

Consumers' Perceptions on the Service Quality in the Motor Vehicle Repair and Service Industry: An Exploratory Study in Klang Valley, Malaysia

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ABSTRACT

Motor vehicle repair and service are common and regular services used by consumers in Malaysia. The high demand for these services is contributed by the continued increase in the number of registered vehicles and the number of driving licences issued annually. There are also many complaints reported in the Tribunal for Consumer Claims (TCC) in relation to this industry. Thus, this study aimed to identify the perceptions of consumers towards the quality of the services provided by motor vehicle garages. A total of 400 respondents participated in the study through simple random sampling and data were collected using a self-administered questionnaire. The results of this study indicated that most of the respondents generally had low and moderate perceptions of the service quality. Meanwhile, among the matters that need to be given more considerations are to ensure that the written consent from the consumers is given before undertaking any repair work, and to provide written statements describing the services and the estimated labour fees incurred. Thus, it is recommended that the enforcement bodies enforce the laws strictly and more attention be given to small garages. This study highlighted the seriousness of the problems and it also showed the importance of enacting a specific statute governing this industry in order to achieve a higher standard of services as well as to provide a comprehensive consumer protection.

Keywords: Consumers' perceptions, motor vehicle repair and service industry, service quality

INTRODUCTION

It has been recognised that consumers consume not only of products, but also of services and 57.9 per cent of the value of Malaysia's economic activities is performed by the services sector based on the statistic issued by the Ministry of Finance in 2009. In the supply of services, consumers justly demand fair treatment and high standards in the whole range of services, which include tailoring, hairdressing, motor repairing, house construction, transportation, recreation, hire purchase, insurance, and banking.

However, consumer services tend to be neglected compared to the attention paid to consumer goods. These are becoming important to consumers and thus, have raised complicated legal issues. Unlike the supply of goods, in which the quality of products can be assessed before a particular sale, a supply of services involves human activities that cannot be subject to such control. Furthermore, consumers often lack technical expertise and are therefore in a weak bargaining position. In fact, they are not in a capacity to fully discuss their requirements with service providers and can thus be at the latter's

Received: 25 April 2010

Accepted: 20 November 2010

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mercy. These problems have been raised many times by consumers groups and academicians, such as FOMCA (2006), Sothi Rachagan (1999), Mohd Hamdan (2005), Howells (2005), Lowe & Woodroffe (2004), to name a few.

The area of car servicing and repairing is a good example of consumer services. According to an interview with the Federation of Malaysian Consumers' Associations (FOMCA), the car sector is a frequent cause of complaints among consumers as for many, motor vehicles are important possessions since their mobility depends upon them (Mohd Yusof Abdul Rahman, 2005). There are also many complaints reported in the Tribunal for Consumer Claims (TCC) in relation to the supply of services, with 3784 cases in 2007 and 3502 cases in 2008. There were 312 complaints relating to garages in 2007 and 223 cases in 2008, which became the third highest number of cases filed in the Tribunal for Consumer Claims. This is a wider phenomenon since the same problems exist in other countries as well. Among other, the New South Wales Fair Trading Tribunal, Australia has reported that the Division of Motor Vehicle had received 917 applications and finalised 1,012 cases in 2002. The European Consumer Law group also conducted a research that exclusively dealt with the industry and submitted that this particular industry is an area where consumers experience considerable problems. In the United Kingdom, the problems are regarded serious for the Office of Fair Trading to devote considerable resources to solve the matters (European Consumer Group, 1989).

TABLE 1
The number of complaints related to the supplier of services

	Classification of services	2007	2008
1	Travel agency	444	327
2	Time sharing	396	241
3	Workshops	312	223
4	Job agency	263	202
5	Maid agency	253	166
6	House renovation	198	131

Table 1 (continued)

7	Electrical repairing	163	114
8	Beauty salon	162	93
9	IPTA/IPTS (Higher education institution)	136	85
10	Umrah agency	100	82
11	Transportation	101	46
12	Networking/ Telecommunication	73	41
13	Postal/courier services	46	37
14	Security services	40	36
15	Electrical services	42	26
16	Laundry	31	20
17	Medical card	26	17
18	Water supply	17	9
19	Tailor	14	9
20	Others	967	1597
TOTAL		3784	3502

Source: The Tribunal for Consumer Claims, Putra Jaya

Among the examples of the stated problems identified are the failures of service providers to carry out work according to consumers' instructions or to perform more than what the consumers have intended. The consumers also complained that instead of carrying out repairs, a new part is fitted or service providers replace a whole section of a car when only a small element of that particular section is damaged. Apart from that, service providers are also guilty of late performance, overcharging, failure to reach the expected standard and the use of defective or low quality spare parts (Tribunal for Consumer Claims, 2008). Thus, the objective of this paper was to determine the consumers' perceptions towards the services provided by garages so that better consumer protection could be suggested.

