Service quality in the motor vehicle maintenance and repair industry in Cape Coast Metropolis, Ghana

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Abstract

The tangibility of the service provider, reliability of service provided, responsiveness of the provider, the empathy with which service is rendered and assurances there from, may not be the only factors that influence the quality of service, but also, cost and communication elements involved in the provider-customer transaction. This was revealed in a study that dwelt on the degree of service quality in the motor vehicle maintenance and repair industry in the Cape Coast Metropolis of Ghana. The study is based on seven dimensions as a means of measuring the quality of service in the industry. Multistep sampling technique was used to select160 responses from 40 workshops and garages. While the simple random sampling was employed to select the shops, the purposive technique was used to select the respondents. A questionnaire was used to collect data utilizing a seven–point Likert scale. The results showed that the perception levels of customers was high for tangibles (5.03), reliability (5.14), responsiveness (5.03)and assurance (5.13); but medium for empathy (4.79), cost (3.54) and communication (3.88). The results also showed that perception levels of tangibles, assurance, costing and communication cut across international boundaries. It is recommended that service providers should take advantage of the study findings by improving upon service delivery through more empathetic interactions, consistency on charges, and provision of information on technical risks involved in the choices of both customers and providers. The attributes of cost and communication as international dimensions of service quality however, invites further academic enquiry.

Keywords: Cost; Communication; Generic Dimensions; Maintenance and Repair; Service Quality

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1. Introduction

The quality of a product and service is of great importance to the survival of businesses and organizations (Osman et al., 2009). This is because consumers not only consume products but services, with records showing that the consumption of services in modern global activities outstrips that of products (Cauchick et al., 2004). For example, in the United State of America, the services industry provides jobs to over 75% of inhabitants. In developing countries such as Malaysia, services contribute to about 58 percent of the value of economic activities. (Elistina and Naemah, 2011). Similarly 54.5 percent of Brazil's GNP is provided by the services sector (Cauchick et al., 2004). The demand for quality services has therefore become a center stage, particularly, with reference to competition and globalization and quality management. Thus, in all economies of the world, the quantum of the services sector is on the increase (Rampal and Gupta, 2008).

Quality delivery is seen from the consumer point of view (Lovelock et al., 2008). Consumers define quality in terms of the extent to which their expectations are fulfilled (Bouman and Wiele, 1992). Studies have shown that service quality influences customer satisfaction (Arasli et al., 2005; Zeithaml and Bitner, 2003; Kandampully, 1998). There is also nodoubt that businesses that focus on quality management have competitive advantage over those who fall short, with consequential successes (Kandampully, 1998). Since customers tend to build better relationships with organizations that provide better quality services, an improved service quality influences provider-customer relationship as well as relationship marketing (Zeithaml and Bitner, 2003). Quality service delivery also influences the cost margins of organizations and hence the profitability of businesses (Berndt, 2009; Buttle, 1996).

The demand of quality service by consumers is justified since fair treatment of high standards is an essential treatment prerequisite for customer satisfaction. Thus in various range of services such as hospitality, tailoring, hair dressing, insurance, banking, recreation, hire purchasing, home construction, transportation as well as motor repair and maintenance, parameters such as service performance, service reliability, customer needs and customer loyalty are pertinent of consideration by customers. Unfortunately it appears consumer services have comparatively been relegated to the background in relation to the position of consumer goods. This is because consumer goods are easy to be assessed before sale is made. It does not require detailed expertise and skill for visual identification of quality. However, consumer services require subjective human involvement on such assessment, the control of which is difficult to attain. The technical expertise is usually unavailable thus positioning customers on the weaker side of the bargaining trail. Indeed most consumers lack the capacity to engage in such discussions with providers, enabling them solely dependent on the advice and suggestions of providers (Elistina and Naemah, 2011; Howells and Wetherill, 2005; Mohd, 2005; Lowe and Woodroffe, 2004; Sothi, 1991). This could largely contribute to overall customer satisfaction or dissatisfaction among customers. When it comes to automobile repair and maintenance services such requirement and resulting technical and capacity could be much more demanding on the consumer.

Customer dissatisfaction results in customer complaints (Elistina and Naemah, 2011). The automobile repair & maintenance services industry has had its fair share of customer complaints in terms of services

rendered. For example, Elistina and Naemah, (2011) have documented that since motor vehicles are essential personal effects of consumers and that their mobility depends on these contraptions, the repair and maintenance sector of automobiles has received lot of complaints (Tribal for consumer claims, 2008). They recorded that about 3784 and 3502 complaints were reported in the Tribunal for Consumer Claims (TCC) in 2007 and 2008 respectively with respect to supply services in Malaysia. The same tribunal also recorded 312 and 223 garage related complaints in 2007 and 2008 respectively. The New South Wales Fair Trading Tribunal in Australia's division responsible for motor vehicles received 917 applications, of which 101 cases were finalized in 2002 in relation to provision of services. The phenomenon of customer complaints in terms of poor quality services in the United Kingdom in particular in relation to services in the repair and maintenance services sector is also an indication of the widespread nature of the problem (European Consumer Law Group, 1989).

