



Exploratory study on service quality of small scale motorcycle maintenance and repair enterprises in Ghana

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Abstract

In spite of the numerous contributions of maintenance and repair service to the motorcycle industry there appears to be a general impression that services within the industry are of lower quality. However, a preliminary study revealed otherwise. This paper therefore looks at the quality of service in the industry using a scientifically modified SERVQUAL approach in the Central Region of Ghana. A total of 240 drivers took part in the study at a usable response rate of 83.3 percent. Data was analyzed employing Cronbach alpha, mean and standard deviation. Results showed negative service quality gaps for all dimensions considered, viz. Empathy (-3.16); Assurance (-2.42); Reliability (-2.23); Tangibles (-1.92); Responsiveness (-7.73); Cost (-1.68) and Communication (-0.85), with Empathy being the relatively least satisfactory. Average service quality gap was -2.02. Study outcomes thus showed that, generally, the quality of service in the industry is not satisfactory. Service providers in the industry shall be advantageously placed and be more competitive if the dimensions considered are dedicatedly taken care of through improvement of the dimensional attributes. Though the findings cannot be generalized, it provides fundamental information on the industry in the Central Region of Ghana and a reference for further and future research in Ghana.

Keywords: Communication; Cost; Maintenance and Repair; Motorcycle; SERVQUAL

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1. Introduction

The measurement and evaluation of quality of service by public and private, small and big enterprises and developed and developing countries has become unimaginably important as a result of rapid development, competition and regionalism, in both domestic and international terms (Brown and Bitner, 2007). Quality of quality, its measurement and evaluation, also means a lot to producers and customers (Osman and Omar, 2007). It is a critical dimension to competition (Lewis, 1989). Indeed globally, service quality has been used to improve marketing flexibility and effectiveness as well as competitiveness of industries (Gržnic, 2007). The realization of industries such as the motorcycle enterprise, that the survival of business in the current global economy largely depends on the quality of products and services provided to customers, is therefore not misplaced (Osman and Omar, 2007). The quality of service thus needs to be given a serious attention (Elistina and Naemah, 2011). Hung et al. (2003) however intimate that the provision of improved customer satisfaction through better quality of service had become a challenging, though it is a pertinent issue facing the present service industry.

Service quality has been defined in various ways. For example, Parasuraman et al. (1988) define service quality as a form of attitude, though not equivalent to satisfaction resulting in difference between expectation and perception. Lewis and Mitchel (1990) also describe service quality as the degree to which customer needs or expectations are met. Service quality is also defined as the services provided as perceived by the customer (Cronin and Taylor, 1992). Zahari et al. (2008), on the other hand, views service quality as the extent to which customer needs are met or exceeded.

According to Seth and Deshmukh (2005), managers, practitioners and researchers have turned attention to service quality during the last twenty years or so as a result of its effect on business performance, customer satisfaction, lower cost, customer loyalty and higher profits. Thus for business to be successful customer service needs must be met or exceeded. This can be achieved through the implementation of quality management adaptations in human, financial, technical and technological recourses. Maintaining customer confidence through satisfaction is a prerequisite to customer retention and this is a managerial enterprise. Quality on continuous basis is therefore pertinent in this regard.

In various range of services in MSMEs such as banking, insurance, recreation, hairdressing, house construction, tailoring, insurance, hire purchase, motor vehicle repairing and motorcycle repairing, customers require high standards, and fair treatment. However there is mismatch between better consumer services and attention given to consumer goods (Elistina and Naemah, 2011). Though MSMEs in the motorcycle industry deliver important services, studies on quality of service tend to be neglected and scarcely available in literature. Nevertheless, in Ghana for instance, micro, small and medium enterprises (MSMEs) are on record to contribute about 85% of employment (Abor and Quartey, 2010). They consist of about 92% businesses and provide about 70% to GDP (Abor and Quartey, 2010). The important role of MSMEs is vital since it is a pivot to economic development, serving as a catalyst to economic growth and development (Mensah, 2004). There is therefore the need for baseline data on this all important sector of the economy with reference to quality of service rendered to customers. As MSME, determining the quality of service of the motorcycle service industry is required for strategizing for regular and continuous

improvement to meet customer needs. This exploratory study therefore sought to assess the nature of quality of service in this sector of the Ghanaian economy, concentrating on the Central Region of Ghana. Perceptions and expectations of customers were considered with the view to ascertaining service quality gaps within the industry.