MATERIALS AND METHODS

Theoretical Background and Literature Review

Service quality has been defined as "the consumer's judgment about a product's overall excellence or superiority" (Parasuraman, 1988). Service quality is also defined as "deeds,

processes, and performance" (Zeithaml *et al.*, 2006). From the legal perspective, service quality means the services are carried out with reasonable care and skill (Section 53 of Consumer Protection Act 1999). Rust and Oliver (1994) stated that customers' overall satisfaction with a particular service provider and perceptions of service quality is interrelated and highly correlated. A number of research studies have also supported that service quality is recognized as an antecedent of customer satisfaction (Cronin & Taylor, 1992; Zeithaml *et al.*, 2006, Lee *et al.*, 2010). Thus, consumers' perception towards service quality is important to imply their satisfaction towards the service providers. In this respect, consumers' satisfaction is the outcome of the service quality.

Nevertheless, the difficulty is for consumers to evaluate service quality since its characteristics are intangible, perishable, and simultaneously produced and consumed (Zeithaml *et al.*, 2006). In order to shed some solutions to these problems, several service quality models have been proposed, tested, and used to measure customer perceptions of service quality. Among the first model proposed was Gronroos' Model (1992; 1994), in which the quality of service is dependent on expected service and perceived service. A more well-known model is Parasuraman, Zeithaml and Berry's Model (SERVQUAL) which measures the gap between customers' expectations of the services and the perceptions of the actual service delivered. Meanwhile, another scale that measures service quality is called SERVPERF, based on the consumer's perception of the service performance alone without considering the expectations of consumers (Cronin & Taylor, 1992).

The latest model is the one proposed by Brady & Cronin (2001) who have suggested a hierarchical and multidimensional model. According to this model, service quality is formed by three primary dimensions, namely, interaction quality, physical environment quality, and outcome quality. Each of these dimensions is formed by three other sub-

dimensions which contribute to a total of nine dimensions. Nevertheless, all these models are not without difficulties and shortcomings (Jose *et al.*, 2010; Kline, 2006). Jose *et al.* (2010) stressed the importance of building more creative service quality on the basis of a well-developed qualitative stage of research. According to Hofmans *et al.* (2009), researchers should develop service quality measures that are country- or culture-specific since cultural factors have greater influence on people's perceptions on service quality.

The aim of this paper was to discover the perceptions of Malaysian consumers towards the quality of the services provided by the motor vehicle garages so that suggestions could be made to the policy makers and the enforcement bodies. Nonetheless, it is important to note that it was not the objective of this paper to explain the consumers' perception for marketing reasons. Nevertheless, very few quantitative research papers approach service quality from a legal perspective (Joseph, 2010). In this paper, the dimensions of SEVQUAL Model was chosen apart from the criticisms by many researchers (Carman, 1990; Jose *et al.*, 2010) since it is the model which is most widely used by researchers either abroad or from Malaysia. To name a few, these include researchers in health institutions (Woodside *et al.*, 1989), courier industry (Norbani *et al.*, 1999), Islamic banking (Othman *et al.*, 2001), and hotel industry (Mohd Tahir *et al.*, 2010). Thus, only consumers' perceptions were measured rather than their expectations, minus the perceptions. This is in line with the proposals by many researchers, i.e. to exclude expectation scores. Patterson & Johnson (1993) expressed that service quality was not directly and indirectly influenced by expectations, whereas McDougall & Levesque (1994) considered including expectation scores as unnecessary. Hence, perception by itself seems to be a stronger predictor of the service quality concept.

