SACCO's and groups have helped in the following areas?

- a) Changing riders' behavior? Yes () No ()
- b) Maintenance of the safety and security of riders? Yes () No ()
- c) Riders' economy? Yes () No ()
- d) Riders' political participation? Yes () No ()
- e) Riders' social affairs? Yes () No ()

THE END

Thank you for taking part in this research and May the Almighty God bless you!

Appendix 3; Observation check list on compliance to 15 provisions of NTSA regulations, 2015

1. Existence of protective gears;
 - a) Reflector jacket; how many pairs
 - b) Chest Guard
 - c) Boots
 - d) Gloves
 - e) Helmet; how many pairs
2. Proper use of the protective gears;
 - a) Both the rider and customer putting on reflector jackets
 - b) Both the rider and passenger putting on helmet
 - c) Jacket properly numbered and the number similar to the registration plate of the motorcycle and has a name of a SACCO printed on it
 - d) Helmet properly numbered and the number similar to the registration plate of the motorcycle
3. How many passengers carried at a time
4. How do those passengers sit? A stride or sideways?
5. Are passengers carried together with load?
6. What of children; are they accompanied or alone while on the motorcycle?
7. While riding are lights on or off at any given time.
8. Is the rear number plate visible?
9. From which side do riders overtake? On the right hand side? Overtaking from which lane? The one occupied by the motorist being overtaken?
10. Are they parking at parking designated areas?
11. Observation of general traffic rules eg use of indicators

Appendix 4; Oral in depth interview guide for *bodaboda* leaders

1. What is your general view on the *bodaboda* transport services in this area in terms of its safety?
2. Are you aware of the existence of the NTSA Regulations, 2015?
3. What are some of the provisions of the regulation that you know?
4. From your observations do you think there is compliance to the regulations by the *bodaboda* riders? (What informs your answer?)
5. What do you think are some of the reasons for non-compliance by some riders?
6. There is the question of license which some riders say are very expensive to acquire, some say the acquisition process is cumbersome, others say there is no need having one while others believe it makes no difference whether you have one or not. What do you have to say about this?
7. Insurance is a very vital document in the transport sector yet some of your members do not have the document, what do you think is the reasoning behind this?
8. What factors determine acquisition and use of protective gears? (helmet, reflector, gloves, boots, chest guard)
9. Your comment on one passenger at a time rule? How about those carrying multiple passengers? What do you think drives them into carrying multiple passengers?
10. What do you think can be done to enhance compliance to the regulations for more safety?
11. In regulation 9 (1) of the NTSA Regulations, 2015 there is a provision for a SACCO model for the *bodaboda* sector, do you think it's a noble idea? What informs your answer?
12. What is the major role of the SACCOs in *bodaboda* development?
13. What documentation do you use in recruiting new members?
14. What is the obligations of your members?
15. What should your members expect from the organization?
16. Are there riders who are not members of any SACCO?
 - a) How do you handle such cases? Or what mechanism do you use to ensure 100% compliance?
17. The regulations provides for sanitation, especially for the customer helmet and jacket; how do you ensure compliance to this amongst your members?

18. What is the major role of the SACCOs in *bodaboda* development?
19. The major problem bedeviling the *bodaboda* sector is insecurity; what role is the SACCOs playing in;
 - a) The riders' security?
 - b) The passengers' security? And
 - c) The security of the general public?
20. Do you, as an organization, ever involve yourself in tracking and retrieving of stolen motorcycles?
21. How do you explain your relation with other security organs in the area?
22. What of investigating persons, especially your members, suspected to be criminals?
23. What problems do you face in your day-to-day management of the organization?
24. What do you think can be done to alleviate those problems?
25. What are your general comments on the SACCO model prescribed for the *bodaboda* business?

Thank you for taking part in this research and May the Almighty God bless you!