2. Literature review

2.1. The motorcycle

The motorcycle is a two-wheeled or three-wheeled motor vehicle, usually driven by an internal-combustion (I.C.) engine. Comparatively, motor vehicle is usually referred as a four-wheeled vehicle. The internal combustion engine of a motorcycle may be two-stroke or four-stroke with a maximum of four cylinders. Though they may be water-cooled, most are air cooled with displacements generally constrained within 1,800cc. Mopeds (motor pedals) are motorcycles which are of smaller designs with engine capacities up to 50cc, consuming 2.4 liters per 100km. Other classifications are child bikes, trail bikes, road bikes, touring bikes and racing bikes in order of increasing engine displacements and power capacity. Super bikes with displacement higher than 900cc are a subcategory of racing bikes with hunched frame and improved aerodynamic features (Cromer, 2016).

Motorcycles may have two, four or six speed transmission system. Power transmission to the rear wheel may be through chain and sprocket, belt and shaft, though chain and sprocket is the most common and preferred type. Engine speed is controlled by clutch and throttle using twist-type controls on the handgrips. The braking system is made up of two mechanisms: front- and rear-wheel brake. While the front-wheel braking system is controlled by a lever near the handgrip, the rear-wheel system is controlled via a foot pedal. The front brake is usually a disc type except very small machines. The rear brake is either disc or drum type controlled by electric push-button starter. The frame of motorcycles is usually made of tubes and sheets of steel though other parts are made of aluminum (wheels, rims and spokes) and cast wheels. Because of the high strength to weight ratio, graphite composite and magnesium are used for other parts. The suspension system consists of coil springs on a telescopic fork (front-wheel) and springs rounded on shock absorbers (rear-wheel). The tires are designed to be smaller and rounded, to allow leaning, reducing the center of gravity and allow improved traction when turning. The stability of motorcycles is high ensuring cornering capability due to gyroscopic effect of the wheels at high speeds (Cromer, 2016).

2.2. Definition and meaning of small scale enterprises (SSEs)

Micro, small and medium enterprise (MSME) has been defined in many ways depending on the number of employees, turnover balance sheet (What is an SME? 2015) or country. For example, in Europe a micro-enterprise has up to 10 employees, small enterprise up to 50 and medium-sized enterprise up to 250 employees. The European Commission, therefore, defines MSME as “the category of micro, small and medium-sized enterprises (MSMEs) made of enterprises which employ fewer than 250 persons and which

have an annual turnover not exceeding 43 million euro” (Department for Business Innovation and Skills, 2014); though, EU member states have 255 employees as the limit; Belgium has 100.

Before the middle of the 20th century, the importance of SMEs was oblivion to both researchers and the business community. SMEs were considered a stumbling block to economic development. With time, their strength was discovered as a solution to mass unemployment and abuse of economic power (Hans-Heinrich and Bass, 2006). Gibson and van der Vaart (2008) in a paper “Defining SMEs: A less imperfect way of defining small and medium Enterprises in Developing Countries,” tried to submit a universal definition for SMEs as “a formal enterprise with annual turnover, in U.S dollar terms, of between 10 and 1000 times the mean per capita gross national income, at purchasing power parity of the country in which it operates (The World Bank, 2010). This definition has two critical advantages: One, annual turnover is a better instrument to measure the contribution of MSMEs to Gross Domestic Product. Two, annual turnover satisfies the criterion of a single ruler measurement. However, two challenges were observable: One, most MSMEs do not have data on annual turnover and two, the ratio of informal MSMEs to formal ones is higher than 8. One fits all definition for MSMEs is therefore still illusory from the global point of view.

In the National Small Business Amendment Act of 2003, South Africa defines micro-businesses as businesses with fewer than six employees and maximum turnover of R100, 000; very small businesses between 6 and 20 employees and small business between 21 and 50 employees. The upper limit of turnover depends on the sector under consideration. The maximum number of employees in the medium-sized business is 200 and turnover between R5 million and R 64 million, depending on the sector.

According to a United Nations Economic Commission report in 2010, MSMEs have contributed a robust GDP growth of 5.4 percent per annum between 2001 and 2007 to the Ghanaian economy. Data from the Registrar General in Ghana shows that micro, small and medium enterprises forms 90% of registered companies (Mensah, 2004). As a source of employment and income of many Ghanaians, MSME is a catalyst toward the economic growth and development of Ghana. In spite of its role towards the development of the country there is no single, one-fits-all definition of a small firm in Ghana due to differences in levels of employment, sales and capitalization. Different sectors have different definitions. However, Kayanula and Quartey (2000) doing comparative analysis based on definitions from different countries identified some commonalities in defining MSMEs in Ghana.