Whilst much has been written on the law relating to consumer protection in Malaysia, there is hardly any discussion which exclusively

deals with defective and unsatisfactory services in the motor vehicle service and repair industry. Khor Kok Peng (1983), Wu Min Aun (2000) and Naemah (2004) emphasized the importance of protecting consumers not only of products but also of services. According to these researchers, Malaysia's economic activities are highly performed by the services sector and consumers, and therefore, they demand fair treatment and high standards in the services provided including motorcar repairs. Nevertheless, there is no specific legislation focusing on this industry, except for the Motor Vehicle Repair and Maintenance (Workshops Information Disclosure) Regulations 2002, and the Guidelines and Code of ethics in the motor vehicle repair and service industry issued by the Ministry of Domestic Trade, Co-operatives and Consumerism.

Levine (1987) and Muller (1991) have identified that a particular industrial sector which needs attention due to its quality is the automobile industry. Archer *et al.* (1996) have further determined that the competition in quality is more than just the quality of the vehicle but it also includes after-sales provision of warranty and maintenance services. Meanwhile, a few empirical researches have been conducted in the motor vehicle repair and service industry. For example, the European Consumer Law group (1989) has conducted a research that exclusively deals with the industry. This particular research has identified several problems in the industry, and these include the failure to carry out work according to the customers' instructions and excessive charges. The suggestions made in this report are beneficial to the research at hand. In Australia (Ministerial Council on Consumer Affairs, 1999), research has been carried out by looking at the perceptions of women consumers on workshops' service since this specific group of consumers is considered as vulnerable and needs more protection. The questions in the questionnaire used in this research have been considered in formulating the questionnaire in the present study.

Research Instrument

The data used in this paper were part of a larger study on the services provided by garages in Klang Valley, the area where the highest number of registered vehicles are located based on the statistics issued by Jabatan Pengangkutan Jalan Malaysia. The self-administered questionnaire was developed for data collection, and it included the questions on demographic characteristics and perceptions of consumers. The questions attempted to measure consumers' perceptions towards the services provided by garages based on their experiences. This part of the questionnaire was designed based on the dimensions of SERVQUAL Model developed by Parasuraman, Zeithaml & Berry (1985), in which they provided insights concerning the criteria used by consumers in judging service quality. Five dimensions were identified based on this model, namely, tangibility, reliability, responsiveness, assurance, and empathy.

Tangibility means the appearance of the physical facilities, equipment, personnel, and communication. In the motor vehicle repair and service industry context, tangibility means the physical appearance of the garage is appealing, equipments are up-to-date, mechanics' appearance is suitable with their job and the important information is displayed at easily accessible places. The second dimension is reliability, which means the ability to perform the promised service dependably and accurately. In the motor vehicle repair and service industry, reliability can be defined as the work of the garages should be of such nature and quality that it can reasonably be expected to achieve. These include performing the work as what has been promised, i.e. to complete the work at the designated time and keeping all the records correctly. The third dimensions, i.e. responsiveness, can be defined as willingness of the garages to help customers and to take prompt response to customers' requests and complaints. The fourth dimension is assurance, i.e. the knowledge and courtesy of the mechanics and their ability to convey trust and confidence in relation to their skills, expertise, and the safety

of the vehicles. The final dimension is empathy, which means, caring and giving individual attention to each customer. Included in this dimension is the extent to which the garages care about their customers, such as providing convenient operating hours, using technical terms which are easy to understand and having consumer's best interest at heart.

Based on these dimensions, the researchers then developed a 22-item research instrument to measure the customers' perceptions of the five dimensions. For the purpose of this study, necessary modifications were made to the items of the original SERVQUAL scale in order to suit the motor vehicle repair and service industry. This is in line with what Dabholkar (1996) has suggested, i.e. the measurement of service quality must be defined from the customer's perspective and it must also be relevant for the industry in which it is measured. Thus, the modifications were based on the instrument used in the survey carried out in Australia on motor vehicle repairs and services among Australian women (Ministerial Council on Consumer Affairs, 1999). Some statements from the research had been adopted, such as whether the consumers were satisfied with their most recent service, the service centre understood what they wanted, the service centre clearly explained the necessary service or repairs, the service centre did not use technical terms which were difficult to understand, they could trust the service centre to do what was required to repair their cars and to do a good job, and they did not feel that they were being talked into unnecessary servicing or repairs.