Appendix 5; Oral in depth interview guide for police/traffic officers

1. What is your general view on the *bodaboda* transport services in this area in terms of its safety?
2. The minister, ministry of transport and communication regulated the operations of motorcycles via NTSA Regulations, 2015; have you taken your time to read through the regulations? (If yes, probe further to ascertain knowledge of the regulations. If no, seek to know why and how he/she operates without knowledge of the regulations)
3. The law is dynamic, within the police service, are there special regular trainings on newly enacted laws and regulations in the transport sector? (if yes, seek to know if she/he has ever attended such trainings and if the regulation in question is part of that. If no, seek to know how they operate without such refresher courses on an ever developing law regime)
4. Generally, how would you describe riders' adherence to the NTSA regulations, 2015? (seek to know his/her opinion on the 15 provisions)
5. What factors do you think enhances compliance to the regulations? What of those exacerbating defiance?
6. What would you say about the argument that the cost of acquiring driving license by riders is high, cumbersome and that sometimes there is no need to have one as the police sometimes bother not to consider having it when one is caught in a traffic mishap?
7. What factors determine acquisition and use of protective gears? (helmet, reflector, gloves, boots, chest guard)
8. Your comment on one passenger at a time rule? How about those carrying multiple passengers? What do you think drives them into carrying multiple passengers?
9. Other than seeking the assistance of the courts, do you have other mechanisms of dealing with those who defy the provisions? (seek to know these mechanisms and their effectiveness if any)
10. The NTSA regulations, 2025 organizes riders into groups/SACCOs, how has this affected your work as the implementer of the regulations? (Seek to know both positive and negative consequences of this move).
11. How do you relate with the leadership of these *bodaboda* SACCOs as far as the implementation of this policy is concerned?

12. On security front, how do you explain the contributions of the *bodaboda* SACCOs in this area?
13. In your own opinion would you say the policy is sufficient in the regulation of *bodaboda* transport sector?
- a) If yes, seek to know how.
 - b) If no, seek to know those areas of deficiencies and
 - c) How it can be further strengthened.
14. What challenges do you face in the course of executing your duties as part of the implementing agency to the policy?
- a) How do you think these challenges can be mitigated?
12. Are there some strengths you gain while implementing this policy?
- b) What are they and how can they be enhanced?

Thank you for taking part in this research and May the Almighty God bless you!

Appendix 6; National Transport and Safety Authority (Operation of Motorcycles) Regulations, 2015

NATIONAL COUNCIL FOR
LAW REPORTING
LIBRARY

SPECIAL ISSUE

119

Kenya Gazette Supplement No. 19

20th February, 2015

(Legislative Supplement No. 11)

LEGAL NOTICE NO. 19

THE NATIONAL TRANSPORT AND SAFETY AUTHORITY ACT

(No. 33 of 2012)

IN EXERCISE of the powers conferred by section 54 of the National Transport and Safety Authority Act, the Cabinet Secretary for Transport and Infrastructure in consultation with the Board makes the following Regulations:—

**THE NATIONAL TRANSPORT AND SAFETY AUTHORITY
(OPERATION OF MOTORCYCLES) REGULATIONS, 2015**

1. (1) These Regulations may be cited as the National Transport and Safety Authority (Operation of Motorcycles) Regulations, 2015 and shall come into force upon publication in the Gazette.

Citation and commencement.

(2) Notwithstanding the provisions of paragraph (1), regulations 5 (b) and 9 shall come into force on the 1st January, 2016.

2. In these Regulations, unless the context otherwise requires —

Interpretation

“Act” means the National Transport and Safety Authority Act, 2012;

“Authority” means the National Transport and Safety Authority established under section 3 of the Act;

“Cabinet Secretary” has the meaning assigned to it under the Act;

“corporate body” means a limited liability company registered under the Companies Act and includes a cooperative society registered under the Cooperative Societies Act and a society registered under the Societies Act;

Cap 486

“licence” means a driving licence issued by the Authority under the Act;

Cap 490

“two wheeled motorcycle” means any mechanically propelled vehicle with two wheels the weight of which unladen does not exceed eight hundred kilograms;

“three wheeled motorcycle” means any mechanically propelled vehicle with three wheels the weight of which unladen does not exceed eight hundred kilograms;

“two wheeled motorcycle Taxi” means a two wheeled motorcycle used for the purpose of carrying or ferrying of a passenger for reward or hire;

“three wheeled motorcycle Taxi” means a three wheeled motorcycle used for the purpose of carrying or ferrying of a passenger for reward or hire;

“motorcycle” means any mechanically propelled vehicle with less than four wheels the weight of which un laden does not exceed eight hundred kilograms;

“owner” means the registered owner of a motorcycle;

“ride” means to operate, manage or to be in control of a motor cycle;

“rider” means the person operating or person in control of a motorcycle”;

“Third Party Motor Vehicle Insurance” means an insurance policy by that name issued in respect to a motorcycle pursuant to the provisions of the Insurance (Motor Vehicles Third Party Risks) Act;

Cap 405

“Third Party Public Service Vehicle Insurance” means an insurance policy by that name issued in respect to a motorcycle pursuant to the provisions of the Insurance (Motor Vehicles Third Party Risks) Act.

