

# Exploratory and Factor Validation and Psychometric Properties of Quality of Customer Service Delivery by Local Authority

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## **Abstract**

*This study adds to the quality of service delivery by local government literature, particularly within a Malaysian context. The quality of service delivery is measured based on service delivery information provided from Kajang Municipal Council Annual Report 2006. The sample of the present study consisted of 638 residents in Kajang residential area and had utilized a stratified random sampling method to collect data. The study proposes that quality of service delivery having seven dimensions by using exploratory factor analysis with varimax rotation: complaining services, community development services, law enforcement services, environmental management services, basic amenities services, community health services, and street and light services. Means and Standard Deviations, ANOVA and independent sample t-test were used to determine any differences among the mean scores for each dimensions of quality of service delivery with gender, project type, race, ownership status, educational background, marital status, household income, and age. Major findings of this study shows that project type is differ significantly for basic amenities services, street and light services, environmental management services, community health services and complaining services. Meanwhile household income group shows significantly with basic amenities, street and light services and environmental management services.*

**Keywords:** *quality of customer service delivery, local authority, validity, reliability, Malaysia.*

## **1. Introduction**

In Malaysian setting, local authority is the lowest level government in the governmental hierarchy. Malaysia government consists of three levels of government: federal, state and local government. Recently there are 418 local councils within Malaysia and they are responsible to collect taxes (in the form of assessment tax), to create laws and rules (in the form of by-laws) and to grant licences and permits for any trade in its area of jurisdiction, in addition to providing basic amenities, collecting and managing waste and garbage as well as planning and developing the area under its jurisdiction. Local authority is more focusing on the performance of various regulatory and enforcement functions at the local administration district. Service delivery is a main function and

responsibility of local authority all around the world. Therefore, high quality of services by local authority is being emphasized because it performs various functions that impact on the resident's quality of life. Local authority management should be understood as part of the public domain but with its own special purposes and conditions reflecting its political nature and as organizations for the delivery of public services (Stewart, 1988). However, the main question that always arises is in the adequacy of service provision: the efficiency, effectiveness and efficacy of local authorities in performance (Phang, 1995).

The concepts of quality in service have been extensively explored, and tools capable of measuring it developed, in the relevant literature. Since the late 1980s, the terms such as "responsiveness", "quality", "service delivery", and "performance culture" have become commonplace in debates on local authority (Deakin & Dillon 2006). All individuals, governments, and private sector have an interest, one way or another, in improving efficiency and performance in public service delivery. Research in the previous literature on the efficiency and service quality delivery local authority all over the world varies widely in many aspects, ranging from their aims to their conclusions. Nowadays, local governments all over the world are faced with tightening restrictions on resources, with simultaneously increasing demand for efficiencies and effective services, coupled with declining public trust.

It is important for local authority researchers and practitioners to understand how general public evaluate the quality of service delivery judgments regarding local government services. Involving citizens to evaluate the quality of local authority's services is important in order to enhance the performance. As David Martin and Maziah (2006: 7) aptly put it:

*"Citizens can also act as partners in efforts to improve public services by assessing the performance of public services. Acting as "customers", citizens sometimes evaluate services simply by filling in a reply card after receiving a public service. As more deeply involved customers, citizens may become engaged in survey research or focus groups. At a still more involved level, citizens may become "evaluators" if they are trained as service quality raters to directly assess the performance of public services from street cleanliness, to library stock completeness, or to the quality of a public transport ride."*

Most researchers define perceived service quality as the comparative judgments of expectations versus perceived performance (Vanessa et al, 2006). Service quality is considered to be an important factor in increasing customer satisfaction and loyalty in the liberalised energy market (Dukart, 1998). Organizations that have adopted a quality-oriented strategy have successfully improved productivity or services and greater customer satisfaction. Recently, public sectors have been under pressure to provide a quality and efficient service for consumers. Local Authority (LA) has to increase their customer service delivery efficiency level continuously. In the current competitive struggle for better services, LA is playing an increasingly prominent role to facilitate the quality improvement effort in their local services. Local authority institutions should enhance the use limited resources to drive a steep change in the provision of services delivery and the management of projects. The level of efficiency indicators are an effective means of determining whether an organization is moving towards high quality service delivery by public organization. Gomes, Yasin and Lisboa (2007) indicates that the critical components of organizational performance for service organization need to focus on improving the service encounter and the customer-orientation through paying close attention to service efficiency, quality, and availability. Studied by Parasuraman, Zeithaml and Berry (1985) stated that measuring the quality through satisfaction has limited value unless the gap between producer and consumer, between organization and community.

