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Paratransit Transport Challenges from Commercial Motorcycle Operations. A Case Study of Wa Municipality, Ghana.

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Abstract

This study examined the challenges of the paratransit service and operations in Wa Municipality in the Upper West Region of Ghana with the aim of developing the predictive model of the challenges faced by the paratransit operators and its optimal parameters of the predictive model and the related correlation effects. The primary data of three hundred and twenty-seven (327) sample operators covered the following variables: poor road networks, cost of fuel and repairs, packing security, attacks, and robbery, distorted direction of route, daily sales, cost of new tricycle, and health condition of the operators. The sampling technique used was simple random sampling from several stoppage of the operators of the study area. Data were analysed using percentage, mean, standard deviation, and regression and correlation analysis using SPSS version 20. The study revealed that the mean of fuel consumption of 4.65 approximately closer to 5 than 4 indicating that the drivers consumed fuel ranging between Ghc 140 – 150} than between Ghc 120 – 140 while the cost of motorcycle range between Ghc 43,000 – 44,000} than between Ghc 44,000 – 44,500 respectively. The security aspect of the motorcycle indicated that 89.9% pack at home, 3.4% pack at fuel station, and 6.7% pack at the transport station. The results also showed that 7.0% agreed that there was average cost on the repair activities operations while 93.0% were of the view that there was high cost in repairing of their motorcycles. The models also indicated that the cost of new okada, bad road, and cost of repair of motorcycle negatively affect the dependent variable (Daily sales). The model indicated that a unit increase in the cost of new okada, poor bad road network, and cost of repair will decrease the daily sales of the okada drivers by (-0.146), (-0.499), and (-0.271) respectively. Again, the model indicated that a unit increase in fuel consumption and distorted direction and route will increase daily sales by (0.943) and (0.81) respectively. The study recommended that the okada drivers should regularly have their health condition checked. The various town roads should be rehabilitated to avoid accident and increase accessibility. Future work is to consider analysis and comparisons of earning of the various kinds of tricycles in Ghana including the demographic study of the operators. Further research may also examine the strategic security of the various categories of the motorcycles for effective and efficient management systems and economic development of the youth in Ghana.

Keywords: Challenges, Commercial, Transport System, Tricycle, Operations, Robbery

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1. Introduction

The sudden growth of various cities and towns in Ghana and their surrounding communities has serious implications on transportation system as a commercial means of providing mobility to residents to satisfy their socio-economic needs.

Transport is an indispensable key element of socio-economic development and growth. Transportation is considered to be efficient when it facilitates and serves as a requirement for effective economic, social, and political development of a country (Aikins and Akude, 2015).. Human daily transaction and movement is characterized by various means of transport



whether private or commercial. Among the means of transport include railways, motor vehicles (Cars, Lorries, Buses), as well as motorcycles, tricycles and bicycles. Others include the use of animals (camels, donkeys, and horses), and animal-drawn carts. The relationship in terms of business between transport and employment led to the high production of tricycle (“Okada”) in most cities in Ghana. Most motorcycle operators used it for private purposes such as transporting farm produce and school children daily (Oladipo, 2012).

The operation of both private in commercial motorcycle cannot be entirely separated from the concept of public transportation in Ghana. Currently, commercial motorcycle has assumed significant position at the high level of meeting passengers need for transportation, particularly in strategic places within the community and cities. The use of commercial motorcycle has become a source of career and employment for considerable proportion of Ghanaian population. Particularly, in recent time many youths in societies are faced with problem of unemployment after completing high school and tertiary institutions.

Despite the socio-economic benefits of the tricycle business, the drivers faces numerous challenges such as increasing rate of accidents, attacks, robberies, and kidnapping on the roads. Again, other constraints such as high cost of purchasing new tricycle, cost of fuel and spare parts, poor road network, frequent police extortion, packing security, and passengers distorted direction and route. The motorcycle robbery was highly regulated in Nigeria but attackers used alternative ways of robbery (Oseghale, 2012).

Paratransit transportation system are constantly evolving worldwide and for the past decade, the mobility in terms of socio-economic activities has transformed significantly changing from “Tiko” to “Okada” in the current situation in Ghana and such paratransit transformations surfaced with complex challenges. At the same time, ongoing urbanization and the various means of transport for business have created increasing pressures on existing transportation infrastructures. The term “paratransit” can be explained as an informal or semi-formal transport system which is privately owned vehicles and self-propelled micro-mobility services with minimum passengers to satisfy passengers' short distance mobility. Paratransit initially surfaced as local strategy respond to meet existing transportation needs of passengers to various destinations serving as quick and fastest way for mobility effectiveness. Goldwyn, (2018).