Causes of consumer complaints in the automobile repair and maintenance services sector include but not limited to the following: overcharging; use of defective or low quality spare parts; failure of providers in carrying out work in accordance with customers instructions; performing more than customers' indications; fitting a new part instead of repairing or maintenance performance; replacement of a whole component or section instead of a smaller component or element of damaged part or section; and late performance.The contribution of automobile repair and maintenance services to the Ghanaian economy cannot be over emphasized (Baidoo et al., 2015; Amoafo, 2012) in spite of such complaints. On the average Baidoo et al. (2015) report that over 71,000 vehicles are imported into the Ghanaian economy annually. Though these vehicles are essential in diverse sectors of the economy in terms of social and economic activities which facilitate the overall development and growth of the economy, a few standard garages responsible for repair and maintenance are available in the Cape Coast Metropolis. In the metropolis only three medium scale providers can be located. The remaining garages are small and micro scale in nature, many of which are nucleated in and around the Siwdo garage and workshop enclave. The small and micro scale automobile repair and maintenance service providers are therefore pivots in the provision of these services. In spite of the numerous advantages of quality of service, studies in the area appear to be deficient in Ghana in general and the Cape Coast Metropolis in particular. Nevertheless, the quality of services provided should be important and relevant to providers and customers in order to ensure competitive business advantage. In order to have updates of service quality of these providers to ensure customer satisfaction and continuous improvement of services rendered, it is penitent that studies are carried out in this area. The aim of thisstudy was therefore to determine service quality within the motor vehicle maintenance and repair industry in the metropolis. Contextually, the objective was to determine consumer perceptions with reference to services provided by garages and workshops in the metropolis with reference to the Parasuraman et al. (1988) generic service quality dimensions and the service quality dimensions adopted by Elistina and Naemah (2011). Finally, the study shall contribute to the debate concerning the application of the Parasuraman et al. (1988) service quality model in the motor vehicle repair and maintenance industry.

2. Literature review

This section reviews literature on the theories of quality in the services industry by first looking at the pioneering works of Parasuraman et al. (1985; 1988). It also looked at the works of other authors who have contributed to the concept, definition and meaning of service quality. It further dilated on the models of Cronin and Taylor (1992) and Grönroos (1992) with the view of selecting an appropriate model for the present study. Finally, it dwelt on empirical studies that support the conceptualization of service quality in the services industry in general and the automotive industry in particular.

2.1. Theoretical considerations

The pioneering work of Parasuraman et al in 1985 on the quality of services rendered by providers has contributed significantly towards the development of a quantitative model to assess the service quality of an organization through the measurement of perceptions of customers (Parasuraman et al., 1985). Parasuraman et al. (1988) in furtherance to the development of the model defines service quality on the consumers judgment about a products overall excellence or superiority, product implying both goods and services. Zeithaml et al. (2006) also express service quality as deeds, processes and performance. In advancing the works on service quality, Lewis and Mitchell (1990) defines service quality as the extent to which a service meets customer's needs or expectations. This definition is derived from the description of Parasuraman et al. (1988) that service quality is an attitudinal dimension which is related to satisfaction though not equivalent thus resulting from a comparison between expectations and actual performance. Kiew and Chee (2007) thus view perceived service quality as the result of a comparison of the customer's expected service and perceived service. Thus service quality is a measured parameter in terms of a match of the levels between delivered service and customer expectations on continual frequencies. The judgment of service quality of a product is thus continually based on the difference between the actual service provided and the expected service. In the view of Osman and Omar (2007), the customer is the final judge when determining service quality.

The findings of Rust and Oliver (1994) that the perceptions of service quality and customers overall perception of a particular service provider are interrelated and highly correlated. And they collectively add more to the definitions of service quality. Various studies corroborate with this finding that quality service produces customer satisfaction (Lee, 2010; Zeithaml et al., 2006; Cronin and Taylor, 1992). Thus whether a customer is satisfied with service provided depends on the quality of service rendered by the provider. The inference is that consumer satisfaction is a product of service quality. In spite of this, Zeithaml et al. (2006) observed the challenge in assessing service quality due to its intangible and perishable features and the fact that services are produced and consumed simultaneously. It has therefore been observed by Robinson (1999) that there is little consensus of opinion and much disagreement on how service quality should be measured, a fact that there is no general consensus on which measurement model should be adopted. This difficulty has brought to the fore the proposition, texting and usage of various models used in the measurement of service quality. While the Parasuraman et al (1998) model (SERVQUAL) measures service quality in terms of the gap between customer expectations of service and the perception of the actual service delivered, the Grönroos' model (1992; 2001) views service quality as dependent on expected service and perceived service delivered. Cronin and Taylor (1992) on the other hand measured service quality in terms

of the customer's perceptions of the service performance (SERVPERF) without reference to customer expectations.

