

YOUTH PERCEPTION ON MOTORCYCLE TAXI BUSINESS INVESTMENT AND ITS EFFECT ON THEIR ECONOMIC WELLBEING: EXPERIENCE FROM MOSHI MUNICIPALITY

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Abstract

The study assessed youth perception on motorcycle taxi business investment and its effect on their economic wellbeing. A cross-sectional research design was used whereby data were collected through a structured questionnaire, key informant interview and documentary review. Data were analyzed using quantitative approach with the use of descriptive statistics and qualitative approach using narratives. Youth perception on motorcycle taxi business investment is attributed through self-employment, secondary source of disposable income, lack of formal employment opportunity and the need for entrepreneurship skills development. The study found that, youth motorcycle taxi business investors benefit in the business which enables them to develop economically through improved wellbeing. The key challenges facing the business included poor road infrastructure, susceptibility of some riders being robbers by community members and lack of training on road safety measures. Study concludes that, youth motorcycle taxi business impacts on operators, owners and users' well-being or quality of life by providing affordable, quick, accessibility to remote places and flexible transport. It is therefore recommended that local authorities and government to improve transport infrastructures like putting street security lights, setting motorcycle parking stations and improving roads, regular training on road safety measures to operators, training on road transport safety and training on entrepreneurship skills to motorcycle taxi operators so as to significantly have positive effect on their economic wellbeing.

Key words: *Motorcycle, Taxi business investment, and economic well-being*

1.0 INTRODUCTION

In the absence of reliable public transportation systems to serve people in different areas in developing countries, several opportunities have become available to entrepreneurs who want to exploit this lucrative demand to provide the service. One of the potential available opportunities is motorcycle taxi business which is fast growing to meet this demand. According to Chhorn *et al.*, (2013) every year in Europe and Asia hundreds of motorcycles manufactured motorcycles are intended to be used for transport. Motorcycle taxi business emerged as a result of rapid urbanization and growth of economic and physical activities all over the world (Turner, 2014). The growing population of Asian and European cities and towns created a transportation demand that both private and public transport services can scarcely keep up. According to Turner (2014), every day more than 750 million Asians and Europeans depend on commercial transportation to get them to their places of work, school and/or business.

In Africa, motorcycles are best at navigating bad road networks and easily enter remote and far away areas where roads are neither too bad nor not existing (Mugasha, 2010). In some densely populated cities in Africa such as Lagos Nigeria, with population of over 15 million, motorcycle taxi helps millions of people to overcome traffic congestion. Number of people especially young men moving to cities is increasing. There are many reasons pushing such move which includes: looking for job, going to school and even aim at establishing small business in towns to enable them improve their economic wellbeing. Therefore, a high demand for transport

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services in Africa exists because millions of people (and their goods) need to move around every day.

In East African countries, particularly in Uganda, motorcycle taxi business has grown from small beginnings in the late 1960s at Busia at the Kenya-Uganda border (Malmberg, 2006). The motorcycle transport is widely known as *Bodaboda*. The term was borrowed from the English word to mean 'border'. The original services were provided by a man's bicycle, equipped with a padded cushion fitted over the rear carrier. It started in the early 1990s, the bicycle-based carriers have been complemented by motorcycles that have greatly extended the range and load carriage of services. Motorcycle taxi is known to provide short-distance, low-capacity service that is able to serve low-density demands or those where access is restricted by the width or quality of the route. Motorcycle taxi business mainly provides a passenger taxi service, although they can sometimes be hired to move goods. According to the World Bank report on road research in East Africa (2012), despite the truth that East African economies are improving, not many people can afford buying cars to move themselves around, and there are inadequate and poorly maintained road networks in the region across the member states of the East African Community (EAC). Where it exists, the public transportation systems are inadequate, unreliable and poorly maintained. To address this shortfall, east African countries license and allow private bus companies, motorcycle taxi operators and ferry services to help meet the transportation demand.

Tanzania is a country endowed with tremendous natural and human resources and has a relatively growing agricultural and industrial sectors and increasing foreign exchange earnings from agricultural exports and tourism. The mission for survival economically and socially has driven many Tanzanians into various jobs including operating commercial motorcycle "*Bodaboda*". Thus, hundreds of motorcycle taxi riders, barely trained and untrained usually flock the roads of major cities and towns as well as rural areas carrying luggage and conveying people to their destinations (Ngowi, 2014). Motorcycle taxi business has contributed to easy movement of people not only in the rural areas where there is poor network of roads but also in the cities where there are traffic hold-ups at low cost with its attendant consequences which include accidents, increasing incidences of the use of motorcycle taxi for despicable activities like robbery and the likes. According to Ngowi, (2014), most of the investors in this business are youth. Much has been said and written on these vices but little attention has been paid to their perception on motorcycle taxi business investment and its effect on their economic wellbeing, particularly in Tanzania.