Currently, there has been some research examining whether local authority in Malaysia is efficient and accountable (e.g., Siddiquee, 2008; Phang, 2007; David Martin & Maziah, 2006; Mustafa, 2006). However, this study found that there is a limited research on the measurement of quality of customer service delivery by local authority in Malaysian setting. Most of the literatures are focusing on service-quality research on the private sector. This has been resulted a dilemma which occurs when service quality management practices derived from the private sector are practice to the public sector. Achieving quality and efficient services would enhance their competitiveness both in organization performance and customer satisfaction performance. A better understanding of the right measurement is therefore an important first step in global performance evaluation of local authority. Feinburg and de Ruyter (1995) pointed the importance of adapting the definition of service quality in different cultures. In addition research by Mattila (1999) stated cultural factors are said to have greater influence on people's evaluation of services than on their evaluations of physical goods due to involvement of customer contact and interaction with employees while a service is delivered. Majority of the researches done thus far have either adopted or adapted existing instruments there have not been many attempts at developing new instruments (Ramayah & Jantan, 2004). We know that Malaysia himself is a multicultural society which is composed predominantly of Bumiputra, Chinese, and Indian. Thus, this paper takes as its unique focus, whether the instrument which is the quality of customer service delivery scale that is developed for this study is valid and reliable to the Malaysian local authority.

## **2.0 Objective of study**

The present study is aimed at addressing the following question: What are the impact of demographic profile of resident (gender, race, age, educational background, marital status, and household income) and housing profile (project type, housing ownership status) on quality of service delivery (complaining services, community development services, law enforcement services, environmental management services, basic amenities services, community health services, and street and light services).

## **3.0 Method**

### **3.1 The Unit of Analysis**

The unit of analysis in this study is the residents of Kajang. The respondents covered low cost and medium cost housing. Total population being studied is 179,000 residents with 638 samples taken from Kajang Local Planning 1998-2010. In addition, Kajang is one of important residential area of Selangor, as well as Bangi, Petaling Jaya and Damansara and expected to continuously growth in future prospect of residential or property development.

### **3.2 Development of the Scale Items**

This study measured the quality of customer service delivery by local authority based on Kajang Municipal Council Annual Report 2006. In the first place, there are forty items was developed and used to measure this construct. This measurement used five-point Likert-type scale ranging from 1 = Worst to 5 = Very good for all the quality of customer service delivery items. To develop comprehensive indicators of service delivery, this paper used consumer survey on the service quality of local government as well as (1) Basic Amenities services; (2) Street and Light Services; (3) Environmental Management Services; (4) Community Health Services; (5) Law Enforcement Services; (6) Community Development Services; and (7) Complaint Services. In fact, these seven basic services are provided by Kajang Manucipal Council to citizen directly. A set questionnaire will develop to obtain response from customers about the efficiency service delivered by KMC.

### **3.3 Questionnaire Administration**

The broad aim of the research was to explore the quality of service delivery from customer perspective practice in the local authority. The primary research method was the collection of primary data via a number of unstructured interviews among key players from local authority

agencies. Indeed, once the study had enough information from a number of authorities, it became clear that the general picture about the local authority performance measurement. Based on the preliminary findings on local authority performance, a set of questionnaires was developed. Then, data was collected through a structured questionnaire, one for each housing unit. The principal investigator met the residents at their home during working hours and weekend. In order to get the various sub-groups of samples, the population was first stratified based on location and type of housing. The technique of sampling used in this study was basically convenience sampling but taking into account housing location and the different types of housing. This will ensure that the various subgroups in the population are represented. Out of 650 answered questionnaires replied and only 638 were usable. This is representing 98.15 percent of response rate.

## 4.0 Results

### 4.1 Profile of the Respondents

Majority of the respondents are male with 61.8 percent males and 38.2 percent females. With regards to age, most of the respondent's ages are 31 to 50 years old. In term of marital status, 85.1 percent of the residents were married, 12.6 percent were single, and 2.3 percent were divorced. They were predominantly Malay (67.2%), followed by Chinese (19.6%), Indian (12.7%), and others (0.5%). About 73.7 percent had education below or equal to college diploma level. The large majority (81.7%) had an income of less than RM5, 000 per month. A total of 314 (49.2%) respondents were from the low cost housing while 324 (50.8%) were from the medium cost housing

### 4.2 Testing the Goodness of Measure for the Service Delivery of Local Authority Construct

#### 4.2.1 Content Validity

Content validity refers to the extent to which an instrument covers the meanings included in the concept (Babbie, 1992). Researchers, rather than by statistical testing, subjectively judge content validity (Chow & Lui, 2001). In addition, the content validity of the proposed instrument is at least sufficient because the instrument is carefully refined from a proven instrument with an exhaustive literature review (Chow & Lui, 2001).