A more recent approach was also proposed, tested and used by Brady and Cronin (2001). This multidimensional and hierarchical model is based on three primary dimensions comprising, the quality of outcomes, quality of physical environment and the quality of interaction between provider and consumer. These dimensions have three sub-dimensions each, summing up to nine in all. According to Jose and Martinez (2010) and Kline (2005) there are shortcomings and difficulties associated with the use of the service quality models related above. For this reason Hotman (2013) suggests the development of better ingenious models based on country and culture as a result of the relationship between customers' perceptions on service quality and culture of a people factors. For this reason Jose and Martinez (2010) emphasize the need to develop more ingenious service quality models during the qualitative stage of research on the quality of services delivered. In spite of these shortcomings, the service quality model of Parasuraman et al. (1988) is the most widely used by researches from various countries, cultures and disciplines (Baidoo et al., 2015; Bondzi-Simpson, 2012; Mohd et al., 2010; Kiew and Chee, 2007; Mensah, 2009; Strongen, 2007; Othman and Owen, 2001; Norbani, 1999; Woodside et al., 1987). This paper therefore adopted the SERVQUAL model dimensions in assessing service quality in the motor vehicle repair and maintenance sector in the Cape Coast Metropolis in spite of its shortcomings and limitations (Jose et al, 2010; Shahn, 2007; Carman, 1990) though only consumer perceptions (SERVPERF) were measured instead of the gap between consumer expectations and perceptions (Cronin and Taylor, 1992). This is in line with Patterson and Johnson (1993) who observed that service quality does not directly and indirectly affect service expectations. This view was corroborated by McDougall and Levesque (1994) who found that the inclusion of expectation scores in determining service quality was irrelevant. Thus contextually perception alone is a good determination in assessing the service quality of business organizations. The questionnaire used by Elistina and Naemah, (2011) was adopted. Along these lines, customer perceptions on seven service quality dimensions were considered in the present study as tangibles, reliability, responsiveness, assurance, empathy, cost and communication.

2.2. Empirical considerations

According to Levine (1987) and Muller (1991), service quality in the automobile industry is one of the most important areas that need particular attention in the industrial sector of every economy. It must be noted that the quality of a vehicle has much to do with after sales warranty as well as repair and maintenance services (Archer and Wesolowksy, 1996). With the rate of globalization and competition in all manner of sectors and the consequential need for restructuring in the automobile industry, Rajesh et al. (2011) were of the view that the auto industry including the maintenance and repair sector needs to adopt best practices in the global and competitive context in order to be sustainable and to survive. Some of the challenges in the sector, they outlined, include job lead time, cost, competiveness and customer orientation. In addition to these challenges these service providers are limited to tight working capital cycle, inadequate exposure to the international environment, absolute technology, poor infrastructural facilities, low capital base, limited generation of surplus funds for re-investment among others; and these could affect the quality of services

delivered. These observations are supported by Osei et al. (1993), Daniels and Ngwira (1993), Aryeetey et al. (1994) as well as Parker et al. (1995).

Apart from these studies, a few empirical studies have been made in the vehicle repair and maintenance subsector of the automotive industry. For example, a study is available by the European Consumer Law Group (1985), identifying challenges such as failure to carry out work in accordance with customer's instructions and excessive charges. Pena (1983), Aun (2000) and Naemah (2004) in Malaysia have researched in this area with particular emphasis on the relevance of consumer protection in relation to goods and services. Reports from New South Wales Fair Trading Tribunal in Australia, Division of Motor Vehicle, are common with the sector workshop complaints from customers. The Ministerial Council on Consumer Affairs (1999) in Australia studying the perceptions of women consumer's on workshop services reported that women are more vulnerable and therefore need greater protection (Elistina and Naemah, 2011). The study also found that small garages do not give written consent before repair work is undertaken; do not provide written statement describing the services and the estimates labor fee; lack the provision of information on specification of spare parts used (either new or reconditioned); do not inform customers (in writing) the estimated time for job completion; do not give customers the opportunity to inspect old parts after replacement with new ones; and do not provide warranty to customers. Kararne et al. (2010), in a study that sought to measure service quality of an Automobile Service Center, observed that overloading in service delivery, which is an attitude under reliability, is one major area in which industry customers are dissatisfied. Fifty four percent of customers were dissatisfied in terms of delay in service delivery.

In other parts of the world, particularly Africa, related studies appear to be few in the general automotive industry, one each in South Africa and Ghana with reference to the study reviewed literature. The present study aims at bridging this gap. A pilot study to the present work indicated that customers are currently demanding higher standards and more fairness in the provision of services in the motor vehicle repair and maintenance subsector of the automobile industry. A related study by Baidoo et al. (2015) showed that service quality could depend on provider's educational attainment, with the authors concluding that quality of service rendered by maintenance and repair service provided could be enhanced by improving professional training and adequately resourcing modern equipment and logistics. The present study is even more relevant from the point of view that customer satisfaction in Ghana is currently becoming of great importance as a measure of patronizing goods and services. The quality of services in the automobile repair and maintenance sector therefore needs investigation currently as never before. In order for the study to be more relevant for comparative purposes, the questions used in the work of Elistina and Naemah (2011) were taken into consideration in the formulation of the study questionnaire.

3. Methodology

The study methodology describes the study area and supports the reasons for selecting the location as the study. Primarily, it describes the instrument used to collect the study data, how the questionnaire was

designed and explains how data was collected. The section also presents the reliability and validity of the instrument and when data was collected. Finally, it reveals the tools used to process and analyze the data.