This study, however, added two more dimensions to the SERVQUAL Model by Parasuramans *et al.* (1989), by looking at the cost factor and the responsibilities of the garages to provide clear information to suit the needs of the study. The addition of these dimensions to the SERVQUAL items was done to suit the objectives of the research and which have been done in many other research work. For example, a research on the Islamic banking by Othman & Owen in which they proposed a new dimension called "Compliance with Islamic law"

to be added to Parasuraman's five dimensions. Meanwhile, cost factor is also important to be looked into in the industry since it is an implied guarantee in relation to the supply of services as being provided by section 56 of the Consumer Protection Act 1999. This dimension included the prices of spare parts, the service charges, and the actual charges as opposed to the estimated price. The sixth dimension included the responsibilities of the garages to disclose important information to their customers since they have been strongly emphasized under the Malaysian Consumer Protection (Workshops Information Disclosure) Regulations 2002. This dimension can be defined as providing clear information before the services are performed, giving clear information of the specification of spare parts and charges, and explaining any risk that may happen.

As a result, a total of 29 attributes were structured and categorized under seven dimensions. These 29 attributes measured on a five-point Likert scale, ranging from number 1 = 'strongly disagree' to 5 = 'strongly agree.' The respondents were asked to indicate their degree of agreement or disagreement of these attributes. The reliability of the instrument was estimated using the Cronbach's alpha coefficient. The analysis yielded an alpha reliability of 0.908 and thus showed that it was reliable (Cronbach, 1951; Nunnally & Bernstein, 1994). It is important to note that the instrument had also been tested using a small group of 15 respondents prior to its execution to ensure that people could understand the topic and the level of language used was appropriate. Their responses and suggestions were used to further polish the instrument. The questionnaire was set both in English and Malay language to enhance the clarity of the questions.

Data Collection

The surveys were administered on a face-to-face basis among 400 respondents at the selected garages. Due to time and cost constraints, the researcher made a target of 400 respondents. In spite of this small number (compared to the total population), the sample size of 400 could be considered as sufficient. According to the

guidelines by Gay & Airasian (2003) and Uma (2000), in a situation where the population size is almost irrelevant (beyond a certain point), the sample size of 400 should be adequate. As indicated earlier on, the researcher applied a simple random sampling. The samples were divided into two groups, namely, those who sent their cars to the big garages in one group and those who sent their cars to the small garages in another group. The big garages included those who provided services by the manufacturers of the vehicles and also the garages which held franchises from the manufacturers and importers. The small garages mean those who carry out service and repair work for all types of vehicle irrespective of the brands. Four manufacturers were selected based on their highest number of sales from January 2007 to June 2007, as reported by the Malaysian Automotive Association (MAA, 2008). These manufacturers were Perodua, Proton, Honda and Naza, which contributed to 73.5% of the total market share. Prior to data collection, permissions were obtained from the manufacturers' headquarters to ensure co-operation. Three service centres were randomly selected for each manufacturer and the survey was conducted by approaching the customers at those service centres until the number of the respondents reached the desired number, i.e., 50 for each manufacturer and therefore 200 respondents were approached altogether as the representatives of the first group. As for the second group, the researcher used the list retrieved from the Malaysia Automobile Repairers' Association members handbook as the sampling frame. 20 service centres were randomly selected from the list and 10 customers were selected from each service centre, contributing to the total sample of 200. The respondents must have at least three experiences of sending their vehicles repaired at the selected service centres, otherwise, other respondents would have to be chosen to replace the first-time customers. This is because familiarity with a service serves a key component of consumer knowledge (Katariina *et al.*, 2002) and it determines an accurate perception towards its quality.

Limitations of the Study

The study was carried out on the urban community living in the Klang Valley; thus, it might not be a representative of the entire population of Malaysia as consumers' knowledge and perceptions might also be different among the consumers living in the rural area. Another weakness was that the researcher only chose the types of garages as the controlled variable. The other demographic variables, such as age, level of education, status, ethnicity, and household incomes, were not controlled due to the cost and time constraints. However, the researcher still ensured that the numbers did not violate any assumption underlying each statistical tests employed in the analyses such as population normality and homogeneity of variance.

RESULTS AND DISCUSSION

Demographic Profile

A total of 400 respondents participated in this study and they comprised of 67.8% males and 32.3% females. This was due to the reason that many males sending the cars themselves or on behalf of their wives and daughters. In terms of age, the largest proportion of the respondents was in the age group of 26-35 years, amounting to 45.4% of the total respondents. Those in the age group below 26 years constituted around 16%, followed by 36-45 years (22.9%), 46-55 years (12.4%) and those above 55 years (only 3.2%). More than half of the respondents were married (67.3%), while 32.3% were still single. Malays formed a large proportion of the respondents compared to the non-Malays, with only 22.3%.