In Moshi Municipality, Kilimanjaro Tanzania, conducting motorcycle taxi business has become popular among young men; initially the intention of conducting this business was to obtain extra income in addition to other primary sources of income such as formal employment, but due to increased unemployment and dependency levels motorcycle taxi business activity has become to be a self-primary employment and major source of income to both youth and other members of the society. Currently, motorcycle taxi is one among the important business activities in Moshi Municipality, it is dominated by youth thus affects their economic wellbeing at large (Ngowi, 2014).

It is evident that economic wellbeing of motorcycle owners and operators is directly linked to motorcycle taxi business that they are involved in (Ngowi, 2014). Poor or lack of improved well-being among individuals has been an issue in most of developing countries which resulted into high levels of crime and drug abuse among youth. The youth can prevent this fate through exploiting potential investment opportunities available which includes motorcycle taxi business. It is also a social issue as it affects the lives of members like men, women, children and elders.

Successful motorcycle taxi business enables an individual to build better houses, obtain clean water, improve mental and physical health and reduce criminal and illegal activities.

Motorcycle taxi business effects to owners' well-being cannot be taken as a normal thing but as an important factor in promoting the total quality of life for owners in terms of improving financial condition, creation of employment, reducing drug abuse and maintaining peaceful society. Evidence from literatures suggest that motorcycle taxi business affects operators, owners and users' well-being or quality of life by providing affordable, safest, quick, remote access and flexible transport. In general, this mode of transport is an important economic activity to owners of business and benefits the society at large (Hawkins, 2010; Fasakin, 2009; Oyesiku, 2012).

2.0 STATEMENT OF THE PROBLEM

The motorcycle taxi business is an important economic activity as it provides employment opportunities to youth and therefore reduces the level of crimes and simplifies transportation of goods and people (Bishop, 2015). Government of Tanzania regulates motorcycle taxi industry by Transport Licensing (Motorcycles and Tricycles) Regulations of 2010. Motorcycle taxi business is also widely known due to its ability to have access to remote areas where other larger vehicles with four wheels and more likely cars could not reach, ability to move goods and people fast even in traffic jams (Ibid).

Despite various benefits that continue to be derived from the motorcycle taxi business, there has been unlawful acts by operators like blocking or obstructing intentionally other service providers, driving above the maximum speed limits in competition with passengers pick ups, driving under the influence of alcohol or any other narcotic drugs at any amount, driving in a careless or reckless manner or in a manner contrary to the provisions of the Road Traffic act and mistreating or harassing passengers and other road users (Bishop, 2015; Olvera, 2007; Oyesiku, 2006). These acts cause series of accidents and unsatisfactory customer services that could have been avoided by following traffic laws. According to Tanzania Traffic Police Statistics (2015) in Kilimanjaro Region, there was an increase in the numbers of deaths and injuries resulting from motorcycle taxi from 10% in 2008 to 32% in 2013 respectively.

There have been on-going debates on what actually appears to be youth's perception on motorcycle taxi business investment and as to whether the business is indeed benefiting investor's wellbeing, owners and other stakeholders at large. According to Olvera (2007) and Oyesiku (2006) and Turner (2014) taxi business has helped many youth to meet their economic needs. Moreover, the fact that many youth join in motorcycle taxi business have differently been demonstrated in many studies (Bishop 2005; Jamal 1997; Malmberg, 2006; Olvera, 2007; Poon, 2016; Turner, 2014; World Bank, 2012;) who found that youth engage in the taxi business depends on many factors such as looking for self-employment, entrepreneurial ideology, policies operational environment and societal perspectives towards taxi business. As such, the sector has experienced a tremendous growth of business and therefore attracting more youth to join the industry. Currently, however, proper assessment has not been done in Moshi municipality in Kilimanjaro region where the business seem to have attracted more youth to join and its effects on their economic well-being. This paper intended to assess youth's perception on motorcycle taxi business investment and its effects on investors' economic wellbeing in Moshi Municipality.

3.0 LITERATURE REVIEW

3.1 Theoretical Framework

A motorcycle is described as a two-wheeler motor-driven road vehicle, but with an internal combustion engine (Howe, 2003). In this study motorcycle refers to the same as that described by Howe (2003) but intended for undertaking motorcycle taxi business. Motorcycle taxi refers

to a licensed form of transport that carries one passenger who rides as the pillion behind the motorcycle operator (Hawkins, 2010). Multiple passengers are common in some countries but in this study the motorcycle taxi is the one that is designed to carry only a single passenger as shown in the photo 1.