The main function of the paratransit operators is to fill gap in areas void of formal transit options and operations and they cater to a transit-dependent population that is often low-income, providing essential access to educational and employment demand for business, farming, town route, and educational purposes mostly operated by youth and mid-aged men (Susilo, 2014),

The objective in this study therefore is to determine the predictive model of the challenges faced by the drivers of tricycle (“Okada”) transport system and examine the

relationships between some of the predictive variables that affect the daily sales of the transportation. After this introduction, the paper highlighted the related works regarding review of literature on the transportation systems followed by the research methodology detailed on study area, population. Sample and how the data was analyzed. The last section provided the analysis of the results, conclusion findings, recommendation, and future work of the study. The study also tested two null hypotheses that:

2. Related Works

Public transportation services over the years have provided people with experiences such as providing safe and efficient transport services for them at a given destination, through making available, cost-effective modes of movement at the destination (Tran and Kleiner, 2005). Currently, motorcycle popularly referred to as “Okada” has become universally accepted means of accessible and affordable commercial transportation public transportation system in Nigeria. (Ebonugwo, 2009). The drivers of motorcycle faced various challenges from authorities leading their ban from operation due to careless driving and refusal to obey traffic regulation. This is evident from the Lagos State Road traffic law bans ((Mordi, 2012).

Adebenga (2018) studied the political economy of ‘Okada’ transport business as an employment strategy in Nigeria The aim of this study therefore was to find out other underlying political, economic, and social factors overshadowing the mobility relevance of motorcycle as a transport business and why it is fast becoming an employment strategy for millions of unemployed youths in Nigeria. The study is to also find out why ‘Okada Unions’ are becoming second arms of political parties, forming strong pressure influences and ‘stated groups’, which are always motivated by politicians to attain political gains. The study ultimately placed a duty on Government on the need to have a future plan on its economic transformation agenda that will guide against ‘Okada’ becoming a “mono-economic” structure of the state. There is the urgent need for the Government to initiate law and control on the ‘Okada’ operation in its present transmutation to political pressure group and its activities creating social problems

Ricky (2018) studied public transport mode preferences of international tourists in Ghana Where tourists made use of different transportation systems for their movement. The. Primary data were collected from 479 outbound international tourists at the departure hall of the Kotoka International Airport in Ghana. The analyses of the study were done using frequencies, charts, chi-square statistic, and multinomial logistic regression model. The study concluded that generic dimensions of transport services such as affordability, accessibility, availability, safety, and comfort influence public transport mode choice of international passengers in Ghana. Aside these factors, there were strong relationships between socio-demographic characteristics of people using various forms of transport system. It is therefore recommended that emphasis should be given to accessibility-based transport

planning in order to help public transport provide quality services to meet the transport needs of international tourists.

Most of the motorcycle riders are careless in their operation and accidents is not exception. According to Ogunmodede and Akangbe (2013) succinctly described the dangers of “okada” accidents as so serious that sometimes lead to instant death, loss of limbs, sight, brain damage, and terrible economic loss. Though some reasons have been given to justify the use of alcohol among okada riders such as to keep awake. Accident Reporting system data as indicated in Fagnant & Kockelmen (2013) of motorcycles collisions involved alcohol.

3. Motorcycle Transportation System in Perspective

Attempts to solve the urban transport problems in Ghana have taken so many dimensions. The public has however responded massively to the problem by providing automobiles for public transport. This is in addition to the fluctuating fortunes of government-owned transportation arrangements. One of the dynamic systems offered by the private individuals is the use of the motorcycle as a mode of public transport. In the late decade, the means of intra-urban means of passengers’ movement became prevalent, not only on the basis of increasing need for transportation of growing population, but for a reason of economic situation consequent upon the structural adjustment policy of the government with its very stringent attributes. It actually became a necessity with the failing road infrastructures; the need to meet the growing demand for public transport resulted in the adaptation of non-conventional means of public transport in major cities of Ghana.