Table 4.1: Distribution of Respondents on Demographic and Housing Profile.

Item		Frequency	Percentage
Gender	Male	394	61.8
	Female	244	38.2
Age	<30 years old	101	15.8
	31-40 years old	209	32.8
	41-50 years old	202	31.7
	>50 years old	126	19.7
Marital Status	Single	79	12.6
	Married	535	85.1
	Divorced	15	2.3
Race	Malay	429	67.2
	Chinese	125	19.6
	Indian	81	12.7
	Others	3	0.5
Educational Background	Primary School	28	4.4
	Secondary School	359	56.3
	Diploma	83	13.0
	Bachelor Degree	140	21.9
	Masters	23	3.6
	PhD	5	0.8
Household Income	<RM1,000	138	21.6
	RM1,000-RM2,000	201	31.5
	RM2,001-RM5,000	182	28.5
	>RM5,000	117	18.4
Types of housing	Low cost	314	49.2
	Medium Cost	324	50.8

#### 4.2.2 Construct Validity

This study applied rotated component matrix method, out of 40 items, six items were dropped as they either had loadings less than 0.5 or cross loadings. Seven factors met the selection criteria of eigen values greater than 1.0, explaining a total of 73.11 percent of the variance. The KMO measure of sampling adequacy was 0.87 indicating sufficient intercorrelations while the Bartlett's Test of Sphericity was significant ( $\chi^2 = 15951.17, p < 0.01$ ). All the items selected had factor loadings greater than 0.5. Table 4.2 below shows the detail of factor analysis results for quality of customer services delivery.

Table 4.2: Factor analysis results for quality of customer service delivery

Items	Factors						
	F1	F2	F3	F4	F5	F6	F7
<b>Factor 1: Complaining Services</b>							
CS2	<u>.72</u>						
CS3	<u>.75</u>						
CS4	<u>.85</u>						
CS5	<u>.82</u>						
CS6	<u>.82</u>						
CS7	<u>.84</u>						
CS8	<u>.73</u>	.33					
CS9	<u>.81</u>	.33					
CS10	<u>.85</u>						
CS11	<u>.75</u>	.30					
<b>Factor 2: Community Development Services</b>							
CDS1	.33	<u>.68</u>	.40				
CDS2		<u>.76</u>	.36				
CDS3	.36	<u>.81</u>					
CDS4	.31	<u>.84</u>					
CDS5		<u>.79</u>					
<b>Factor 3: Law Enforcement Services</b>							
LES1	.40	.33	<u>.63</u>				
LES2			<u>.85</u>				
LES3	.39		<u>.69</u>				
LES4			<u>.83</u>				
LES5			<u>.84</u>				
<b>Factor 4: Environmental Management Services</b>							
EMS2				<u>.77</u>			
EMS3				<u>.85</u>			
EMS4				<u>.86</u>			
EMS5				<u>.80</u>			
<b>Factor 5: Basic Amenities Services</b>							
BAS1					<u>.67</u>		
BAS2					<u>.85</u>		
BAS3					<u>.82</u>		
BAS4				.30	<u>.70</u>		
<b>Factor 6: Community Health Services</b>							
CHS1						<u>.71</u>	
CHS2						<u>.86</u>	
CHS3						<u>.85</u>	
<b>Factor 7: Street and Light Services</b>							
SLS3							<u>.74</u>
SLS4					.42		<u>.69</u>
SLS5				.35	.38		<u>.67</u>

Items	Factors						
	F1	F2	F3	F4	F5	F6	F7
Eigenvalue	10.58	5.64	2.82	1.85	1.62	1.46	1.09
Percentage of Variance	21.07	11.13	10.63	9.81	8.96	7.10	5.03
Total Variance Explained	21.07	32.19	42.82	52.63	61.58	68.68	73.71
KMO Measure of Sampling Adequacy	0.87						
Approximate Chi-Square	15951.17***						

Note.  $N = 638$ . Items included for the respective factors are underlined for identification; \*\*\* $P < .001$ .

Factor loadings less than .30 have not been printed.