3.1. Study area

The Cape Coast Metropolis was selected for the study due to its tourism and educational institutional activities as well as its strategic location between the capital metropolis (Accra) and the oil and gas metropolis (Takoradi) of Ghana. This makes the metropolis teem with commercial activities that support the two important sectors of the metropolis' economic and industrial potential. The metropolis therefore stands to compete vigorously with these two locations in terms of economic, industrial and commercial activities. It is the capital of the Central Region of Ghana, bearing historical links between Africa, the Americas and Europe. It is a major host of the defunct PANAFEST, the Pan-African festival held in Ghana (Travel to discover Ghana, 2016). As a former Government seat of the Gold Coast until 1877, it is currently one of the ten administrative capitals in Ghana. The metropolis boasts of the Cape Coast Castle, a World Heritage Monument (World Heritage Foundation under UNESCO) and forts. It celebrates the Fetu (originally referred as Afutu) Festival annually with fishing activities prominently practiced by some residents. Industrial activities include lumber milling, stone quarrying and automobile repair and maintenance among others. The metropolis has sixty small and micro scale (Baidoo et al., 2015) and three medium-scale automobile maintenance and repair workshops and garages. It has an automobile maintenance and repair facility referred to as the Siwdo Auto Repair Enclave where most of the garages/workshops are located, though a good proportion are scattered within the metropolis.

3.2. Study instrument

The original SERVQUAL instrument by Parasuraman et al. (1988) was used for the study. The original instrument has ten dimensions which were summed into five dimensions as the reliability of service; tangible aspects of service; empathy shown by service providers; responsiveness of service providers; and the assurance given in the process of service delivery. Each dimension comprises different variables which poses different influence on the grading of success of individual dimensions. Generically, the five SERVQUAL dimensions are stated as tangibles, reliability, responsiveness, assurance and empathy. Table 1 shows the SERVQUAL dimensions and the variables that fall under each.

3.3. Study design

In designing the questionnaire for the study the questions in the questionnaire used by Elistina and Naemah (2011), with reference to the SERVQUAL dimensions were critically analyzed. The Elistina and Naemah (2011) design gave consideration to the design by the Ministerial Council on Consumer Affairs (1999) study which considered the perceptions of women consumers on workshop services in Australia. Contextually, (refer Figure 1) tangibility in the motor vehicle repair and maintenance service industry means: the physical appearance of the garage is appealing; equipment's are up to date; mechanics appearance is suitable with

their job; and important information is displayed at easily accessible places; Reliability is the ability to perform the promised service dependably and accurately. Thus reliability in the automobile repair and maintenance industry means: when something is promised, it is done; providers could be trusted to do a good job; providers perform services correctly the first time; and providers keep records correctly.
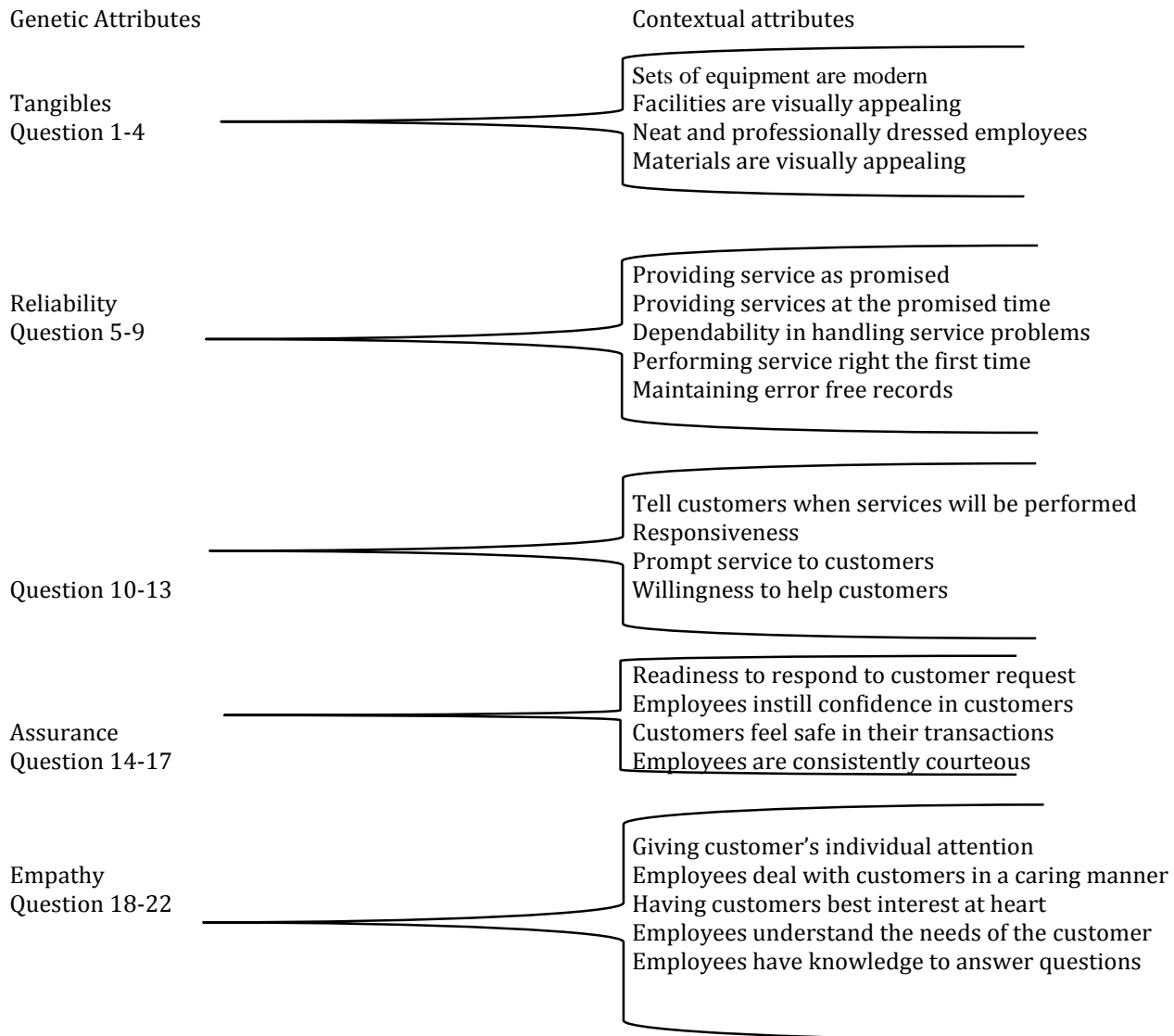
Genetic Attributes   Contextual attributes