The need and desire to incorporate paratransit transport system into sustainable urban mobility policies in the cities stems from the observation of several strengths of this offer. First of all, paratransit services represent a low cost for the public authorities. Secondly, the small-scale transport sector is an important source of employment in our societies where unemployment has a higher rate. The transport services are provided because of their flexibility, accessibility, comfortability, and adaptability, are particularly appropriate to the characteristics of urbanization in the cities in Ghana. Finally, it should be noted that in some cities, the paratransit organizations of the paratransit sector assisted the farming activities. It is therefore essential to integrate these operators into the implementation of sustainable urban mobility policies. Despite the many advantages of paratransit, a number of negative externalities remain, such as the contribution to traffic congestion, significant pollution, poor safety conditions for passengers, poor quality of service and criminal activities from external attacks on the roadside. Improving the quality of service and the functioning of the transport system requires the establishment of regulatory frameworks to truly integrate this offer. Establishing specifications of the “public service obligation” type is one of the levers for introducing norms and standards, which is most often accompanied by a minimum of regulation, or even

subsidies. However, the introduction of norms and standards cannot be done without first questioning the role and function of paratransit in the local mobility system, and without having precisely identified the who qualifies to operate in the paratransit motorcycles in Ghana.

The recent high-rate population growth and increased urbanisation in Ghana coupled with dense vehicular traffics, poor road networks, and absence of by-pass roads necessitates an alternative means of transport where motorcycles services and are expected to play significant role in intra-city and rural transport (Starkey and Njenga, 2010). Known by several names, the tricycle business is growing in popularity across Africa and Ghana is not excluded. Tricycles assume numerous names in Africa that include “Tuktuk” in Tanzania, Kenya, Ethiopia, , “okada” in Nigeria, and in Ghana as Mahama Can Do (cando), “Nyaaba lorry”, “Pragya” and “Aboboyaa”, “yellow yellow” (Aikins, & Akude, 2015). In most developing countries, motorcycles and tricycles are now being used as the main means of transportation, especially, among the urban poor (Ismail, Adeniji, and Paul, 2018). The choice of motorcycles and tricycles as an alternate means of transport in resolving urban and town movement challenges has introduced variable scopes of issues including traffic accidents and safety on the road issues. In Ghana, there are several means of transportation, such as cars, vans, buses, motorbikes. Recently, the tricycle was introduced in many parts of the country and has widen up in many urban centres (Dinye, 2013)

4. Research Methodology

The survey was conducted among “Okada” operators in Wamunicipality in the Upper West Region of Ghana. Ghana is located on the western coast south of the Saharan desert in Africa sharing boundaries with Togo, Cote d’Ivoire, Burkina Faso, and the Gulf of Guinea. It lies approximately between latitudes 4.5°N and 11°N and longitudes 1°E and 3°W Ricky, Edem & Collin (2018). The principal mode of transport system in Ghana is by road using passengers board various kind of transport system. Travelling by train and waterway (predominantly on the Volta Lake, which is the only navigable water body in Ghana) is in a developing stage. It has been estimated that approximately 15 percent of the road users use private cars, and 85 percent travel either using public transport or by foot (Abane, 2011). Public transport modes in Ghana comprise mainly of taxis, buses, and motorcycles (Poku-Boansi, 2008). The rail transport system bequeathed to the country by the British before independence has taken a nosedive but is being revamped. Another emerging form of public transport within the rural and urban areas of Ghana is the motorcycle, popularly known as “okada”

Several routes classified as zones were randomly selected after the study area was stratified along route direction. Among the zones identify were Bamaahu, Sombo, Dondoli, Kumbiehi, Loho, Cheree, Kpaguri, Zongo, Busa, New market, magazine, Kpogu, and Regional Hospital. The survey was conducted with the use of structured questionnaires, which were personally administered the operators to enhance

understanding and high response rate. In all a total of 327 operators were randomly sampled for the survey on an odd-even number basis.

The research instrument used for the study was questionnaire which covered the various challenges face by the sample of 327 okada drivers purposely and randomly selected using Tamane formular for the sample size. The various drivers were grouped and stratified. The population of the research covered the entire okada drivers within Wamusalicity.

The descriptive statistics of the identified variables studied in the models are presented in Tables. The frequency, percentages, mean, standard deviation of the variables were shown on each specific table. The correlation and regression model coupled with ANOVA were provided.