The respondents' education level could be considered as high, with 47% of them having a university degree or above. This was probably reflective of the profile of the urban population. Meanwhile, the respondents with STPM and diploma made up 5.3% and 17.0%, respectively. In terms of their household incomes, more than half of the respondents (65.8%) had income level of RM1001-5000 and about 25.4% had income level of more than RM5000. About half

(53.5%) of the respondents worked in the private sectors. Another 30.3% were in the government sector, while 8.8% were self-employed and unemployed, making up the remaining 7.6%. The demographic profile of the respondents is shown in Table 3 below.

TABLE 3
Characteristics of the respondents

Demographic variables	Frequency	Percentage
Gender		
Male	271	67.8
Female	129	32.3
Age (year old)		
Below 26	63	16
26 - 35	181	45.4
36 - 45	95	22.9
46 - 55	49	12.4
Above 55	12	3.2
Marital status		
Married	269	67.3
Single	129	32.3
Others	2	0.5
Ethnicity		
Malay	311	77.8
Non-Malay	89	22.3
The highest level of education		
Primary school	4	1.0
LCE/SRP/PMR	14	3.5
MCE/SPM/SPMV	105	26.3
Diploma	68	17.0
HSC/STP/STPM	21	5.3
University Degree/ Professional	188	47.0
Household income (monthly)		
Below RM1000	36	9.0
RM1001 - 2000	70	17.5
RM2001 - 3000	88	22.0
RM3001 - 4000	60	15.0
RM4001 - 5000	45	11.3
RM5001 - 6000	29	7.3
RM6001 - 7000	25	6.3
Above RM7000	47	11.8

Table 3 (continued)

Occupation		
Government	121	30.3
Private	214	53.5
Self-employed	35	8.8
Unemployed	30	7.6
Sending pattern		
At the same place every time	283	70.8
Different places	117	29.3
Having technical knowledge		
Little	282	70.5
A lot	36	9.0
Not at all	82	20.5

To grasp their practice pattern of sending their cars for servicing or repairing, the respondents were asked to indicate the number of vehicles, how often they sent their vehicles to garages and whether or not they chose the same garage every time. A cross tabulation on the sending pattern was made, and it showed that the consumers of big garages were more loyal to the service providers (77.0%), compared to the small garages (64.5%). Meanwhile, a majority of the respondents (81.6%) indicated that they owned only one or two vehicles. Slightly over half of the respondents (51.5%) sent their vehicles for every 5000km and 70.8% chose the same garage each time. The majority of them (70.5%) indicated that they did not have deep technical knowledge in motor vehicle repair and service, while 20.5% others did not have such knowledge at all. This could imply that most consumers did not have the expertise and knowledge in the area and solely relied on their service providers to assist them.

Consumers' Perception towards Motor Vehicle Repair and Service Industry

Generally, the consumers' perception towards the services were quite fair since all the mean scores for each statement ranked between 3.01 - 3.97. It showed that the consumers were mostly and fairly agreed to the statements. The statement with the lowest mean score was that the

important information was displayed at the place which was easily assessable to consumers (3.01). Under the laws, the garage should display all the important information to consumers, such as their service charge, the price of the spare parts, etc. Based on this result, however, the garages did not have enough important information displayed to the consumers. This finding is supported by three other statements which also showed quite low mean scores, i.e. the garages provide clear information of the specification of the spare parts (3.57), the information of the risks to the vehicles (3.392), and the information of the charges (3.6). The statements in relation to the reasonableness of the costs, either it was the service charge or the price of the spare parts, also showed quite low mean scores, with 3.45 and 3.4598 respectively. These finding can be seen in Table 4.

The consumers' perception score was further counted by computing the answer according to its scale. The highest scale (strongly agree) was given five marks while the lowest scale (strongly disagree) was given one mark. Therefore, the minimum total score was 29 and the highest total score was 145. From the total score, the respondents were grouped into three categories, i.e., low scoring group (consumers with low perception), medium scoring group (consumers with medium perception), and high scoring group (consumers with high level of perception). These are presented in Table 5 below.