Photo 1: Motorcycle Taxi designed to carry one passenger

3.1.1 Theory of Welfare Economics

Welfare economics is a branch of economics that uses microeconomic techniques to evaluate well-being (welfare) at the aggregate (economy-wide) level. A typical methodology begins with the derivation (or assumption) of a social welfare function, which can then be used to rank economically feasible allocations of resources in terms of the social welfare they entail (Kenneth, 1963). The theory states that given certain assumptions, competitive markets produce Pareto efficient outcomes; which is the state of allocation of resources from which it is impossible to reallocate so as to make any one individual or preference criterion better off without making at least one individual or preference criterion worse off. This theorem is often taken to be an analytical confirmation of Adam Smith's "invisible hand" hypothesis, namely that competitive markets tend toward an efficient allocation of resources. As argued by Krishna, (2007) that the theorem supports a case for non-intervention in ideal conditions: let the markets do the work and the outcome will be Pareto efficient. In this study the theorem applies when the demand for affordable transport in narrow width and rough roads or remote areas was high and availability of transport (i.e. supply) was not adequate enough to match demand, fares charged for the few vehicles available was high to the extent that most low income earners could not afford. Today we have motorcycles taxi, a form of vehicle transport that may access remote locations easily and at affordable prices to low income earners.

3.1.2 Social Choice Theory

Social choice theory is an economic theory that reflects whether a community or society can be well-arranged in a manner that reflects ones preferences (Wikipedia, 2019)). This theory is concerned with finding an optimal method that combines individual preferences and decision for good judgments on various investments. In this study this theory applies for individual youth perception towards deciding on motorcycle taxi business investment. The introduction of motorcycles taxi has been a pinch to the other forms of transport like bicycles and four wheels vehicles in the sense that most resources like human, finance and time have been allocated to the motorcycles taxi business where majority prefer motorcycle taxi service than other forms of transport. This situation is explained in the theorem of Social Choice Theory which is supplemented by welfare economics concept called competitive markets that produce efficient outcomes. Since the majority of citizens are living in remote locations where roads infrastructure are not well established then availability of cheap transport like motorcycle taxi to remote areas and narrow width roads has improved welfare of most low income earners by making access to important services like hospitals, schools and markets being much easier.

3.1.3 Youth and unsafe motorcycle taxi riding in Tanzania

Motorcycle taxis offer easy earnings for youth with less qualification, but frequent accidents and lax regulation call for the industry cleaning up. In rural Tanzania motorcycle taxis provide a vital transportation service whereby in urban areas like in Dar es Salaam motorcycle taxis help a

lot in overcoming traffic jams so enabling people to get to job or homes more quickly as compared to motor vehicles (Jamal, 2014).

Across Tanzania, tens of thousands of youth are jumping on motorcycle taxi each year even as concern grows over their safety and security record. According to government statistics, in 2003 Tanzania imported 1,884 private motorcycles. Last year, 185,110 private motorcycles were imported whereby most of them were for motorcycle taxi operations (Bishop, 2015). Growth of motorcycle taxis in Tanzania was inspired by their success in neighboring Uganda, where bicycles were first used. It is not surprising that Tanzania's motorcycle taxi is as notorious as the Ugandan ones. Motorcycle taxi operators observe no regulations, including simple ones such as stopping at traffic lights. As in Uganda, many motorcycle taxi riders in Tanzania don't have driving licenses, do not wear helmets and have no qualms about driving in the wrong direction on one-way roads (Olvera, 2007).

3.2 Empirical Review

A study by Bishop (2015) in Brazil on motorcycle public transport found that motorcycle public transport in Brazil began in 1994. Until the 2000s almost all Brazilian cities had motorcycle transport services whereby most appeared in poorer and less urban areas. He further argued that young people increasingly support themselves by driving them although this revolution involves cost of increased Road Traffic Injury (RTI) that brings burden to the country's economy and society. In Cambodia motorcycle transport benefits low income earners in Phnom Penh and other cities, motorcycles are widely available as a form of low-cost public transport (Fasakin, 2009). Cambodian government has introduced regulation that requires riders to be members of the motorcyclist associations. Associations are required to register officially, and members are required to comply with rules such as obtaining a riding license, wearing helmet, and carrying no more than one passenger in one motorbike.

Moreover, Chhorn (2013) in his study on motorcycles and quality of service rendered in Cameroon argued that motorcycles are most common form of transportation in Maroua. Short distances cost about 200 francs which is less than US\$1. Chhorn showed that motorcycle taxi service is provided at affordable price but service provided is of low quantity due to non-compliance on traffic laws by riders. According to Hawkins (2010), there are motorcycle transport throughout China, including in Beijing, Shanghai, and Guangzhou. They are popular due to their low cost, flexibility and being faster than other means of transport. Over the past decade there has been a significant growth in the use of motorcycles as a commercial public transport mode in countries in sub-Saharan Africa, Latin America and Asia (Chhorn, 2013). While offering certain transport advantages in the form of easy maneuverability, ability to travel on poor roads, and demand responsiveness, commercial motorcycle service growth has also led to an increase in road accidents, traffic management problems, pervasive noise and increases in local air pollution and greenhouse gas emissions.