Tangibles
Question 1-4
- Sets of equipment are modern
- Facilities are visually appealing
- Neat and professionally dressed employees
- Materials are visually appealing

Reliability
Question 5-9
- Providing service as promised
- Providing services at the promised time
- Dependability in handling service problems
- Performing service right the first time
- Maintaining error free records

Question 10-13
- Tell customers when services will be performed
- Responsiveness
- Prompt service to customers
- Willingness to help customers

Assurance
Question 14-17
- Readiness to respond to customer request
- Employees instill confidence in customers
- Customers feel safe in their transactions
- Employees are consistently courteous

Empathy
Question 18-22
- Giving customer's individual attention
- Employees deal with customers in a caring manner
- Having customers best interest at heart
- Employees understand the needs of the customer
- Employees have knowledge to answer questions

Figure 1. Service quality dimensions and variables, Source: Kotler and Keller (2006)

The third dimension, responsiveness, indicates how willing the garage is prepared to help customers by responding promptly to requests and complaints of customers. Responsiveness there indicates: providers tell customers when services will be performed; provision of prompt services; willingness to help customers; and readiness to respond to customers' request. Customer assurance, the fourth dimension, deals with the

knowledge and courtesy of the garage and its ability to inspire confidence and trust of customers, not disregarding its competence, credibility and security. Finally, the fifth dimension, empathy is concerned with how caring and attentive the garage provides to individual customers in terms of access, communication and understanding. Table 1 show the contextual questions used in the design of the study questionnaire. Thus the suggestion by Dabholkar (1996), that in defining service quality the customer's perspective must take the center stage and be related to the industry within which measurement is made, was taken into consideration.

In line with the design of Elistina and Naemah (2011) the present study added two dimensions to the original SERVQUAL model as proposed by Parasuraman et al. (1988) by considering cost and communication in order to achieve the aim and objectives of the study. Several research works have used this procedure of adopting additional dimensions to the SERVQUAL model to suit the particular industry under consideration. For example, Miguel da Silver et al. (2007) identified communication as an important dimension in the vehicle maintenance and repair service chain. Berndt (2009) also identified communication as one of the important dimensions in motor vehicle servicing and repair industry. Adding communication to the SERVQUAL was therefore considered relevant to the present study. The importance of cost factor can be appreciated, for example, from how the section 56 of the Consumer Protection Act of 1999 (Malaysia) views it is an implied guarantee in terms of the supply of services. Its relevance to the study cannot therefore be over emphasized. The variables under cost and communication dimensions are displayed in Table 1.

A two-section questionnaire was developed and used for the study to take care of demographic characteristics and consumer perceptions. The SERVQUAL variables with indications as described above were used for the consumer perceptions. Thus a total of 29 attributes were measured using a five-point Likert scale ranging from 1, as "strongly disagree" to 7, representing "strongly agree" in terms of respondents degree of agreement or otherwise to the posed questions. A Cronbach alpha coefficient of 0.904,which was obtained after the instrument was tested, indicated a satisfactory degree of reliability as it is consistent with the reliability scores obtained in other SERVQUAL studies in literature (Normally and Bernstein, 1994; Cronbach, 1951). A Cronbach alpha coefficient value above 0.7 is an indication of internal consistency and therefore making the results reliable and hence acceptable (Pallant, 2005). For example 0.92 Cronbach alpha coefficient was obtained by Parasuraman et al. (1988); 0.90 by Cronin and Taylor (1992); 0.927 by Frost and Kumar (2001)' 0.916 by Miguel et al. (2007); 0.827 by Bouman and van der Wiele (1992); 0.847 by Berndt (2009) and 0.908 by Elistina and Naemah (2011) were obtained in various SERVQUAL studies. The instrument was therefore considered valid since it measured what it was supposed to measure. Measurement was thus accurate and precise thus reflecting that the values of the study are important, respected and expected and for that matter acceptable by users of research as well as the researcher (Sarantakos, 2005) thus ensuring validity. The questionnaire was self-administered after a pilot study was conducted with 19 respondents. Various observations, responses and suggestions were taken into account in the final designed of the questionnaire and its administration. Seven demographic characteristics were considered.