The Ghana Statistical Service (GSS) bases its definition of MSMEs on number of employees. Small scale enterprises (micro, very small and small) employ less than 10 persons while medium and large-sized enterprises employ more than 10 persons. On the other hand the National Board for Small Scale Industries (NBSSI) uses both number of employees and fixed asset as the bases. A small scale enterprise is thus defined as one with not more than 9 workers and plant and machinery worth (excluding land, buildings and vehicles) not exceeding 10 million cedis. With the value of the cedi having been depreciated several times since 2000, using fixed asset as a criterion for definition of MSME may not be reliable with respect to time. A dollar equivalent when adopted to deal with inflation and depreciation of the cedi may put the definition in its right perspective. For the purpose of this paper, therefore, the definition of MSMEs based on the number of

employees has been adopted. Thus a small scale enterprise (SSE) may be defined as micro, very small or small organization that employs less than 10 persons at the time of assessment or evaluation.

SSEs in Ghana may also be classified as urban or rural enterprises. The urban enterprises may be “organized” or “unorganized”. While organized enterprises have registered and paid workers, the unorganized comprises artisans working in open spaces, at home, or in temporary wooden structures, usually with no salaried employees. They may have no waged employees and work in semi-permanent metal container structures (UNECA, 2010; Kayanula and Quartey, 2000). Family members or apprentices or both usually support the activities of this category.

RuralSSEs usually include family groups, individual artisan and women engaged in food production from local crops. Small scale enterprises include soap and detergents, clothing and tailoring, village blacksmiths, fabrics, textile and leather, tin smelting, aluminum casting, ceramics, timber and mining, bricks and cement, bakeries, beverages, food processing, wood furniture, agro processing, chemical bases products, electronic assembly, vehicle mechanic, and motorcycle mechanics (UNECA, 2010; Kayanula and Quartey, 2000). Considering their sector-based widespread nature in the economy, SSEs in Ghana are agents of fund mobilization which would have been otherwise untapped (Kayanula and Quartey, 2000). Kayanula and Quartey (2000) also intimate that SSEs are labor intensive, promote indigenous technological knowhow, are a seed-bed for indigenous entrepreneurship drive and have higher labor-to-capital ratio. They further point out that SSEs are capable of promoting a better equitable distribution of wealth than larger firms as a result of greater dispersion and intensity of labor. Ability to expand the domestic market and facilitate productivity using scarce resources, were identified to influence strategic economic growth and development.

In spite of these advantages SSEs in Ghana still face various challenges (UNECA, 2010; Kayanula and Quartey, 2000). Firstly, SSE entrepreneurs who act as owner/manager have limited formal education. Simple accounting skills are lacked thus making it difficult to access data which could be used to draw effective and strategic policies that may support their growth (Mensah, 2004). Secondly, Mensah (2004) identified limited access to finance as a major constraint. Working capital and raw material accessibility are also challenges as a result of limited access to local, international, private and public capital markets. Mensah (2004) also identified access to appropriate technology and information on advance production (products and service) methods. This is in corroboration with findings of UNCTAD (2005) that most SSEs lack both financial and technical resources required for the acquisition of state of the art technologies and equipment to meet international and domestic competition.

Other challenges identified by Mensah (2004) are constraints arising from regulations by governments, high start-up costs arising from licensing and registration requirements and excessive delay in court proceedings. High cost of settling legal claims could also create unbearable burdens and negatively affect the activities of SSEs in Ghana. Lack of managerial knowhow was also observed as a major constraint to SSEs. Skilled workers have also been found to be insufficient, resulting in limited specialization opportunities, higher production costs and lower flexibility in firm’s operations. In the effort to absorb best global practices in their survival of the complete global market, Rajesh et al. (2011) also outlines cost competitiveness, lead-time, low capital base, limited creation of surplus funds to reinvestment as a result of tight working capital

cycle, limited geographical diversity of markets, poor infrastructural facilities, inadequate exposure to international environment and obsolete technology as some of the constraints motorcycle maintenance and repair SSEs face. This corroborates with some of the observations of Osei et al. (1993) in the Ghanaian environment. Daniels and Ngwira (1993), Aryeetey et al. (1994) and Parker et al. (1995) outlined these challenges as general constraints facing SSEs.