Government efforts to regulate the market have had the contrary impact of compounding the problem by distorting market structures. In most of populated areas and cities in Africa, motorcycle taxi remains to be an alternative transport mode that provides thousands of employment opportunities and affordable transport for the low-income majorities. The motorbike taxi riders are at the centre of this activity and the main actors. Their perception of the activity varies from one individual to another and from one place to the other. According to Olvera (2007), the motorbike taxi riders view their activity as a source of income and social progress on a general scope. The on-going more so economic situation gives room for very few job opportunities. The employment crises have pushed many into motorbike taxi riding. The youth have seized this employment opportunity which feeds them. From a secondary activity of farming, motor bike taxi riding has become the primary activity of most riders in

developing countries (Olvera, 2007). The farming of cash crops has been relegated to a second position due to its instability of prices and seasonality. Motorcycling is the main source of income for many youth who use the activity as a base in the construction of their future lives. Even part time riders (students and farmers) use the income generated from this activity to sustain their livelihood and therefore enhance improved economic wellbeing. According to Bishop (2015) on the study of opportunities to improve road safety through 'bodaboda' in Tanzania, motorcycle transport is known to provide short-distance, low-capacity service that is able to serve low-density demands or those where access is restricted by the width or quality of the route.

4.0 METHODOLOGICAL APPROACH

In this study, a cross sectional research design was used. A cross sectional research design is suitable in descriptive statistics and data on youths' perception on motorcycle taxi business investment decision factor and its effects of on operators' economic wellbeing were easily collected using different methods at one point in time. The study was conducted in the Moshi Municipality in Kilimanjaro Region, Northern Tanzania. The Moshi Municipal has a population of 184,292, according to 2012 National Census by the National Bureau of Statistics (2013). The Municipal covers about 59 square kilometers and is the smallest Municipality in Tanzania by area. The study was conducted at Moshi Main Bus Stand – Motorcycle Taxi Station and Kilimanjaro Christian Medical Centre (KCMC) – Motorcycle Taxi Station because the two parking lots have been operating since their establishment in 2003 and 2005 respectively and comprise of more experienced operators in the industry. Simple random sampling approach was used to obtain equal representation of each participant. However, Purposive sampling was adopted in searching further information from motorcycle association's leaders, customers, and government officials. The technique was deliberately used to reach key informants due to quality of information they possess and also helped in reaching targeted informants more quickly and hence, required insight into the study was made possible. The target population involved 944 motorcyclists from two stations (KCMC and Moshi Bus Stand). Sample size was calculated using a Slovene's formula:

$$n = N / (1 + Ne^2) \dots \dots \dots (1)$$

where the minimum sample of 91 motorcyclists was obtained at 0.1 margin of error. Various data collection techniques were used which includes: Questionnaires, key informant interview, documentary review and observation. Copies of the questionnaire were distributed to 91 motorcyclist and all were successfully returned for analysis. An interview guide was developed to guide the interview process which was conducted with leaders of the two-motorcycle association at Moshi stand and Kilimanjaro Christian Medical Centre (KCMC) stations. During documentary review, a thorough reading of at least 2 related papers per day was done for one month. At least five relevant quotes for each paper were gathered. Notes were taken during reading and were organized in a matrix developed in MS Excel. In addition, MS Excel filter function was used to capture the topical themes.

Furthermore, the researcher used mostly the motorcycle taxi in the data collection process to get clear insight by observing what the investors perceive the business and how it affects their economic wellbeing. Data were analyzed using Statistical Package for Social Science (SPSS) version 23.0.0 for windows (+AMO+Data collection) software. Categorical variables were summarized using absolute numbers and simple percentages. However, quantitative variables were summarized using mean and standard deviation. The youths' perceptions on motorcycle taxi business investment was assessed using their agreement with six statement/indices on a 5 - point Likert scale model ranging from strongly disagree-1 point to strongly agree 5 - points (Pulka *et al.*, 2014). The points accrued were graded into positive and negative perception using the total points of the minimum 'Agreed' response ('Agreed' = 4 points x 6 responses = 24 points) as cut off points for positive perception to 30 points whereas respondents that scored 6 –

23 points were considered to have negative attitude towards motorcycle taxi business investment.

5.0 FINDINGS AND DISCUSSION

5.1 Background information of the Respondents

In its investigation, the study approached respondents with different socio-demographic characteristics. The main focus was on motorcycle taxi operators. The study examined a total of 91 respondents from Moshi main stand- motorcycle station and KCMC motorcycle taxi stand.

5.1.1 Age and gender of respondents

The mean age for operators' respondents was 27.42 years, the median age was 27 and the mode age was 24 years as shown in table 1 below. The minimum age was 20, and the maximum age was 47. These findings indicated that most of the motorcycle taxi operators were largely youth at mean age of 27. This is in agreement with Olvera (2007), who found that the majority of motorbike taxi riders are young men who view this activity as a source of income and social progress on a general scope. However, the business is not gender sensitive in the sense that most of youth engaged into the business are males.