3.4. Data collection

A multi-stage sampling technique was adopted to sample respondents for the study. According to data from the Cape Coast Metropolitan Assembly 76 Automotive garages and repair shops exist in the metropolis. However the target population was 60, that is, those officially registered with the Metropolitan Assembly (Baidoo et al., 2015). The Yamene (1967) formula was used in determining the minimum sample size. The simple random sampling technique was used to select 44workshops and garages from the sample frame. The purposive sampling technique was then utilized to sample 4 customers from each shop contributing to a total of 168. The customers must have patronized the shop for a minimum of one year. This is in line with the suggestion by Katariina et al. (2008) that consumer familiarity with a service is a key factor of perception towards its quality (Elistina and Naemah, 2011).

The survey was conducted through a self-administered questionnaire to the majority literate customers and an interview schedule for the few non-literate oneson a face to face basis. Those who could not immediately respond on self-administered basis were allowed to submit back to the workshop owners. A period of thirty five days was taken to collect the last returned questionnaire. The modified SERVQUAL version (Elistina and Naemah, 2011) was used for the study. The data was taken in the months of June and July 2015, during the rainy season, during which demand for service is usually at the peak.

4. Results and discussion

This section presents the data and results obtained for the study. Data include demographic parameters and perceptions of respondents. It also submits the analysis and discusses the results through comparisons, inferences and deductions.

4.1. Demographic distribution

The distribution with regards to demographics is displayed in Table 1. One hundred and sixty subjects participated in the study by returning un-dented questionnaire: 29 female and 131 male. This skewed distribution could be due to the desire of many men driving their wives on regular bases or owning vehicles instead of allowing their wives to own and therefore drive on regular bases (Elistina and Naemah, 2011). The distribution could also be attributed to many males sending their vehicles for routine and corrective maintenance on behalf of their wives, daughters (Elistina and Naemah, 2011) and female friends. Gender stereotyping whereby men are preferred to drive private and commercial vehicles could also be a contributing factor.

The age group with the largest proportion of respondents was 36-45 at 46.3 percent (refer Table 1). This is followed by 26-35 at 25.6 percent. Those between 46-55, below 26 and above 55 were respectively 20.6 percent, 4.4 percent and 3.1 percent in that order. The distribution is close to a normal distribution in agreement to the 2010 population census (Ghana Statistical Service, 2012) though actual group proportions do vary. Majority of the respondents (42.5 percent) fell within the tertiary educational level category.

Table 1. Characteristics of respondents' demographic variables

Gender	Frequency	Percent
Male	131	81.9
Female	29	18.1
Age (Years)		
Below 26	7	4.4
26 – 35	41	25.6
36 – 45	74	46.3
46 – 55	33	20.6
Above 55	5	3.1
Highest level of education		
Basic	51	38.1
Sec/Voc/Tech	31	19.4
Tertiary	68	42.5
Monthly income		
Below 700	17	10.6
701 – 800	38	15.4
801 – 900	43	26.8
901 – 1000	42	26.3
Above 1000	20	12.5
Type of employment		
Government	23	14.4
Private	95	59.3
Self employed	26	16.3
Unemployed	16	10.0
Sending pattern		
At same place all time	11	69.4
Different places	9	30.6
Having technical knowledge		
Little	131	81.9
A lot	24	15.0
Not at all	5	3.1

Source: Field data, 2015

According to Elistina and Naemah (2011), urban populations are likely to have people with highest level of tertiary education among vehicle owners. Job opportunities appear to favor their qualifications, vehicle ownership and settlements. With reference to type of employment, 59.3 percent were privately employed. The lowest proportion is the unemployed respondents who may be wards and children who are sent by parents and guardians. Government vehicle drivers were relatively low in proportion since most government outfits have internally located workshops that maintain agency and department vehicles.

Table 1 also shows the details of the income distribution of the respondents. The lowest income of respondents was ¢600/month ($150) while the maximum was ¢7689 ($1920). Majority of the respondents (53.1 percent) earned between ¢800/month ($200) and ¢1000/month with 68.5 percent earning between ¢700 ($175) and ¢1000 ($250). These represent the middle income earners. The upper income

earners were 12.5 percent. When loyalty of respondents was tested the study revealed that 69.4 percent were up to task. The remaining 30.6 percent had more than one repair shop to visit. According to Heskett (2002) and Kandampully (1998), this is an indication of the extent of customer satisfaction of service quality delivered by providers. Though this is encouraging, as much as 81.9 percent had little technical knowledge in maintenance and repair of vehicles while 3.1 percent had no knowledge at all. Customer satisfaction, in this regard, may therefore not be from the technical point of view of respondents. About 60 percent of the respondents sent vehicle for repairs rather than routine servicing. This figure could be on the high side. This could be due to the many second hand vehicles imported into the country. Such vehicles have weaker components and are therefore more likely to break down easily and quicker than new ones. The lack of or low technical knowhow of respondents may also result in lack of knowledge of the importance of preventive maintenance of which routine servicing is one of the many components.