These challenges affect the competence of organizations and industries such as the motorcycle maintenance and repair industry. Awuah (2007) defines competence as an attribute that provides ability to an organization to create and administer relations with key suppliers, customers and other organizations (UN, 2007; UNIDO, 2002). Thus, for the sake of this paper, competence may be defined as an attribute that generates a set of skills, related knowledge, attributes and characteristics required by an individual or organization to perform a task or an activity or group of tasks or activities expected within a specific job or function to the satisfaction of customers. But the ultimate satisfaction of customers depends on the quality of service rendered by the organization. Thus, according to Lewis and Mitchell (1990), the quality of service delivered is the degree to which a service meets the needs of customers. It is for this reason that a study of service quality in the industry is relevant, for the survival of actors in a competitive national economy where smaller motor vehicles, bicycles and mass transport are becoming a popular means of transport. The current development of which many motorcycles are being used for commercial purposes (referred as okada, boda-boda, moto-taxis, oleyia, zemidjans, phen-phen or bendskins) calls for greater provision of quality service from maintenance and repair service providers in order to enhance efficiency, prevent or reduce loss of lives and property from crashes (Oteng-Ababio and Agyemang, 2015; Kudebong et al., 2011).

2.3. Service quality (SERVQUAL) measurement

In 1982, Grönroos identified functional service quality and technical service quality as two dimensions of service quality. Grönroos (1982) explained that while functional dimension of service quality deals with how service is provided, technical dimension is concerned with what service is provided. Lehtinen and Lehtinen (1982) on the other hand identified service quality in terms of physical and corporate perspectives. They attributed physical quality to tangible aspects of service quality and corporate dimension to image of the service provider in the eyes of customers, both immediate and potential as well as the general public. The works of Grönroos (1982) and Lehtinen and Lehtinen (1982) among others contributed to the study of other researchers in coining definitions of the concept of service quality. For example, Crosby (1984) viewed quality in terms of how a product conforms to specified requirements. On the other hand, Parasuraman et al. (1988) defined service quality in terms of tangibility, reliability, responsiveness, assurance and empathy. Juran (1988) also looks at quality as a characteristic that enables a product to be fit for use while Eiglier and Langeard (1977) define quality as an attribute of a product that makes a customer satisfied upon consumption.

A significant breakthrough in the development of criteria for measuring service quality was made by Parasuraman et al. (1985) to assess the quality of service by a firm by measuring the perceptions of customers towards quality. The SERVQUAL multi-item scale was developed in this regard for measuring

service quality. Though the original scale contained ten dimensions it was later scaled down to five as: the reliability of service; the assurance to customer in the process of service delivery; the tangible aspects of service; the empathy exhibited to customers in the process of service delivery; and the responsiveness of service delivery (Parasuraman et al., 1988). The five generic attributes are stated as: tangibles, reliability, responsiveness, assurance and empathy. Each generic attribute has different contextual attributes. Contextual attributes have different effects on the grading of a generic attribute. Each generic attribute also has different influence on the final service quality. Tangible are concerned with the equipment, physical facilities and employee appearance. Reliability also deals with dependency and accuracy in terms of the ability to deliver the service promised. While responsiveness is in relation to willingness to deliver service promptly and help customers, assurance is the ability of the firm to inspire trust and confidence as well as knowledge and courtesy of employees. It also deals with security, competence and credibility. Empathy covers communication, understanding, care and individual attention from the organization to the customer (Iwarrrden et al., 2003).

According to Gržnic (2007) it is the customer who is the best determinant of service quality and therefore the best valuer. SERVQUAL is for this purpose. It is used to measure how best service is provided and how it fits the expectations of the customer consistently. It compares the expected service and the perceived as a means of determining the gaps between the two, in both contextual and generic dimensions. Shahin (2006) observes that the SERVQUAL scale is very popular with researchers and in literature. It is intimated that SERVQUAL contains a list of attributes that are desirable to customers in terms of their fundamental needs from service providers in a logical arrangement. The choice of attributes was established through intense and scientific method of enquiry. In spite of its popularity, however, Robinson (1999) observes that there is much disagreement and not much consensus of opinion in the mode of measurement. Though many a researcher have used the SERVQUAL methodology, Shahin (2006) is of the view that there has not been a general agreement on how service quality is measured using SERVQUAL, despite numerous efforts to study the concept.