From the table, the biggest portion of the respondents was in the first group. This showed that many respondents had low perception towards the service quality of the garages. In this study, an independent-samples t-test was also conducted to look at whether there was a difference in the perceptions between the consumers of the big garages and the consumers of the small garages. Table 6 presents the results of the test. The result showed that there was a significant difference in the mean scores between the two groups ($p \leq 0.05$), indicating that there was a significant difference in the perceptions of the consumers between the two types of garage. Comparing the mean values between the two groups, it was found that the

big garages had higher mean score (107.298) compared to the small ones (103.76). Therefore, it could be concluded that the consumers of the big garages had better perceptions towards the services provided as compared to those of the small garages.

The independent-samples t-test analysis was also carried out to each item to compare the differences of the consumers' perceptions between the two groups. Table 6 presents the mean score M, the significant value (p), and the t-value of each item. The result showed that there were eleven items indicating significant differences, namely, the equipment is up-to-date, the physical appearance of the garage is appealing, garages display important information at easily accessible places, keeps records correctly, do not feel that they were being talked into unnecessarily servicing/repairing, individual attention given to each consumer, convenient operating hours, have consumers' best interests at heart, do not use technical terms which are difficult to understand, actual charge is lower or similar to the estimated one, and provide clear information of the charges.

Nonetheless, it was not surprising to discover that the physical appearance and the equipment used in the big garages were more appealing compared to the small garages. The consumers also perceived that the big garages kept records more accurately, provided more individual attention to each customer, put more consumers' interest at heart, offered more convenient operating hours, and did not use technical terms which are difficult to understand. In addition, they also perceived that the actual charge were lower or similar to the estimated one and provided clearer information of the charges. On the other hand, the consumers of the small garage felt that they were being talked into unnecessary services or repairing compared to the consumers of the big garages. However, the results surprisingly showed that the consumers of the big garages perceived that the garages had failed to display important information at the places which are easily accessible to consumers.

TABLE 4
Customers' perception towards the services provided by garages

Statements	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)	Means M	Standard deviation SD
1 Equipments are up-to-date.	1.0	12.0	34.5	46.0	6.5	3.45	0.824
2 Physical appearance of the garage is appealing.	0.5	6.3	18.3	59.8	15.3	3.84	0.772
3 Mechanics' appearances are suitable.	0	3.5	21.5	58.5	16.5	3.89	0.706
4 Display important information at easily accessible places.	10.5	27.8	18.0	29.8	14.0	3.01	1.24
5 When something is promised, it is done.	3.0	17.3	23.5	44.0	12.3	3.45	1.01
6 Could be trusted to do a good job.	0.8	7.5	21.8	57.8	12.3	3.74	0.783
7 Performs the service correctly the first time.	1.5	8.3	22.3	53.5	14.5	3.71	0.867
8 Completes the services at the designated time.	2.0	16.3	26.5	46.5	8.8	3.44	0.932
9 Keeps records correctly.	2.5	11.0	21.8	43.5	21.3	3.7	1.004
10 Finishes the jobs within a reasonable time.	0	10.3	19.8	61.8	8.3	3.68	0.760
11 Provision of prompt service.	0	11.8	27.0	48.0	12.3	3.6	0.868
12 Responsive to complaints.	0.8	9.5	22.8	53.0	14.0	3.7	0.853
13 Mechanics are never too busy to respond to requests.	1.5	9.5	22.8	56.0	10.3	3.65	0.835
14 I trust them with their skills and expertise.	0	5.5	21.0	61.5	12.0	3.8	0.705
15 Can be trusted to take care of the vehicle (safety).	1.3	6.0	20.5	60.5	11.8	3.769	0.762
16 Do not feel that they were being talked into unnecessarily servicing/repairing.	4.3	13.8	20.3	43.5	18.3	3.58	0.654
17 Have the knowledge in answering all consumers' problems.	0.3	4.8	16.3	65.0	13.8	3.884	0.686
18 Individual attention given to each consumer.	1.0	9.5	27.5	52.5	9.5	3.61	0.8133
19 Convenient operating hours.	1.3	7.5	17.8	58.5	15.0	3.79	0.826
20 Have consumer's best interests at heart.	1.3	5.3	28.3	53.3	12.0	3.7	0.782
21 Do not use technical terms which are difficult to understand.	1.0	4.3	17.3	63.3	14.3	3.86	0.727