Table 1: Age of respondents (n=91)

Variable	Age (years)
Mean	27.42
Median	27
Mode	24
Minimum	20
Maximum	47

5.1.2 Education levels of respondents

The researcher also realized that many of the respondents had at least ordinary secondary education, which represents 52.7% of the respondents as indicated in table 2. However, 29.7% had primary education and only 11%, 4.4% and 2.2% had tertiary, advanced secondary and vocational education respectively. This is due to employment crisis which has pushed many into motorbike taxi riding as revealed from the study findings that 54% and 47% said they perceive the business as a source of self-employment due to lack of formal employment. The youth have seized this employment opportunity which feeds them and helps them cater for their daily needs and that is why even those who are educated venture into the business. This conform to the study by Poon (2016) who found that lower level of education leads to poor business performance in India and Cambodia.

Table 2: Education level of respondents (n=91)

Variable	Frequency (f)	Per cent (%)
Primary education	27	29.7
Ordinary Secondary	48	52.7
Advanced secondary	4	4.4
Vocational education	2	2.2
Tertiary education	10	11

5.1.3 Motorcycle ownership

The study also sought to find out if the operator owned the motorcycle or hires from someone else. The study revealed that 80.2% of the riders were the owners of the motorcycles they were operating, 13.2% of the respondents were employed by other people and 6.6% hired the

motorcycles as indicated in table 3. More than 50% of motorcycle taxi operators in Kilimanjaro were financially empowered by Village Community Banks, family groups and other micro finance institutions at lower interest rates and affordable loan disbursement requirements to purchase their own motorcycles and thus are no longer employed by the business men and women who can afford to own them. This is contrary to the work of Howe (2003) who found that motorcycle hire is a profitable business that is entered into by people who are already engaged in other economic activities.

Table 3: Respondents motorcycle ownership status

Variable	Frequency	Per cent (%)
Owner	73	80.2
Hired	6	6.6
Employed	12	13.2

5.2 Youth perception on Motorcycle Taxi Business Investment

Findings show that, most riders or operators joined the business because of:

5.2.1 Self-employment

Youth believe that the motorcycle taxi is a source of creation of self-employment. This factor had a mean score of 1.4 which is within the average score of 2.5 for the acceptance of the factor measured by Likert scale (Likert, 1932). With regard to this factor, the majority of respondents (59.3%) strongly agreed with the statement, 40.7% agreed and none of the respondents disagreed. From this observation and the mean score derived from the descriptive statistics it can be asserted that the reason for youth to join the motorcycle taxi business in Moshi Municipality was because it created self-employment. A study by Krishna (2007), observed the same scenario in Kenya. She further argued that the majority of motorcyclists' riders wanted to be independent with their own jobs instead of being under someone else.

5.2.2 Secondary source of disposable income

Findings revealed that 59.3% strongly agreed on the statement, 39.6% agreed and 1% were undecided with the statement and none disagreed. Further analysis of the mean score for the factor revealed a mean score of 1.4 which is again within the average score of 2.5 for the acceptance of the factor measured by Likert scale (1932). In this regard it can also be asserted that the majority youth operators in Moshi Municipality join motorcycle taxi business because of creating or adding their disposable income. The study findings concur with that done by Oyesiku (2006) in Nigeria where the same attribute to join the business was observed to motorcycle taxi business as indicated in table 4.

5.2.3 Lack of formal employment opportunities

The finding shows that 51.6% strongly agreed with the statement, 37.4% agree, 3.3% were undecided, 6.6% disagree and 1.1% strongly disagrees with the statement. Further analysis of the mean score revealed a mean of 1.7 which is within the range of 2.5 for acceptance of the factor measured by Likert scale. From the findings above it can be asserted that the third ranking reason for majority of youth to join the motorcycle taxi business was due to lack of formal employment in both public and private sectors. Comparing these findings with Bishop (2015), he had the same argument that the majority of motorcycle taxi riders in Karatu, Tanzania started the business for the sake of creating self-employment after failing to secure formal employment.

5.2.4 Need for entrepreneurial skill development

Findings revealed that, there are other factors pulling youth to join motorcycle business in Moshi municipality. The need of gaining entrepreneurship skills by operators appeared to be the push factor. Findings show that, 29.7% strongly agreed with the statement, 33% agreed, 14.3% were undecided, 13.2% disagreed and 9.9% strongly disagreed with the statement. Mean score was 2.4 which was also within the range of 2.5 and below for the acceptance of the reason measured by Likert scale (1932). Basing on the findings above, it was concluded that the fourth ranking reason for youth to join motorcycle taxi business was due to need of gaining entrepreneurship skills in order to grow and manage big businesses in the future. Bishop (2015), Jamal (2014) and Poon (2016), also found that majority of motorcycle taxi riders in India and Eastern Africa joined the business for the purpose of acquiring knowledge on entrepreneurship skills. They do this by forming groups basing on stations of parking motorbikes and government facilitates training through the groups formed. Having joined the motorcycle taxi business and groups, riders benefit from both theoretical and practical entrepreneurship skills as shown in table 4 below.