5. Results and Discussion

Table 1

Descriptive Statistics

	N	Mean	Std. Deviation
Bad Road	327	1.92	.276
Packing Security	327	1.17	.525
Daily Sales	327	4.29	1.179
Cost of New Okada	327	4.70	.791
Fuel Consumption	327	4.65	.991
Police Extortion	327	1.98	.134
Spare Parts	327	1.98	.145
Luggage and Goods	327	1.96	.196
Repair Cost	327	1.93	.256
Distorted Direction	327	1.96	.203
Stealing and Attack	327	1.98	.134
Health Condition	327	1.95	.222
Valid N (listwise)	327		

Table 1 showed the descriptive statistics (Mean and standard deviation) of the various challenges faced by the motorcycle operators. There were 327 motorcycle operators sampled for the study. The standard deviation of each challenges showed closeness in terms of mean values. The mean of 1.92 was obtained for bad road network which is between (1) coded as “No” and (2) coded as “Yes” but very approximately very close to yes. Hence majority of the motorcycle operators were of the view that the poor road network was a serious challenge to their operations. Again, the mean of 1.17 for packing security was between 1 and 2 but approximately closer to 1 indicating that majority of the operators packed their motorcycle at home and fuel station, and transport station. The mean of daily sales 4.29 was approximately closer to 4 than 5 indicating that majority of the operators earn a daily sales ranging between Ghc 180 - 200} than between Ghc 200 – 220 respectively.

The cost of motorcycle indicated the mean of 4.70 approximately closer to 5 and 4 indicating the majority of the operators agreed that the cost of motorcycle range between Ghc 43,000 – 44,000} than between Ghc 44,000 – 44,500 respectively.

The mean of fuel consumption of 4.65 approximately closer to 5 than 4 indicating that the drivers consume fuel ranging between Ghc 140 – 150} than between Ghc 120 – 140 respectively.

Furthermore, the mean of police extortion, cost of spare parts, luggage and goods, repair cost, distorted direction, stealing and attach as well as health condition were approximately closer to 2 than 1 respectively. These indicated that the drivers of motorcycle agreed:” Yes” that police extortion is a challenge to them and cost of spare parts are high and affect their operations. Again, the results also indicated that luggage and goods of passengers affect the comfort of their passengers due to the small size of the motorcycle where passengers and luggage board the vehicle at the same time. The use of different route for different passengers caused affect the fuel consumption where each passengers have parallel route in terms of location to his or her destination.

Finally, the approximate mean of stealing and attack indicated that majority of the motorcycle operators agreed that there is high rate of physical attack on them in terms of robbery of the motorcycle and stealing of their sales. The health condition of the drivers is also affected due the continuous movement to have access to passengers.

Table 2

Bad Road

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid NO	27	8.3	8.3	8.3
Yes	300	91.7	91.7	100.0
Total	327	100.0	100.0	

Table 2 indicated the frequency and valid percentages of the bad road faced by the motorcycle drivers. The results showed that 300(91.7%) drivers agreed with the bad road which affect their mobility.

Table 3

Packing Security

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Home	294	89.9	89.9	89.9
Fuel Station	11	3.4	3.4	93.3
Transport Station	22	6.7	6.7	100.0

Total	327	100.0	100.0	
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Table 3 indicated the frequency and valid percentages of the packing security faced by the motorcycle drivers. The results showed that 294(89.9%) pack at home, 11(3.4%) pack at fuel station, and 22(6.7%) pack at the transport station respectively.

Table 4

Daily Sales

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Ghc 120 – 130	18	5.5	5.5	5.5
Ghc 120 – 150	17	5.2	5.2	10.7
Ghc 150 – 180	34	10.4	10.4	21.1
Ghc 180 – 200	42	12.8	12.8	33.9
Ghc 200 – 220	216	66.1	66.1	100.0
Total	327	100.0	100.0	

Table 4 indicated the frequency and valid percentages of the daily sales made by the motorcycle drivers. The results showed that 18(5.5%) made a sales between Ghc 120 – 130 daily, 17(5.2%) made a sales between Ghc 120 – 150, 34(10.4%) had sales between Ghc 150 – 180, 42(12.8%) had sales between Ghc 180 – 200 and 216(66.1%) had sales between Ghc 200 – 220 pack at the transport station respectively.