Table 4 (continued)

22	Understand what the consumer wants.	0.5	2.8	12.3	69.3	15.3	3.97	0.623
23	Actual charge is lower or similar to the estimated one.	3.3	16.0	26.0	42.5	12.3	3.972	1.002
24	The charges are reasonable.	2.3	15.0	28.8	43.3	10.8	3.45	0.949
25	The prices of spare parts are reasonable.	2.8	19.0	30.5	38.8	9.0	3.4598	0.945
26	Provide clear information of the problems before the services are performed.	1.3	8.8	21.0	56.5	12.5	3.332	0.966
27	Provide clear information of the specification of the spare parts.	2.0	12.5	23.3	51.8	10.5	3.573	0.9
28	Provide clear information of any risk that might happen.	3.8	19.0	22.5	45.0	98.0	3.392	1.0074
29	Provide clear information of the charges.	4.0	16.0	20.0	35.8	24.3	3.6	1.1326

*Note: The higher the mean score, the higher the level of consumers' perceptions are

TABLE 5
Consumers' level of perception

Total score	Number of respondents	Percentage (%)
Low 29-101	141	35.3
Medium 102-110	130	32.5
High 111-145	129	32.3

TABLE 6
Consumers' perception and the types of service centres

Types	Number	Means M	Standard deviation SD	Significance (p)	t-value
Big garages	200	107.298	12.23281	0.007*	2.214
Small garages	200	103.76	13.79616		

The mean difference is significant at $p \leq 0.05$ level

TABLE 7
Mean score for each item according to the types of garages

Items	Big garages M (SD)	Small garage M (SD)	Significance (p)	t-value
Equipment is up-to-date.	3.6 (0.76)	3.3 (0.87)	0.01*	2.696
Physical appearance of the garage is appealing.	3.96 (0.7)	3.7 (0.8)	0.000*	3.605
Mechanics' appearances are suitable.	3.92 (0.64)	3.84 (0.76)	0.183	1.398
Displays important information at easily accessible places.	2.85 (1.23)	3.33 (1.21)	0.00*	-3.774
When something is promised, it is done.	3.5 (0.9)	3.38 (1.09)	0.163	1.398
Could be trusted to do a good job.	3.76 (0.75)	3.7 (0.85)	0.323	0.991
Performs the service correctly the first time.	3.7 (0.92)	3.73 (0.94)	0.928	-0.091
Completes the services at the designated time.	3.42 (0.93)	3.46 (0.94)	0.623	-0.492
Keeps records correctly.	3.94 (0.97)	3.47 (0.98)	0.00*	5.122
Finishes the jobs within a reasonable time.	3.73 (0.76)	3.64 (0.77)	0.159	1.411
Provision of prompt service.	3.58 (0.9)	3.6 (0.87)	0.991	-0.012
Responsive to complaints.	3.7 (0.87)	3.69 (0.84)	0.616	0.502
Mechanics are never too busy to respond to customers' requests.	3.68 (0.84)	3.6 (0.86)	0.223	1.220
I trust them with their skills and expertise.	3.83 (0.69)	3.78 (0.74)	0.334	0.968
Can be trusted to take care of the vehicle (safety).	3.82 (0.8)	3.69 (0.8)	0.038	2.082
Do not feel that they were being talked into unnecessarily servicing/repairing.	3.91 (1.02)	3.23 (1.01)	0.00*	6.758
Has the knowledge in answering all the consumers' problems.	3.92 (0.7)	3.83 (0.7)	0.082	1.742
Individual attention given to each consumer.	3.7 (0.2)	3.5 (0.8)	0.009*	2.621
Convenient operating hours.	3.92 (0.82)	3.06 (0.83)	0.001*	3.417
Has consumers' best interests at heart.	3.8 (0.75)	3.6 (0.83)	0.004*	2.874
Does not use technical terms which are difficult to understand.	3.93 (0.7)	3.78 (0.79)	0.016*	2.409
Understands what the consumer wants.	3.94 (0.67)	3.98 (0.64)	0.809	-0.242
Actual charge is lower or similar to the estimated one.	3.56 (0.91)	3.33 (1.04)	0.014*	2.462
The charges are reasonable.	3.49 (0.92)	3.42 (0.98)	0.399	0.844
The prices of spare parts are reasonable.	3.29 (0.97)	3.36 (0.98)	0.557	-0.588
Provides clear information of the problems before the services are performed.	3.67 (0.83)	3.74 (0.86)	0.524	-0.638
Provides clear information of the specification of spare parts.	3.52 (0.89)	3.61 (0.93)	0.475	-0.716
Provides clear information of any risk that might happen.	3.35 (0.99)	3.41 (1.05)	0.720	-0.359
Provides clear information of the charges.	3.84 (1.08)	3.37 (1.14)	0.00*	4.306