Table 4: Youth perception on Motorcycle Taxi Business investment

S/N	Statement	*SA		**A		***N		****DA		*****SD		Mean score
		F	%	F	%	F	%	F	%	F	%	
i	Self-employment	54	59.3	37	40.7	0	0	0	0	0	0	1.4
ii	Generate/Increasing income	54	59.3	36	39.6	1	1.1	0	0	0	0	1.4
iii	Lack of formal employment	47	51.6	34	37.4	3	3.3	6	6.6	1	1.1	1.7
iv	Gain entrepreneurship skills	27	29.7	30	33	13	14.3	12	13.2	9	9.9	2.4
v	Family/Guardian influence	30	33	30	33	5	5.5	11	12.1	15	16.5	2.5
vi	Friends influence	29	31.9	23	25.3	7	7.7	17	18.7	15	16.5	2.6

*Strongly Agree, **Agree, ***Neutral, ****Disagree, *****Strongly Disagree

5.3 Motorcycle Taxi Business Effect on Wealth

5.3.1 Wealth index on assets owned

A wealth index based on quantities and weights assigned to individual household assets was established to determine the wealth of motorcycle taxi business owners. Land, house, motorcycle, bicycle, radio, television, cupboard, dining table and chairs, wrist watch and mobile phone were used as a set of household assets that indicate wealth status of respondents. Total index scores of assets owned by each respondent were computed and wealth status of each respondent was categorized into three groups of low, moderate and high. Those below the median (5) were categorized as low wealth status, equal to median categorized as moderate wealth status and above the median categorized as high wealth status.

As indicated in Table 4, the majority motorcycle operators (45.1%) had low wealth index total score which was below 5, 30.8% of the motorcycle taxi operators had high wealth index total score which was above 5 and 24.2% had moderate wealth index total score exactly to 5. This shows that on average the majority of motorcycle taxi operators in Moshi Municipality had low wealth status which indicated that contribution of the business to the wealth of operators was low. A similar finding was reported by Fasakin (2009) who found that the majority of motorcycle taxi riders in Cambodia are less wealthy and live below the poverty line because the business is not worthy enough to liberate operators from poverty. Moreover, a study by Bishop (2015) revealed that in Uganda and Kenya, youth engage in motorcycle taxi business in order to sustain their daily lives but no significant development had been noted to their general lives as a result of engaging in the motorcycle taxi business.

Table 4: Wealth Index Total Score of Motorcycle Taxi operators in Moshi Municipality (n=91)

Wealth category	Wealth Index Total Score	Frequency	Per cent (%)
1=Low	Less than 5	41	45.1
2=Moderate	Equal to 5	22	24.2
3=High	More than 5	28	30.8
Total		91	100.0

5.3.2 T-test for total wealth index score among owners of motorcycle taxi operators and hired motorcycle taxi operators

An independent-sample t-test was done; it revealed that there was a statistically significant difference in the mean total wealth index scores between operators who owned and those who hired the motorcycle taxi in order to undertake the business. In the output presented in appendix I, the p-value is less than 0.05 which indicates that there was statistically significant difference in the mean total wealth index scores between operators who owned and those who hired the motorcycle taxi. The mean difference of 3.249 between the two groups is also shown in table 5, along with the 95% confidence interval of the difference, showing the lower value and the upper value. The reason for this difference is that those who hired motorcycle had to pay hiring charges for the bikes they hired which reduced their ability to retain more return and acquire more assets compared to counterparts who owned the motorcycles they ride. This is contrary to study findings by Fasakin (2009). In his study of motorcycle operations in Uganda he concluded that the ability to make more money from the business depends on personal efforts exerted by an operator himself including attracting more customers by respecting them and observing road signs and regulations.

Table 5: Independent Samples t-test on the total wealth index score between operators owning and those who hired the motorcycle taxi

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	Sig. (2-tailed)	Mean Difference	95% CI of the Difference	
							Lower	Upper
Total Wealth Index Score	Equal variances assumed	1.836	0.179	5.205	0	3.249	2.006	4.492
	Equal variances not assumed			9.169	0	3.249	2.444	4.054

5.3.3 T-test for total wealth index score among owners of motorcycle taxi operators and employed motorcycle taxi operators

The study further tested the difference in mean wealth index score between operators who owned the motorcycle and those who were just employed by other business men or women. Findings revealed that there was a statistically significant difference in the mean wealth index score between two groups since the p-value is 0.000 which is again less than 0.05 as portrayed in table 6. The reason for this difference in the mean wealth index score is that operators who own motorcycles are capable of retaining more disposable income compared to operators who are employed by someone else, being employed by someone involves business agreements which are most favourable to owners of the motorcycle taxi business than operator themselves. For example, the motorcycle owner might require that his employee (the operator) to remit Tanzanian shillings 20,000 per day which automatically reduces the ability of the operator to save compared to operators who own motorcycles. This is again contrary to Fasakin (2009) who found that the ability to make more money from the business depends on personal efforts

exerted by an operator himself including attracting more customers by respecting them and observing road signs and regulations.