Cap 405

3. These Regulations shall apply to all motorcycles operating on a public road in Kenya.

Application of the Regulations.

4. (1) No motorcycle shall be sold or transferred by any person without the following protective gear—

Protective Gear

- (a) two helmets which comply with the standards established by the Kenya Bureau of Standards and which shall have the registration number indelibly printed in letters not less than three inches in height on both sides of the helmet;
- (b) two reflective jackets which shall have the registration number of the motorcycle indelibly printed in letters not less than four inches in height on the back of the jacket.

(2) A person desirous of transferring a motorcycle must present physical proof of compliance with regulation 4 (1) to the Authority.

(3) No supplier, distributor or person involved in the business of selling motorcycles in Kenya shall sell, distribute or otherwise convey a motorcycle without the protective gear described in regulation 4.

(4) For Purposes of this regulation the term “reflective jacket” shall also mean a reflective vest.

5. Every owner of a two wheeled motorcycle shall—

Responsibilities of Owners.

- (a) provide the rider and passenger with the protective gear stipulated in regulation 4 (1);
- (b) ensure that the helmets provided under (a) are yellow if the two wheeled motorcycle is a taxi;
- (c) not cause or permit any person to ride their motorcycle unless such person is the holder of a valid driving licence or a valid provisional licence endorsed in respect of that class of motorcycle;
- (d) for private motorcycles, ensure that the motorcycle is at the very minimum insured against third party risks in accordance with the Insurance (Motor Vehicles Third Party Risks) Act;

Cap 405

- (e) for two wheeled motorcycle taxi, ensure that motorcycle has a Third Party Public Service Vehicle Insurance;
- (f) ensure that no structural modifications to the motorcycle are undertaken that may affect the safe operation of the motorcycle;
- (g) ensure that no structural modifications to the motorcycle are undertaken that may obstruct the visibility of the rear number plates;
- (h) ensure that no modifications to the exhaust system or any other noise abatement device of a motorcycle are done so as to cause the noise emitted by the motorcycle to be above that emitted by the motorcycle as originally manufactured.

6. Every rider of a motorcycle shall—

Responsibilities of a Rider

- (a) have a valid driving license issued by the Authority;
- (b) ensure that they shall not ride or carry a person on a motor cycle without the prescribed protective gear properly fastened;
- (c) not carry more than one person at a time;
- (d) ensure that passengers are carried on a proper seat with foot rests securely fixed to the motor cycle behind the rider's seat;
- (e) ensure that a passenger sits astride the motor cycle;
- (f) ensure that the headlights of the motorcycle are on at all times when riding;
- (g) ensure that loads and passengers are not carried at the same time;
- (h) keep the protective gear in a clean, dry and generally wearable condition;
- (i) ensure that the rear number plates are visible at all times;
- (j) overtake on the right hand side and not to overtake in the same lane occupied by vehicle being overtaken;
- (k) observe traffic lights;
- (l) observe all traffic rules;
- (m) not park in undesignated areas.

7. (1) Every passenger in a motorcycle shall—

Responsibilities of a Passenger.

- (a) properly wear a helmet and reflective jacket whenever being carried on a motorcycle;
- (b) not board or be carried on a motorcycle that already has a passenger except as provided by Regulation 7 (2) (a);
- (c) not board or be carried on a motorcycle that is carrying any load;

- (d) sit astride in the seat fixed behind the rider's seat.
- (2) For the purposes of these Regulations--
- (a) a child who is less than thirteen years old may be carried together with an adult provided the child is seated between the rider and the adult and wears a helmet designed for children;
- (b) persons with disabilities will be exempted from the requirement to sit astride while being carried on a motorcycle.

8. (1) A motorcycle rider shall not carry a load--

Carriage of Loads

- (a) whose width projects more than fifteen centimeters beyond the outside end of the handle bars;
- (b) whose height is more than two metres from the ground;
- (c) whose weight is more than thirty kilograms for a motorcycle whose carrying capacity does not exceed fifty cc and kilograms for a motorcycle whose carrying capacity does not exceed four hundred cc;
- (d) which projects to the rear beyond the maximum overall length of the motorcycle by more than sixty centimeters. The rear extremity of the load must be plainly indicated by a conspicuous red marker during the day and by a red light at night.