* The mean difference is significant at $p \leq 0.05$ level

CONCLUSION

In this study, the consumers' perceptions have been looked into to determine the service quality so that further actions can be pursued for the betterment of the industry. In addition, the findings can be used to better understand the problems from the perspective of the consumers. It is recommended that the enforcement bodies enforce the laws strictly since the survey has indicated that the garages have failed to comply with the laws on certain aspects. Furthermore, the enforcement bodies need to give more attention to small garages since the statistical tests have indicated that there is a significant difference between the types of garages. Meanwhile, the matters that need to be given more considerations include ensuring that the written consents from the consumers be given before undertaking any repair work, and providing written statements describing the services and the estimated labour fee. Nevertheless, in relation to big garages, more focus should be given to the requirements in providing information on the specification of the spare parts used, either they are new or recondition, informing the consumers (in writing) the estimated time of completion, allowing the consumers to inspect the old spare parts after being replaced with the new ones, and providing warranty to the consumers.

In view of the negative perceptions towards the services, especially the ones related to the insufficient information, the enforcement bodies should ensure that the garages provide clearer information to their customers, particularly because most of the consumers lack the technical knowledge. Under the Malaysian Consumer Protection (Workshops Information Disclosure) Regulations 2002, the garages should display all important information to their consumers, such as their service charge, the price of the spare parts, etc. Based on this result, however, the garages did not do enough to display important information to their consumers. Notably, this regulation only imposes criminal sanctions to those workshops which fail to disclose important information to consumers before any repair is carried out. It does not provide a mechanism

for consumers to claim for redress. In addition, it fails to address many issues in the industry, such as the efficient licensing scheme, the imposition of equipment requirements, and the safety standards which need to be adhered to by the garages.

On the part of the suppliers, not only they need to develop marketing strategies to satisfy consumers' needs, they should also be responsible in protecting their consumers. Thus, the development of a code of practice is essential. Nevertheless, the Federation of Automobile Workshop Owners' Association of Malaysia (FAWOAM) does not have any written code of the ethics and solely relies on the Guidelines and Code of Ethics which are prescribed by the Ministry of Domestic Trade and Consumer Affairs. The prescribed Code, however, is very basic and it is also insufficient to provide a comprehensive guideline in this respect. Moreover, the association does not provide any mechanism in monitoring the services and spare part quality of their members. Neither have they controlled the service charges though they issue a recommended retail pricing. The membership is not compulsory and thus, the organization cannot monitor the services in the whole industry.

Therefore, the present practice of the FAWOAM, which relies solely on the Guidelines and Code of Ethics (as prescribed by the Ministry), is insufficient to provide effective self-regulation unless amendments are made to the prescribed Guidelines. Thus, it can be stated that the United Kingdom Vehicle Builders and Repairers Association Consumer Code of Practice (VBRA Code) is helpful in this respect. Below are some of the matters which are recommended to be inserted into the existing guidelines and code of ethics:

- i. The provision on diagnostic works which includes the expenses and the nature of the work.
- ii. The provision on the definitions of an estimate and quotation.
- iii. The provision on warranty in relation to workmanship.

- iv. The provision on the suppliers' responsibilities to take care of their customer's vehicles and possessions.
- v. The provision on the complaining procedure which include the conciliation and arbitration processes.
- vi. The provision on the enforcement of the Code.

On a final note, it can be concluded that the quantitative data presented in this study have highlighted the seriousness of the stated problems in the industry. The study has also indicated the importance to enact a specific legislation governing this industry. It is pertinent to emphasize that consumers are always in detrimental position since they do not have the same technical competence and knowledge about the quality of repairs as professional repairers and thus, are exposed to exploitation. In addition, the co-operations from the consumer organizations, traders as well as consumers are essential to assist the industry in achieving a higher standard of services, as well as to provide for comprehensive consumer protection.

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