Other researchers have equally criticized the service quality gaps model on both methodological and conceptual terms (Brown et al., 1993; Teas, 1993; Cronin and Taylor 1992; Carman, 1990). Cronin and Taylor (1992) were of the view that in measuring service quality it is not useful in measuring customer expectations; that customer perception is an enough yardstick in evaluating the parameter. The authors believe in evidential assertion that the expectation-performance gap as a predictor of service quality has no founded support. The researchers therefore proposed that the performance-based measurement model (SERVPERF) which measures performance only through customer perceptions conforms better with available customer satisfaction literature and existing attitude than the perception-expectation gap model (Shahin and Samea, 2011).

Unlike perception which is easily defined and is measurable as the belief of a customer in terms of experienced service, expectation is amenable to various definitions and interpretations (Dabholkar et al., 2000; Teas, 1993; 1994, Babakus and Inhofe, 1991; Grönroos, 1990). Expectation may be considered normative or ideal. Thus many definitions of expectations abound making its actual measurement doubtful. Hence, whether expectation is concerned with organizational human resource, facilities and equipment's

limitations or without the concern to limitation and constraints, brings to the fore the difficulty in understanding the concept of expectations. Additionally, Parasuraman et al. (1988; 1985) defining expectation as the desire or wants of the consumer in relation to what the service provider should offer instead of would offer exposes one other shortcoming of the expectation-performance gap model (Jain and Gupta, 2004).

The assertion by Carman (1990), that SERVQUAL is not applicable as a common instrument in measuring service quality in various sectors and industries, has been proven over the years (Berndt, 2009; Miguel da Silver et al., 2007; Mukherjee and Nath, 2005). According to Brown et al. (1993), SERVQUAL has limitations in terms of psychometric implications of the application of difference score since the gap approach exhibits poor reliability due to the propensity for perception and expectations to correlate. The authors also intimated that tests of statistical significance between the two, if there should exist statistical variance, is intricate to analyze. Despite these criticisms, Shahin and Samea (2010) still recommend, the use of the service quality gaps model as the best alternative in measuring the quality of service delivered by an organization to its customers.

It is well noting that Luk and Layton (2007) gap model was derived from the SERVQUAL model by Parasuraman et al. (1988). In the present study the gap between customer's perceptions and actual expectations of service delivered, referred as service quality gap was considered. According to Shahin and Samea (2010), both customer perceptions and expectations are important and that a comparison of the two portrays customer satisfaction. There is therefore the need for managers to access customer perceptions and expectations of the quality of service rendered. Shahin and Samea (2010) intimated that this is compatible with the model of service quality gaps when integrated with the six-sigma methodology when an additional component and two other gaps were included in the traditional models when computation of sigma quality level was required (Shahin et al., 2006). Shahin and Samea (2010) were of the view that managers should be interested in the service process and not be blind of customer perceptions on the quality of these services in addition to how their employees perform when delivering service. This is because in their opinion, perceived service is directly linked to service delivery while service delivery results from employee performance. With reference to the importance-performance analysis (IPA) framework, the authors add that managers, executives and decision makers (management) should concentrate on the feelings of customers about the actual services provided in addition to what is important to them (Shahin, 2006).

3. Materials and methods

The multistage sampling technique was adopted using judgmental sampling method as the first stage to select four administrative districts, the districts being the most populous in the region. Thus Cape Coast Metropolis, Kasoa, Winneba, and Agona-Swedru Municipalities in the Central Region of Ghana were selected due to the strategic location of the region; between the national capital region (Greater Accra Region) and the booming oil region (Western Region). Population size, and consequential commercial, industrial and economic activities were the major influential factors considered. The second stage involved purposive

sampling to select ten (10) motorcycle repair shops from each metropolis/municipality. The final stage employed accidental sampling to select (6) customers from each repair shop. Though accidental and purposive sampling techniques may be limited when it comes to generalization, the relatively large sample size was likely to more than compensate for the deficiency.

Data was collected from Monday to Saturday in the month of February, 2015, between the hours of 10.00 am and 2:30pm. Out of the 240 questionnaires distributed, 200 were used for analysis due to missing data cases at a response rate of 83.3 percent (Cape Coast = 55 (27.5%); Kasoa = 61 (30.5%); Winneba = 40 (20%); Agona-Swedru =44(22%) respondents). The study ensured that no respondent completed more than one questionnaire to enhance reliability of the results. It was also ensured that respondents had patronized the workshop more than three occasions since according to Katariina et al. (2008), consumers' customization with service is a cardinal element of perception with respect to its quality (Elistina and Naemah, 2011). As three-section document, the first section of the questionnaire requested for customer demographic profile while the other two sections demanded for customer perceptions and actual expectations on quality of service delivered.