4.2. Consumer perception

The Likert Scale made up scores from one mark (strongly disagree) to seven marks (strongly agree) was used to score consumer perception. Thus the minimum total score was expected to be 29 and the maximum 203. The mean scores thus ranged between one and seven on the Likert scale. The mean scores (Table 2) for contextual attributes of the respondents ranged between 3.01 and 5.44 (refer Table 2 and Table 3). This is an indication that consumes mostly and fairly agreed to the statements. This is comparable to the findings of Elistina and Naemah (2011) where mean scores of attributes ranged between 3.01 – 3.97 on a 1-5 point Likert scale; the average mean being 3.49 (Likert mean was 3). The average mean of the present study was 4.65 (Likert mean is 4). The attribute with the lowest mean was "provide clear information of any risk that might happen" (3.01) while the attribute with the highest mean was "have the knowledge in answering all consumers problems" (5.44) (refer Table 2). These responses appear to be conflicting. This is because consumers were of the view that it appears the garages have the knowledge in answering all consumer problem, the garages do not provide clear information of any risk that might happen when they send vehicle for maintenance or and repairs. This may imply that either the garages have little or no time to provide information on risks or the customers are in a hurry to leave the garage premises. Lack of technical knowhow on the part of customers to see the need of information on risks could be a contributing factor as well to this attitude.

   Generally, the perception of consumers towards garage service was between medium and high with 44. 8 percent of the attributes being medium and the remaining 55.2 percent high; none was in the low perception level (refer Table 2). This confirms the details in Table 4 that consumers agreed to most of the statements in the questionnaire. The score grading are shown in Table 3 where the total mean scores were ranged from 1 to 7 and classified into three groups; 1-3 (low perception level); 3.01-5 (medium perception level), and 5.01-7 (high perception level).Table 4 displays the means of the perception scores in terms of the seven attributes. They consists of the five generic dimensions (Kotler and Keller, 2006) by Parasuraman et al. (1989), the SERVQUAL scale, and other two (costing and communication) as adopted by Elistina and Naemah (2011). The SERVQUAL generic attributes are tangibles, reliability, responsiveness, assurance and empathy. With

reference to the present study the attribute with the least perception score, Cost, was (3.54), and contributing 10.9 percent to the overall perception scores. The attribute with the highest mean score was Assurance (5.14) also contributing 15.7 percent to the overall perception scores. This is followed by Reliability (5.13);   nication (3.88) in that order.

Table 2. Customer perceptions towards services provided

Contextual attributes	Strongly Disagree (%)	Slightly Disagree (%)	Indifferent (%)	Slightly Agree (%)	Moderately Agree (%)	Strongly Agree (%)	Means (M)	Standard Deviation (SD)
1. Equipment are up to date	2.5	2.5	22.5	42.5	22.5	5	4.84	1.18
2. Physicalappearance of garage appealing.	7.5	-	-	42.5	50	-	5.28	1.07
3. Mechanics appearances are suitable	2.5	2.5	30	32.5	27.5	5	4.95	1.07
4. Display important information at easily accessible places.	-	2.5	25	40	32.5	-	5.03	0.84
5. When something is promised, it is done	7.5		12.5	45	30	5	-	1.14
6. Could be trusted to do a good job	2.5	2.5	20	20	52.5	-	5.0	1.23
7. Performs the service correctly the first time	2.5	5	15	27.5	45	5	5.1	1.1
8. Completed the services at the designated time	2.5	2.5	17.5	37.5	37.5	1	5.21	0.99
9. Keeps records correctly	5	2.5	12.5	22.5	52.5	2.5	5.24	1.15
10. Finishes the jobs within a reasonable e time	2.5	2.5	20	42.5	32.5		5.0	0.95
11. Provision of prompt service	-	5	20	30	35	7.5	5.18	1.04
12. Responsure to complaints	2.5	2.5	17.5	50	20	2.5	4.95	0.93
13. Mechanics are never too busy to respond to request	7.5	5	15	27.5	40	5	5.0	1.3
14. Skills and expertise could be trusted	2.5	2.5	5	55	32.5	2.5	5.21	0.89
15. Can be trusted to take care of vehicle (safety)	2.5	2.5	27.5	37.5	25	2.5	4.87	0.99
16. Do not feel that they were being talked into unnecessarily servicing repairing	7.5		7.5	2.5	32.5	10	5.18	1.19
17. Have the knowledge in answering all consumers problems	2.5	-	7.5	37.5	42.5	10	5.44	1.94
18. Individual attention given to each consumer.	5	2.5	5	42.5	37.5	7.5	5.3	1.12
19. Convenient operating hours	5	7.5	12.5	40	32.5	2.5	51	1.02
20. Have customers best interest at	-	2.5	17.5	-	40	5	5.3	0.89