Table 5

Cost of New Okada

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Ghc 40,000 - 41,000	3	.9	.9	.9
Ghc 41,000 - 42,000	6	1.8	1.8	2.8
Ghc 42,000 - 43,000	32	9.8	9.8	12.5
Ghc 43,000 - 44,000	3	.9	.9	13.5
Ghc 44,000 - 44500	283	86.5	86.5	100.0

Total	327	100.0	100.0	
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Table 5 indicated the frequency and valid percentages of the cost of new motorcycle made by the motorcycle drivers. The results showed that 3(9%) bought the okada between Ghc 40,000 – 41,000 , 6(1.8%) bought the machine between Ghc 41,000 – 42,000, 32(9.8%) had theirs between Ghc 42,000 – 43,000, 3(9%) bought theirs between Ghc 43,000 – 44,000 and 283(86.5%) purchased between Ghc 44,000 – 44,500 respectively

Table 6

Fuel Consumption

Ghc	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 80 – 90	15	4.6	4.6	4.6
90 – 100	8	2.4	2.4	7.0
100 – 120	9	2.8	2.8	9.8
120 – 140	11	3.4	3.4	13.1
140 – 150	284	86.9	86.9	100.0
Total	327	100.0	100.0	

Table 6 indicated the frequency and valid percentages of the fuel consumption made by the motorcycle drivers. The results showed that 15(4.6%) consumed between Ghc 80 – 90 , 8(2.4%) consumed between Ghc 90 – 100, 9(2.8%) consumed between Ghc 100 – 120, 11(3.4%) consumed between Ghc 120 – 140, 284(86.9%) consumed between Ghc 140 – 150 respectively.

Table 7

Police Extortion

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	6	1.8	1.8	1.8
Yes	321	98.2	98.2	100.0
Total	327	100.0	100.0	

Table 7 indicated the frequency and valid percentages of the rate of police extortion The results showed that 6(1.8%) agreed that the police extortion does not affect their operation. And, 321(98.2%) were of the view that the police daily extortion affect their operations and sales.

Table 8

Spare Parts

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Small Increase	7	2.1	2.1	2.1
High Increase	320	97.9	97.9	100.0
Total	327	100.0	100.0	

Table 8 indicated the frequency and valid percentages of the rate of increase in prices of spare parts. The results showed that 7(2.1%) agreed that there was small increase and does not affect their operations while 320(97.9%) were of the high increase in spare parts affect their operations

Table 9

Luggage and Goods

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Not Obstacle	13	4.0	4.0	4.0
Obstacle	314	96.0	96.0	100.0
Total	327	100.0	100.0	

Table 9 indicated the frequency and valid percentages of luggage and goods. The results showed that 13(4.0%) agreed that luggage and goods were not obstacle and does not affect their operations while 314(96.0%) agreed that luggage and passengers goods were obstacle to their operations ..

Table 10

Repair Cost

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Average Cost	23	7.0	7.0	7.0
High Cost	304	93.0	93.0	100.0
Total	327	100.0	100.0	

Table 10 indicated the frequency and valid percentages of the repair cost of the motorcycle. The results showed that 23(7.0%) agreed that there was average cost on the repair activities operations while 340(93.0%) were of the view that there was high cost in repairing of their motorcycles.

Table 11

Distorted Direction

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No Distortion	14	4.3	4.3	4.3
Distortion	313	95.7	95.7	100.0
Total	327	100.0	100.0	

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No Distortion	14	4.3	4.3	4.3
Distortion	313	95.7	95.7	100.0
Total	327	100.0	100.0	

Table 11 indicated the frequency and valid percentages of the rate of distorted route direction of passengers. The results showed that 14(4.3%) agreed that there the distorted route affect their operations while 313(95.7%) agreed that the distorted direction affect their daily sales.

Table 12

Stealing and Attack

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No Attack	6	1.8	1.8	1.8
Attack	321	98.2	98.2	100.0
Total	327	100.0	100.0	

Table 12 indicated the frequency and valid percentages of the rate of stealing and attack of the operators and the machine. The results showed that 6(1.8%) agreed both the drivers and the machined were not under serious threat and robbery while 321(98.2%) agreed that okada operator were been attacked daily.

Table 13.

Health Condition

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No Effect	17	5.2	5.2	5.2
Effect	310	94.8	94.8	100.0
Total	327	100.0	100.0	

Table 13 indicated the frequency and valid percentages of the rate of health condition of the okada drivers.. The results showed that 17(5.2%) agreed that the daily movement does not affect their health conditions while 310(94.8%) were of the view that the operation affect their health conditions.

Table 14

Correlations

		Daily Sales	Fuel Consumption
Daily Sales	Pearson Correlation	1	.795**

	Sig. (2-tailed)		.000
	N	327	327
Fuel Consumption	Pearson Correlation	.795**	1
	Sig. (2-tailed)	.000	
	N	327	327

** . Correlation is significant at the 0.01 level (2-tailed).

Table 14 shows the strong correlation of 0.795 between daily sales and fuel consumption

Table 15.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.801 ^a	.641	.639	.708

a. Predictors: (Constant), Cost of New Okada, Fuel Consumption

Table 15 indicated the model summary of the dependent variable (daily sales) and the predictors (cost of new okada and fuel consumption). There was strong correlation of 0.80 between the dependent variable and the predictors. The R square and the adjusted R square were 0.641 and 0.639 respectively with the standard error of the estimate as 0.708.