The SERVQUAL scale was used as the study instrument. SERVQUAL is the most popular model developed by Parasuraman et al. (1988) and widely used in literature (Shahin and Samea, 2010) by researchers (Shahin, 2006; Iwaarden et al., 2003); health institutions (Woodside et al., 1989); the courier industry (Norbani (1999); Islamic banking industry (Othman and Owen, 2001) and the hotel industry (Bondzi-Simpson, 2012); just to mention a few. The initial SERVQUAL model had ten dimensions for estimating service quality as tangibles, reliability, responsiveness, assurance, courtesy, credibility, security, accessibility, communication and understanding the customer. These factors were later simplified, collapsing into five dimensions as tangibles, reliability, responsiveness, assurance and empathy. In line with Dabholkar's (1996) suggestion, the questionnaire was modified to suit the current study. Dabholkar (1996) suggests that measured service quality should be relevant to the industry or sector concerned.

The model questionnaire used by Elistina and Naemah (2011) was therefore adopted by adding two additional dimensions, cost and communication to the five SERVQUAL dimensions. Cost and communication also had contextual attributes. Thus 29 attributes were designed making constituting seven dimensions. A seven-point Likert scale ranging from strongly disagree (1) to strongly agree (7), based on agreement or otherwise to the questions, was employed. A pilot study of 29 customers helped structure the questionnaire using English as the medium of communication. A Cronbach alpha coefficient of 0.87 was obtained when questionnaire was tested for reliability indicating the instrument was reliable (Elistina and Naemah, 2011; Cronbach, 1951). Additionally, internal validity was positive as the study met the conceptual and scientific methods and requirements adopted by reliable and proven researchers and related studies (Payne and Payne, 2004; Bailey, 1994). According to the literacy level of respondents, questions were translated into vernacular for lucid understanding as appropriate. Data was processed and analyzed using the statistical package for the social sciences (SPSS, Version 21). The descriptive statistic was employed for the analysis, relying on mean and standard deviation.

4. Results

4.1. Demographics of respondents

Table 1 shows the details of demographic characteristics of respondents. Among the 200 respondents majority (95.5%) representing 191 were male while the remaining were female.

Table 1. Demographic characteristics of respondents

Gender	Frequency	Percent
Male	191	95.5
Female	9	3.57
Age (Years)		
Below 26	7	3.5
26-35	83	41.5
34-45	84	42
46-55	22	11
Above 55	8	4
Highest Educational Attainment		
Basic	45	22.5
Sec/Voc/Tech	101	50.5
Tertiary	54	27
Net Monthly income (GHc)		
Below 801	13	6.5
801-900	47	25.5
901-1000	85	42.5
Above 1000	67	33.5
Technical knowledge		
Not at all	32	16
Little	153	76.5
A lot	15	7.5

Source: Survey data (2015)

This may be due to relatively high risk associated with motorcycle riding. Thus females would usually not patronize motorcycle riding particular tricycles with trailer used for carrying load only. There is a general societal view in southern Ghana that motorcycle riding should be an encounter of the male preserve. This attitude may have cultural underpinnings. The minimum age was found to be 25 years and the maximum 62. Thus all respondents were adults who could take decisions on their own.

Customers' age range between 24 years and 59 years with about 94.5 percent within the 26-35, 36-45 and 46-55 year brackets (refer Table 1). Majority of the customers had Sec/Voc/Tech as the highest educational attainment (50.5%). Those with tertiary educational background were 27 percent while those with basic educational attainment were 22.5 percent. Majority of the customers (42.5%) received a net income of between GH¢901 and GH¢1000; 33.5 percent above 1000; 25.5 percent between ¢801 and ¢900; and 6.5 percent below ¢801 in that order. The sample thus belongs to the middle-income earning group. In terms of technical knowledge, majority of the customers (92.5) had little or no knowledge on maintenance and repair

of motorcycles. This may support the fact that majority (73%) had highest educational attainment of either Sec/Voc/Tech or basic.