#### 4.2.3 Convergent Validity

Further to the construct validity test using the factor analysis (between scales), another factor analysis was utilized but this time using the within scale to test the convergent validity. According to Campbell and Fiske (1959) convergent validity refers to all items measuring a construct actually loading on a single construct. Convergent validity is established when items all fall into 1 factor as theorized. Based on the result in Table 4.3, all the value of KMO are more than 0.5 and percent of the variation are more than 63 percent. Thus, it can be concluded that the convergent validity of these measures is valid.

Table 4.3: The convergent validity test result.

Dimensions	KMO	Percent of variation
Complaining Services	0.90	67.51
Environmental Management Services	0.81	77.11
Community Development Services	0.81	75.10
Basic Amenities Services	0.81	68.15
Community Health Services	0.72	78.68
Law Enforcement Services	0.86	71.13
Street and Light Services	0.56	63.77

#### 4.2.4 Discriminant Validity

Discriminant validity refers to the extent to which measures of two different constructs are relatively distinctive. The correlation value of discriminant validity is neither an absolute value of '0' nor '1' (Campbell & Fiske, 1959). A correlation analysis was done on the seven factors generated and the results are presented in Table 4.4. As can be seen all the 7 factors are not perfectly correlated where their correlation coefficients range between 0 and 1. Hence, we can conclude that discriminant validity has been established.

Table 4.4: Results of the correlation analysis.

	1	2	3	4	5	6	7
1 Complaining Services	1						
2 Community Development Services	.51**	1					
3 Law Enforcement Services	.47**	.57**	1				
4 Environmental Management Services	.15**	.18**	.21**	1			
5 Basic Amenities Services	.04	.13**	.12**	.51**	1		
6 Community Health Services	.11**	.12**	.17**	.49**	.44**	1	
7 Street and Light Services	.18**	.22**	.22**	.41**	.49**	.45**	1

#### 4.2.5 Reliability

Reliability refers to the degree of consistency, as Kerlinger (1986) puts it; if a scale possesses a high reliability the scale is homogeneous. According to Nunnally (1978) alpha values equal to or greater than 0.70 are considered to be a sufficient condition. Table 4.5 shows that all the seven corresponding alpha values are equal or greater than 0.70. Thus, it can be concluded that these measures possess sufficient reliability.

Table 4.5: Reliability analysis.

Dimensions	Reliability	Mean	Standard Deviation
Complaining Services	0.94	2.86	0.69
Community Development Services	0.92	2.65	0.83
Law Enforcement Service	0.90	2.85	0.76
Environmental Management Service	0.90	2.86	0.75
Basic Amenities Services	0.84	2.86	0.86
Community Health Service	0.86	3.14	0.79
Street and Light services	0.70	3.18	0.74

#### 4.3 Test of Differences

Several tests of differences using the t-test and the one-way ANOVA were conducted to identify if there existed any difference in terms of the eight dimensions of residential satisfaction of the present study by gender, housing ownership status, project type, race, educational background, marital status, household income, length of residence, crowding, and age. The results of the analysis are presented in Table 4.6 until Table 4.13. Table 4.6 demonstrated that only street and light services shows the significant result with gender. Female residents indicated significantly higher in street and light services quality as compared to male residents.

Table 4.6: Differences in the Quality of Services Delivery by Gender.

Dimensions	Gender	Mean	t value
Basic Amenities Services	Male	2.85	-0.11
	Female	2.86	
Street and Light Services	Male	3.10	-3.17**
	Female	3.30	
Environmental Management Services	Male	2.85	-0.49
	Female	2.88	
Community Health Services	Male	3.12	-0.63
	Female	3.16	
Law Enforcement Services	Male	2.81	-1.63
	Female	2.91	
Community Development Services	Male	2.61	-1.80
	Female	2.73	
Complaining Services	Male	2.85	-0.68
	Female	2.89	

Note: \*\*  $p < 0.01$ , \*  $p < 0.05$

Table 4.7 shows that, the owner occupier is statistically significantly different with renter in term of basic amenities only. Those who are owner occupiers indicated significantly higher compared to renter. Other services dimensions show no significant differences between owner occupier and renter.

Table 4.8 shows the results of the one-way ANOVA tests used to assess the differences among residents with regards to their marital status. With respect to quality of services delivery dimensions, there were no significant differences arose.

Table 4.7: Differences in the Quality of Services Delivery by Housing Ownership Status.