Table 16

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	290.468	2	145.234	289.557	.000 ^b
	Residual	162.510	324	.502		
	Total	452.979	326			

a. Dependent Variable: Daily Sales

b. Predictors: (Constant), Cost of New Okada, Fuel Consumption

Table 16 shows the ANOVA between the daily sales and the predictors. The table showed that the model was significant since sig(0.000) < 0.05.

Table 17

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.532	.286		1.859	.064
	Fuel Consumption	.958	.040	.805	24.059	.000
	Cost of New Okada	-.149	.050	-.100	-2.995	.003

a. Dependent Variable: Daily Sales

Table 17 indicated the values of the unstandardized coefficient and the standardized coefficient of the model between the dependent variable and the predictors. The constant term is 0.532 and that of the fuel consumption (0.958) and cost of new okada (-0.149) indicating that a unit increase of fuel consumption will increase daily sales by 0.958 while a unit increase of cost of new okada will decrease daily sales by 0.149 respectively. The model is greatly affected by the fuel consumption indicated in the standardized coefficient of 0.805 .

Table 18

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.806 ^a	.649	.644	.704

a. Predictors: (Constant), Distorted Direction, Fuel Consumption, Bad Road, Cost of New Okada, Repair Cost.

Table 18 indicated the model summary of the daily sales as the dependent variable and that of the predictors. There was strong correlation between the dependent variable and the predictors

Table 18.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	293.991	5	58.798	118.715	.000 ^b
	Residual	158.988	321	.495		
	Total	452.979	326			

a. Dependent Variable: Daily Sales

b. Predictors: (Constant), Distorted Direction, Fuel Consumption, Bad Road, Cost of New Okada, Repair Cost

Table 18 shows that there was statistically significant between the dependent variable and the predictors since the sig (0.000) < 0,05

Table 19

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.523	.564		2.701	.007
	Fuel Consumption	.943	.040	.793	23.540	.000
	Cost of New Okada	-.146	.051	-.098	-2.878	.004
	Bad Road	-.299	.143	-.070	-2.095	.037
	Repair Cost	-.271	.160	-.059	-1.697	.091
	Distorted Direction	.081	.207	.014	.391	.696

a. Dependent Variable: Daily Sales

Table 19 shows the constant of 1.523 of the models and which also indicated that the cost of new okada, bad road and the cost of repair of motorcycle negatively affect the dependent variable (Daily sales). The model indicated that a unit increase in the cost of new okada, poor bad road network and cost of repair will decrease the daily sales of the okada drivers by (-0.146), (-0.499) and (-0.271) respectively. Again, the model indicated that a unit increase in fuel consumption and distorted direction and route will increase daily sales by (0.943) and (0.81) respectively.

6. Conclusion, Recommendation, and Further Research

The use of motorcycle as a commercial transport service has significantly affected the socio-economic development of people in our communities and has come to stay. The results of this study have shown the challenges of faced the motorcycle operators such as stealing and physical attach, cost of spare parts, cost of repair of motorcycle, bad road, distorted direction of route, cost of new motorcycle, packing security, and health condition of the drivers.

The results indicated that the fuel consumption ranged between Ghc 140 – 150} than between Ghc 120 – 140 while the cost of motorcycle range between Ghc 43,000 – 44,000} than between Ghc 44,000 – 44,500 respectively. The security aspect of the motorcycle indicated that 89.9% pack at home, 3.4% pack at fuel station, and 6.7% pack at the transport station. The results also showed that 7.0% agreed that there was average cost on the repair activities operations while

93.0% were of the view that there was high cost in repairing of their motorcycles.

The study recommended that the okada drivers should regularly have their health condition checked more especially, their eyesight, waist, and general body screaming at the Regional Hospital due to continuous driving for hours. The route of the drivers should also be limited more especially the edge of town and timing not to work beyond 9:00pm to avoid physical attack and robbery. The various town roads should be rehabilitated to avoid accident and accessibility. Future work is to consider analysis and comparisons of earning of the various kinds of tricycles in Ghana including the demographic study of the operators. Further research may also examine the strategic security of the various categories of the motorcycles for effective and efficient management systems and economic development of the youth in Ghana.

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