4.2. Service quality attributes

Table 3 shows detail responses, means and standard deviations of customer expectations of service provided. Expectation was lowest for 'equipment's are up to date' and highest for 'physical appearance for garage is appealing' with reference to Tangibility. Reliability analysis for customer expectations gave 'performs the service correctly the first time' as the lowest score (5.6); and complete the service at the designated time' (6.0) as well as 'when something is promised it is done' (6.0) the highest scores. With respect to responsiveness, 'responsive to complaints' was the highest score (6.0) while 'provision of prompt services' was the highest (5.5). When it comes to assurance customer expectation was least for 'garages cannot be trusted to take care of vehicle safety.' Lack of security at their premises could be the major reason. Expectations (on Assurance), however, was highest on 'knowledge to answer questions' (6.3) followed by 'trust in knowledge and skills' (6.2). 'Understanding managers,' on the other hand, highest perceptions was for 'individual attention given to each customer' as well as 'do not use technical terms difficult to understand.'

As attributes of customer expectations (Empathy), 'convenient operating hours' was the least (5.6) and the highest (6.1) on 'individual attention given to each customer' as well as 'do not use technical terms difficult to understand. Customer expectations (Cost) was lowest on 'actual charge' (3.8) and highest on 'prices of spare parts are reasonable' (5.2). Furtherance to this (Information), customers had highest expectations on 'provide clear information on the problem' and 'provide clear information of charges.' Nevertheless, expectations on 'provide clear information on spare parts was the least.'

Table 4 displays the detail responses, means and standard deviations of customers' perceptions. Attributes that recorded the least perception score for tangibles were 'equipment are up to date' (3.2) and 'display important information at easily accessible places' (3.2). The results showed that both expectations and perceptions were of low levels that 'equipment are not up to date.' In terms of reliability, 'when something is promised it is done, 'received the lowest perception score, while 'could be trusted to do a good job' (3.82) and 'performs the service correctly the first time' (3.82) were highest. Customer's perception to shop owner's responsiveness showed that the least perception was 'finishing the job within a reasonable time' (3.47); the highest was 'responses to complaint' (4.69). With respect to assurance, the lowest perception was 'do not feel that were being talked into unnecessary repair/servicing' (2.56), and 'do not use technical terms which are difficult to understand,' the highest being 'convenient operating hours' (2.94). The study also showed that the least perception, with reference to cost was 'the charges are reasonable' (2.86), and the highest, the 'prices of spare parts are reasonable' (3.1). The study further showed that, with regards to communication, 'provide clear information on the problem' was the least perceived (4.1), while the highest perceived was 'provide clear information of the charges.'

4.3. Service quality gaps

The service quality dimension gaps of the motorcycle maintenance and repair enterprises in the study area are shown in Table 2. Empathy recorded the highest customer expectation score (5.88), followed by reliability (5.86) assurance (5.83), responsiveness (5.73); tangibles (5.6); communication (5.26) and costs (4.6) in that order with reference to customer expectations. In terms of percentage, Empathy score was (20.3%); followed by reliability (20.27%); Assurance (20.17%); responsiveness (19.83%) and tangibles (19.38%) in descending order among (Berry et al., 1994). Thus customers expected workshops to do best in terms of empathy, followed by reliability, assurance, responsiveness and tangibles. This does not corroborate with the findings of Berry et al. (1994) in which reliability is the most important dimension of service quality to consumers. According to Berry et al. (1994) it is best to do well in reliability; followed by responsiveness, assurance, empathy and tangibles in that order. The authors argued that reliability is the core of quality service, and that if service is not reliable nothing matters any more. They add that the development of service failure pattern is a conclusion that one cannot depend on the firm. Other efforts in other dimensions will not make amends; that no amount of friendliness and apology can save the situation. Though the findings of the present study does not follow that order, it is well noting that reliability is the second most important service quality dimension to consumers in this regard.

Table 2. Service quality dimension gaps

Generic attributes	Customer expectations	Customer perceptions	Service quality Gap.
Tangibles	5.60	3.68	-1.92
Reliability	5.86	3.53	-2.33
Responsiveness	5.73	4.00	-1.73
Assurance	5.83	3.41	-2.42
Empathy	5.88	2.72	-3.16
Cost	4.60	2.92	-1.68
Communication	5.26	4.41	-0.85
Mean of means	5.54	3.52	-2.02

Source: Computation from survey data (2015)