heart								
21. Do not use technical terms which are I cult to understanding	5	32.5	32.5	20	2.5	-	3.12	0.93
22. Understand what the consumer wants	-	2.5	5	31.5	32.5	5	5.02	1.02
23. Actual charge is lower or similar to the estimated one	5	25	40	15		-	3.35	1.23
24. The charges are reasonable	15	32.5	17.5	7.5	10	-	3.42	1.10
25. The prices of spare parts are reasonable	7.5	7.5	52.5	32.5	-	-	3.86	1.29
26. Provide clear information of any risk that might happen	2.5	2.5	5	47.5	12.5	75	4.80	0.82
27. Provide clear information of the specification of the spare parts	-	32.5	50	10	-	-	3.10	1.01
28. Provide clear information of any risk that might happen	-	30.5	55	5	2.5	2.5	3.01	1.05
29. Knowledge in answering all consumers problems	-	7.5	7.5	42.5	17.5	-	4.61	0.91

Source: Field data, 2015

Table 3. Perception level of consumers contextual attributes

Grade	Mean Range	Number of attributes	Percent (%)
Low	1.01 – 3	0	0
Medium	3.01 – 5	13	44.8
High	5.01 – 7	16	55.2

Source: Field data, 2015

Table 4. Perception levels of generic attributes

Attribute	Mean	Percent (%)	Grade
Tangibles	5.13	15.5	High
Reliability	5.13	15.8	High
Responsiveness	5.03	15.5	High
Assurance	5.14	15.7	High
Empathy	4.79	14.7	Medium
Costing	3.54	10.9	Medium
Communication	3.88	11.9	Medium

Source: Field data, 2015 (Note: Percent is the contribution of the dimension to the overall customer perception)

The study has shown that customers most agree that garages provide services as promised; provide services at the promised time; are dependable in handling service problems; perform service right the first time; and maintain error free records. The study has also shown that in terms of cost garages poorly performed most. Respondents were of the view that actual charges by garages are higher than what they initially estimate. They were also of the view that charges by garages are unreasonable and that the prices of spare parts are also equally unreasonable. It is not surprising that perception on cost fared badly. This is

because inflation rate could be higher, depending on the period of the year. Inflation rate affects prices of commodities, particularly items that are imported into the country such as spare parts and other vehicle maintenance consumables like lubricants and other consumables.

Table 5. Perception levels of attributes based on data from Elistina and Naemah (2011)

Attribute	Mean	Percent (%)	Perception level
Tangibles	3.73	14.54%	High
Reliability	3.61	14.01%	Medium
Responsiveness	3.66	14.28%	Medium
Assurance	3.69	14.4%	High
Empathy	3.84	15.04	High
Costing	3.63	14.17%	Medium
Communication	3.47	13.56%	Medium

Source: Author's construct (legend: 1-2.3=low; 2.31-3.7=medium; 3.71-5=high.)

The study has revealed that perception levels such as Tangibles (High), Assurance (High), Costing (Medium) and Communication (Medium) may cut across international boundaries (compare Table 4 and Table 5). Thus, majority on the average, 57.14 percent of dimensions (in terms of being low, medium or high) of perception levels were similar to both Malaysian case and the Ghanaian situation. Hence in both studies (present study and Elistina and Naemah, 2011), perception levels for tangibles and assurance were high while costing and communication were medium, using a comparative scale (refer Table 3, Table 4 and Table 5). Reliability, Responsiveness and Empathy, which differ in both studies, constitute the remaining 42.86 percent (compare Table 4 and Table 5). The difference in specific dimension percentages of both studies (for example: Tangible was 15.5% for present study and 14.54% for Elistina and Naemah, 2011) could be attributed to lack of technical knowhow on the part of customers, cultural differences as well as historical antecedents between customers and garages.

5. Conclusion

The objective of the study was to determine service quality delivery in the motor vehicle maintenance and repair industry from the point of view of customers. The study area was the Cape Coast Metropolis in the Central Region of Ghana. The study showed that customers view customer service in terms of seven categorized attributes. These are tangibles, reliability, responsiveness, assurance, empathy, costing and communication. Perception towards tangibles, reliability, responsiveness and assurance were high while empathy, costing and communication were medium. The study recommends that garages should deal with customers in a more caring way, have the customers best interest at heart, endeavor to understand customers when delivering services and give more attention to individual customers. Garages should also make sure that actual charges are not higher than estimated charges given to customers. They should also charge reasonable prices in terms of workmanship and spare parts. Finally, garages must provide clear

information of technical problems before services are performed, provide clear information on the specifications of spare parts, provide clear information on charges in terms of spare parts and workmanship. Adhering to these recommendations will help improve the quality of services rendered by workshops and garages in the metropolis. The study recommends further studies in the generalization of the seven service quality dimensions and the possibility of perception levels extending beyond international boundaries.

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