Table 6: Independent samples t-test on total wealth index score between operators owning and those who are employed by other business men or women

		Levene's Test for Equality of Variances		T-test for Equality of Means				
		F	Sig.	T	Sig. (2-tailed)	Mean Difference	95% CI of the Difference Lower Upper	
Total Wealth Index Score	Equal variances assumed	0.001	0.98	3.93	0	1.832	0.905	2.759
	Equal variances not assumed			4.1	0.001	1.832	0.882	2.783

5.4 Challenges Encountered by Operators in Motorcycle Taxi Business

Operators of motorcycle taxi in Moshi Municipality face a number of stumbling blocks which hinders development of their business; hence realization of operators' business goals including wealth maximization and economic development. The findings are summarized in Table 7.

Table 7: Challenges encountered by operators of motorcycle taxi business in Moshi Municipality

Challenge	Responses	
	Frequency	Per cent (%)
Poor infrastructure like roads and parking areas	78	25.10
Weather conditions e.g. rain	63	20.30
Suspicion by the public	46	14.80
Disregard from other motorized vehicle drivers	27	8.70
Traffic reasons/they take bribes	27	8.70
Lack of training on road signs and regulations	37	11.90
Robbery by unknown customers	15	4.80
Disrespect/abuse from some customers	18	5.80
Total	311	100.00

Key challenges noted included poor infrastructure like roads, road lights and parking areas which were mentioned by 25.1%, poor business environment during rainy season was pointed out by 20.3% and tendency of some community members to suspect operators of motorcycle taxi business as untrusty was pointed out by 14.8% of the interviewed respondents.

Moreover, lack of regular seminars and training on road signs and regulations was mentioned by 11.9%, the tendency of motor vehicle drivers to disrespect operators of motorcycle taxi and the tendency of road traffic officers to take bribes from motorcycle taxi operators were both mentioned by 8.7% of the interviewed respondents. Other respondents were of the opinion that some customers had tendency of not respecting operators by seeing that they are of mean behaviour or are robbers and motorcycle taxi operators are robbed by unknown people who pretended to be customers and their bikes taken away.

These are among challenges facing operators of motorcycle taxi business in Moshi Municipality which hinders growth of the industry and accomplishment of personal operators' business goals as depicted in Table 5. The findings are in line with Malmberg (2006) who found that major constraints of motorcycle taxi business in Uganda is lack of good roads and parking stations and threat from robbers who would steal operators' motorbikes.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

The study concluded that there are different perceptions among youth which lead them to join motorcycle taxi business in Tanzania such as looking for self-employment, secondary source of disposable income, lack of formal employment opportunities and need for entrepreneurship skills development. Most youth and other operators preferred independence in their own businesses, wanted to learn new skills in business management by practicing on their own and creating an alternative way of making a living after failing to secure formal employment. Moreover, the study concludes that majority of operators have low wealth status and lived beneath the poverty line. The major reason is due to the fact that many abuses the little amount of monies they generate in the business by considering that not even enough to fulfill the needs of household size, this is geared through lack of proper skills on management of funds, savings and re-investments for future expenditures. In addition, the study concludes that there are number of challenges facing the motorcycle taxi business such as poor roads, lack of security lights and cameras, inadequate parking areas, inadequate training on road safety measures and tendency of some community members to suspect operators as robbers. All these challenges face youth all negatively affecting the performance of their business and hence limited benefits accrued there from.

6.2 Recommendations

It is recommended that, local authorities should develop clear mechanism to enable motorcycle taxi operators to conduct their activities in a good environment. This will enable them to even facilitate the revenue collection by the authorities. In addition, the Local authorities need to improve the existing transport infrastructure like roads, parking areas, security cameras and lights along the roads. Motorcycle taxi business is feared by many customers when night comes due to the perception that most of the operators are robbers, also operators fear to operate during the night hours by fearing strangers who aim to take away their bikes. Also improving roads will make the motorcycle taxi business more suitable means of transport.

On the other hand, regular training and seminars for youth motorcycle taxi operators is relevant. According to statistics by Tanzania Traffic Police 2015, numbers of deaths and injuries resulting from motorcycle taxi business in Kilimanjaro Region increased by 10% and 32% respectively from 2008 to 2013. The major cause of these injuries and deaths was little understanding of the road safety laws and regulations. The most affected are the youth. To eliminate or reduce these accidents there is a need for regular training and seminars on road safety measures to all motorcyclists, youth in particular. Furthermore, training on entrepreneurship skills to operators of motorcycle taxi is highly required. Some motorcycle taxi operators who generate sufficient income should be equipped with relevant knowledge on entrepreneurship. This will lead them to require knowledge on proper use of their income through reinvestment and thus increase income margins resulting into improving economically and wealth maximization. It is recommended to facilitate regular training on entrepreneurship skills to motorcycle taxi operators through their associations. Proper measures to be taken against corrupt road traffic officers; the majority of operators declared to expose corrupt road traffic officers while on business, although there had been no evidence to validate this but the situation should not be ignored by relevant authorities. Proper disciplinary measures should be taken on the corrupt road traffic officers by relevant authorities. Likewise, this study recommends there should be arrangement for aggressive measures against corrupt traffic officers in order to ensure motorcycle taxi business grows and the country benefits at large.