The dimension among the customers, with reference to customer perceptions revealed a different distribution. The highest perceived dimension was Communication (4.41); Responsiveness (4.0) Tangibles (3.68); Reliability (3.53); Assurance (3.41); Cost (2.92) and Empathy (2.72) in that order. The percentage distribution based on the five major dimensions was responsiveness (23.07%); tangibles (20.7%); reliability (13.53%); assurance (19.67%) and empathy (15.69%) in that order. In both distribution, customer expectations and customer perceptions place reliability as among the three most important dimensions and this appears to be a healthy development in the industry, supporting the indispensable nature of the relevance of reliability to the customer. When service quality is viewed panoramically in terms of service quality gaps, however, the results are not encouraging. The largest service gap was empathy (-3.16); followed by assurance (-2.42); reliability (-2.23); tangibles (-1.92); responsiveness (-7.73); cost (-1.68) and communication (-0.85) in descending order. The average perception gap of the seven elements was -2.02. All

gaps were negative indicating that customers are generally not satisfied with the services provided by service providers in the industry.

In order to enhance the tangibility gap, pulling resources together, to establish unified and integrated garages could help save this situation. The cost of capital can also be reduced through proper banking policies by financial institutions and fiscal policies by the government. Equipment pool when created by private and government sources where equipment is made available on credit bases may be an embracing policy to the sector. It is pertinent on this note for shop owners to take a critical look at upgrading and updating equipment used in the workshops.

Shop owners can improve upon service reliability through provision of diagnostic equipment (up-to-date) as supported in the perception on whether 'equipments are up-to-date.' Improved in-service training may also help improve this situation. Educational institutions such as Cape Coast Technical Institute, Asuansi Technical Institute and Cape Coast Technical University, all in the Central Region of Ghana, should organize short courses at affordable fee to train shop owners in this regard. Private sector sponsorship could go a long way to compliment the efforts of shop owners and managers. With respect to responsiveness, perception of managers was lowest for provision of prompt services. This could also be as a result of inadequate availability of up to date equipment including diagnostic equipment as indicated by the study. Attitudinal responses from employees could also be a major factor. Employees when motivated could give off their best.

As an attribute of empathy customers may send motorcycles for repairs after they have closed from work at the inconvenience of workshops that may have to work into the night to get work done. This difficulty may be dealt with through mutual understanding between workshop operators and customers. While it is important that shop owners have customers' best interest at heart, operating hours may be favorable to customers but unfavorable to shop owners. This must be encouraged since it will enhance customer service quality. As already indicated above, mutual understanding is required to deal with the situation by both workshops and customers

While customers view general expected charges as relatively unreasonable (high perception), customers perception was otherwise. Customers expect actual charges to be generally lower than or closer to estimated initial charges. This may be due to incorrect diagnosis which may be reasoned from inadequate up-to-date equipment; not performing service correctly the first time; and delay in the provision of prompt services. These three reasons have been supported by the study as expectations of these attributes were the lowest with respect to tangibles, reliability and responsiveness respectively. The suggestions already provided could therefore help alleviate the deficiencies. Considering the fact that maximizing profit is the ultimate of every business, charges could be made rather attractive to ensure customers are retained for the survival of the organization. In a sector where most of the employees are apprentices and therefore no regular wage, salary or remuneration is offered, performance could be greatly compromised.

Providing security at the premises may also add additional cost to consumers. Whether customers may be willing to pay additional cost for security of vehicles is an issue to contend with. Indeed customers need to be convinced to pay for services rendered; the lack thereof appears to be the reason for perceiving that shop owners should provide clear information of general charges demanded. It is clear, that providing clear

information on the problem will help customers appreciate the charges of the service, and therefore, soliciting for the provision of clear information of the charges they are to pay. The need to provide clear information on spare parts, when majority of customers (92.5%) have little or no technical knowledge on motorcycle maintenance and repair work, however, may not be a relevant exercise for the workshops.

5. Conclusion

The study was exploratory and aimed to assess the nature of service quality in the motorcycle maintenance and repair industry with emphasis on micro, small and very small enterprises (SSEs). The aim was to assess service quality gaps as a measure of quality of service in the motorcycle maintenance and repair industry. Using a modified SERVQUAL model, seven dimensions were assessed as Empathy; Assurance; Reliability; Tangibles; Responsiveness; Cost and Communication. The highest service gap was Empathy, and the least, Cost, all dimensions recording negative gaps. The average service quality gap was also negative. Thus generally, service quality in the industry was found to be unsatisfactory. There is therefore the need for improvement in all attributes of the dimensions considered with emphasis on Empathy as the most important to customers among the elemental parameters of service quality studied.

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