(2) The rider of a motorcycle carrying loads shall ensure that no part of the load carried drags on the road.

(3) For the purpose of this regulation the term "load" excludes luggage carried by a passenger provided such luggage does not exceed ten kilograms in weight and does not project more than fifteen centimeters beyond the outside end of the handle bars.

(4) The luggage in sub-regulation (3) may be carried together with the passenger provided the luggage is properly secured between the rider and the passenger.

9 (1) Any person engaging in business of motorcycle taxis services shall be a member of a body corporate which shall have a minimum of one hundred motorcycle taxis.

Membership in a body corporate

(2) For two wheeler motorcycle taxis, the name of the group or sacco which they are members of must be indelibly printed in letters not less than four inches in height on the back of both jackets.

10 Every three wheeled motorcycle taxi shall--

Requirements for operation of three wheeled motorcycle taxi

- (a) be fitted with a seat belt for the rider and a seat belt per seating position for passengers;
- (b) have a covered body;
- (c) have painted on both sides and on the rear, a broken horizontal yellow band having a width of one hundred and fifty millimeters and of a consistency sufficient to enable

- such band to be clearly visible by day at a distance of two hundred and seventy five meters.
- (d) no part of the motorcycle, whether unladen or laden, other than the driving mirror or direction indicators, shall project more than fifteen centimeters, beyond the outside wall of the outmost rear tyre;
- (e) have at the minimum a motor commercial public service vehicle insurance cover.
11. Every owner of a three wheeled motorcycle taxi shall—
- Responsibility of owners
- (a) not cause or permit any person to ride their motorcycle unless such person is the holder of a valid driving licence or a valid provisional licence endorsed in respect of that class of motorcycle;
- (b) ensure that all three wheeled motorcycle taxi owned have at the minimum a Third Party Public Service Vehicle Insurance.
12. Every rider of a three wheeled motorcycle shall—
- Responsibilities of a Rider
- (a) not ride a motorcycle unless that person has a valid driving licence issued by the Authority;
- (b) not ride a motor cycle without properly wearing a seat belt or carry passengers who have not properly worn their seat belts;
- (c) not carry more than passengers in excess of the seating positions provided;
- (d) ensure that the headlights of the motorcycle are on at all times when riding;
- (e) overtake on the right hand side and not to overtake in the same lane occupied by vehicle being overtaken;
- (f) observe traffic lights,
- (g) not ride or operate a motorcycle between lanes of traffic or between adjacent lanes or rows of vehicles;
- (h) keep the seat belts in a clean, dry and generally wearable condition;
- (i) observe all traffic rules.
13. Every passenger in a three wheeled motorcycle shall—
- Responsibilities of a Passenger
- (a) wear seatbelt whenever being carried on a motorcycle;
- (b) not board or be carried on a motorcycle that already has the maximum number of passengers allowed.
14. The Authority in consultation with the relevant county government shall designate—
- Areas of operation
- (a) the areas of operation of motorcycle taxis;

(b) the hours of operation of motorcycle taxis.

15. A person who contravenes any provision of these Regulations and whose penalty is not provided for in the Traffic Act, commits an offence and is liable on conviction to a fine not exceeding twenty thousand shillings or to imprisonment for a term not exceeding six months or, both.

Offences and
penalties
Cap 403

16. Regulation 25A of Legal Notice 173 is revoked.

Repeal.

Made on the 5th February, 2015.

MICHAEL S.M. KAMAU,
Cabinet Secretary for Transport and infrastructure.

LEGAL NOTICE NO. 20

THE NATIONAL TRANSPORT AND SAFETY AUTHORITY ACT
(No. 33 of 2012)

IN EXERCISE of the powers conferred by section 54 of the National Transport and Safety Authority Act, the Cabinet Secretary for Transport and Infrastructure in consultation with the Board makes the following Regulations —

THE NATIONAL TRANSPORT AND SAFETY AUTHORITY
(OPERATION OF TOURIST SERVICE VEHICLES)
REGULATIONS, 2015

1. These Regulations may be cited as the National Transport and Safety Authority (Operation of Tourist Service Vehicles) Regulations, 2015 and shall come into force upon publication in the Gazette.