REFERENCES

- Adams, R. H. (2012). *Non-agricultural income, inequality, and land in rural Egypt*. Economic Development and Cultural Change 50 (2), 339–363.
- Adesanya, A. (2011). *The use of Motorcycles for Public Transportation in Nigeria: The situation in Ibadan*, NISER Monograph Series, No. 6.
- Bailey, O. (2016). *Emerging Mobility Crisis: The Use of Motorbike as Public Transport in Cities*, communication at the 10th World Conference of Transport Research, Seoul. Sage publications: United States. 28-31pp.
- Bishop, T. (2015). *Opportunities to improve road safety through bodaboda associations in Tanzania. Africa community access partnership*. Dar es Salaam. Thrust Publication Ltd: 38-42pp.
- Chhorn, V. (2013). *Motorcycle Management Manual*. GERES. Phnom Penh, Cambodia. 10-15 pp.
- Donald K. K. & Delno L. A. T. (2009). *Proposal and Thesis Writing, An introduction*. Pauline Publications Africa: Nairobi, Kenya.
- Fasakin, J. O. (2009). Some factors affecting daily profits of Commercial Motorcycles in Akure, Nigeria, *Transport policy*, 8(1), 63-69pp.
- Hawkins, J. (2010). *A new theory of well-being*. Unpublished paper presented at the annual conference of the British Society for Ethical Theory, University of Nottingham, 56pp.
- Jamal, V. (2014). *Farewell to farms: De-agrarianisation and employment in Africa*. Aldershot: Ashgate. 12pp.
- Likert, R. (1932). "A Technique for the Measurement of Attitudes". *Archives of Psychology*. 140: 1–55.
- Malmberg, C. (2006) *Case study on intermediate means of transport: bicycles and rural women in East Africa*. SSATP Working Paper No. 22. The World Bank and Economic Commission for Africa mediation of sex in East Africa. *Journal of AIDS Care*, vol. 15, No.1 350-369pp.
- Mugasha, W. (2010). *Improving smallholder livelihoods through small scale business management: an adaptation to climate variability & change in Makete District, Tanzania*. 1- 11pp.
- NBS, (2013). *Population distribution by Age and Sex*, Ministry of Finance, Dar es Salaam, 264pp.
- Ngowi D. (2014). *Bodaboda bikes to be licensed*. Tanzania Daily News, Dar es Salaam. Available at: <http://allafrica.com/stories/201409030662.html>. Accessed on 18th October 2017.
- Ogunsanya, A. A. & Galtima, M. 2003. "Motorcycle in Public Transport Service in Nigeria: Case Study of Yola Town", in J.S. Ikya (ed.), *Urban Passenger Transportation in Nigeria*. Ibadan: Heinemann: 191-207.
- Olvera, M. A. (2007). *Socio economic effects of public transport in Uganda: Case Study of Entebbe Town*. Mkuki na Nyota Publishers. Dar es Salaam. 37pp.
- Oyesiku, K. O. (2006). *City poverty and Emerging Mobility Crisis: The Use of Motorbike as Public Transport in Nigerian Cities*, communication at the 9th World Conference of Transport Research, Seoul. Sage publications: South Africa. 28-31pp.
- Poon L. (2016). "Motorcycle in Public Transport Service in Tanzania: Case Study of Dar es Salaam", *Urban Passenger Transportation in Tanzania*. Heinemann: 190-201pp.
- Pulka, B. M., Rikwentishe R., & Ibrahim, B. (2014). *An evaluation of students' attitude towards Entrepreneurship Eduaction in some selected Universities in North East Nigeria*. *Global Journal of Business and Management Research: Administration and Management*. 14(8), (Ver 1.0): 1-7.
- Tanzanian Traffic Police, (2015). *Statistics available directly from Traffic Police Headquarters, Sokoine Drive, Dar es Salaam, Tanzania*.
- Turner, J. (2014). "An investigation into the role of transport operator associations in shaping

- transport services in Africa's rural areas*". Transaid, London, UK. 144p.
- Walter K. (2011). *Non-agricultural income, inequality, and land in rural Egypt*. *Economic Development and Cultural Change* 50 (2): 339–363 pp.
- Wikipedia, (2019). <https://www.investopedia.com/terms/s/social-choice-theory.asp>, site visited 16/9/2019 at 13.51hrs
- World Bank Road Research. (2012), *Food prices, Nutrition and the Millennium Development Goals*. 37-39pp.