Citation

2. In these Regulations, unless the context otherwise requires —

Interpretation

“Act” means the National Transport and Safety Authority Act, 2012;

“Appeals Board” means the Transport Licensing Appeal Board established under section 39 of the Act;

“Authority” means the National Transport and Safety Authority established under section 3 of the Act;

“Cabinet Secretary” has the meaning assigned to it under the Act;

“corporate body” means a limited liability company registered under the Companies Act, and includes a cooperative society registered under the Cooperative Societies Act and a society registered under the Societies Act;

Cap 486

Cap 490

“licence” means a tourist service licence issued by the Authority;

“licensee” means a person to whom a license is issued under the Act;

“owner” means the registered owner of the tourist service vehicle;

Appendix 7. Maseno University Ethics Review Committee Approval



MASENO UNIVERSITY ETHICS REVIEW COMMITTEE

Tel: +254 057 351 622 Ext: 3050
Fax: +254 057 351 221

Private Bag – 40105, Maseno, Kenya
Email: muerc-secretariate@maseno.ac.ke

FROM: Secretary - MUERC

DATE: 3rd May, 2019

TO: Walter Ouma Nyasio
PG/MA/DS/00049/2016
Department of Development Studies
School of Development and Strategic Studies
Maseno University
P. O. Box, Private Bag, Maseno, Kenya

REF: MSU/DRPI/MUERC/00684/19

RE: An Assessment of *Boda Boda* Motorcyclists' Compliance to the National Transport and Safety Authority (Operation of Motorcycles) Regulations, 2015 in Mbita Sub-County, Kenya . Proposal Reference Number MSU/DRPI/MUERC/00684/19


This is to inform you that the Maseno University Ethics Review Committee (MUERC) determined that the ethics issues raised at the initial review were adequately addressed in the revised proposal. Consequently, the study is granted approval for implementation effective this 3rd day of May, 2019 for a period of one (1) year. This is subject to getting approvals from NACOSTI and other relevant authorities.

Please note that authorization to conduct this study will automatically expire on 2nd May, 2020. If you plan to continue with the study beyond this date, please submit an application for continuation approval to the MUERC Secretariat by 15th April, 2020.

Approval for continuation of the study will be subject to successful submission of an annual progress report that is to reach the MUERC Secretariat by 15th April, 2020.

Please note that any unanticipated problems resulting from the conduct of this study must be reported to MUERC. You are required to submit any proposed changes to this study to MUERC for review and approval prior to initiation. Please advise MUERC when the study is completed or discontinued.

Thank you.


Dr. Bernard Guyah
Ag. Secretary,
Maseno University Ethics Review Committee.



Cc: Chairman,
Maseno University Ethics Review Committee.

MASENO UNIVERSITY IS ISO 9001:2008 CERTIFIED

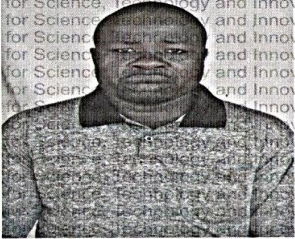


Appendix 8. National Commission for Science, Technology and Innovation Permit

THIS IS TO CERTIFY THAT:

MR. WALTER OUMA NYASIO
of MASENO UNIVERSITY, 0-40305
Mbita, has been permitted to conduct
research in Homabay County
on the topic: AN ASSESSMENT OF BODA
BODA MOTORCYCLISTS' COMPLIANCE TO
THE NATIONAL TRANSPORT AND SAFETY
AUTHORITY (OPERATION OF
MOTORCYCLES) REGULATIONS, 2015 IN
MBITA SUB-COUNTY, KENYA

Permit No : NACOSTI/P/19/29624/30636
Date Of Issue : 26th June, 2019
Fee Received :Ksh 1000



for the period ending:
24th June, 2020

[Signature]
Applicant's Signature

[Signature]
Director General
National Commission for Science, Technology & Innovation


THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014.

CONDITIONS

- The License is valid for the proposed research, location and specified period.**
- The License and any rights thereunder are non-transferable.**
- The Licensee shall inform the County Governor before commencement of the research.**
- Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.**
- The License does not give authority to transfer research materials.**
- NACOSTI may monitor and evaluate the licensed research project.**
- The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.**
- NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.**

National Commission for Science, Technology and innovation
P.O. Box 30623 - 00100, Nairobi, Kenya
TEL: 020 400 7000, 0713 788787, 0735 404245
Email: dg@nacosti.go.ke, registry@nacosti.go.ke
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REPUBLIC OF KENYA
National Commission for Science, Technology and Innovation
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