Dimensions	Status	Mean	t value
Basic Amenities Services	Owner occupiers	2.90	2.52*
	Renter	2.67	
Street and Light Services	Owner occupiers	3.20	1.71
	Renter	3.07	
Environmental Management Services	Owner occupiers	2.89	1.86
	Renter	2.75	
Community Health Services	Owner occupiers	3.16	1.11
	Renter	3.06	
Law Enforcement Services	Owner occupiers	2.85	0.01
	Renter	2.85	
Community Development Services	Owner occupiers	2.66	0.15
	Renter	2.64	
Complaining Services	Owner occupiers	2.84	-1.45
	Renter	2.95	

Note: \*\*  $p < 0.01$ , \*  $p < 0.05$

Table 4.8: Differences in the Quality of Services Delivery by Marital Status.

Dimensions	Marital Status	Mean	F
Basic Amenities Services	Single	2.96	.882
	Married	2.84	
	Divorced	3.04	
Street and Light Services	Single	3.30	1.667
	Married	3.18	
	Divorced	2.95	
Environmental Management Services	Single	3.03	3.38
	Married	2.83	
	Divorced	3.14	
Community Health Services	Single	3.20	.272
	Married	3.14	
	Divorced	3.06	
Law Enforcement	Single	2.88	.212



Services	Married	2.86	
	Divorced	2.74	
Community Development Services	Single	2.66	.035
	Married	2.65	
	Divorced	2.60	
Complaining Services	Single	3.01	1.920
	Married	2.85	
	Divorced	2.86	

Note: \*\*  $p < 0.01$ , \*  $p < 0.05$

Meanwhile, the result shows that five dimensions of quality of services delivery statistically significantly different with project type's variable. Table 4.9 demonstrated that residents of medium cost housing shows significantly higher in term of basic amenities, street and light, environmental management, community health and complaining services. Residents who are in low cost project type indicated higher in complaining services.

Table 4.9: Differences in the Quality of Services Delivery by Project Type.

Dimensions	Status	Mean	t value
Basic Amenities Services	Low cost	2.49	
	Medium cost	3.21	-11.50**
Street and Light Services	Low cost	3.07	
	Medium cost	3.28	-3.50**
Environmental Management Services	Low cost	2.75	
	Medium cost	2.97	-3.75**
Community Health Services	Low cost	3.08	
	Medium cost	3.20	-2.01*
Law Enforcement Services	Low cost	2.88	
	Medium cost	2.82	1.07
Community Development Services	Low cost	2.65	
	Medium cost	2.66	-0.24
Complaining Services	Low cost	2.96	
	Medium cost	2.77	3.37**

Note: \*\*  $p < 0.01$ , \*  $p < 0.05$

In the result presented below, Chinese and Indian respondents are significantly different from one another in term of law enforcement service. An Indian respondents' are indicated significantly higher compared to Chinese respondents. Meanwhile, quality of complaining services results demonstrated that an Indian and Malay respondents are significantly different each other. An Indian respondent is significantly higher compared to Malay respondents. Other races are not significantly different in any dimensions. (Refer to Table 4.10)

Table 4.10: Differences in the Quality of Services Delivery.

Dimensions	Race	Mean	F
Basic Amenities Services	Malay	2.82	1.49
	Chinese	3.00	
	Indian	2.79	
	Others	2.92	
Street and Light Services	Malay	3.18	1.34
	Chinese	3.10	
	Indian	3.30	
	Others	3.00	
Environmental Management Services	Malay	2.82	1.71
	Chinese	3.00	
	Indian	2.87	
	Others	2.83	
Community Health Services	Malay	3.17	1.14
	Chinese	3.15	
	Indian	2.99	
	Others	3.00	
Law Enforcement Services	Malay	2.85	3.45*
	Chinese	2.72*	
	Indian	3.05*	
	Others	2.47	
Community Development Services	Malay	2.68	.44
	Chinese	2.61	
	Indian	2.62	
	Others	2.30	
Complaining Services	Malay	2.83*	2.29*
	Chinese	2.87	
	Indian	3.04*	
	Others	2.93	

Note: \*\*  $p < 0.01$ , \*  $p < 0.05$

The Table 4.11 below demonstrated only basic amenities services had a significant sign with educational background. The table revealed that respondents with degree qualification are statistically different with primary and secondary qualification respondents. Respondents with degree qualification recorded higher compared to primary and secondary qualification. Other qualification groups are not differing at all in term of other quality of service delivery.

Table 4.11: Differences in the Quality of Services Delivery by Educational Background.

Dimensions	Race	Mean	F
Basic Amenities Services	Primary school	2.65**	8.95**
	Secondary school	2.70**	
	Diploma	2.91	
	Degree	3.19**	
	Master or higher	2.99	
Street and Light Services	Primary school	3.07	.359
	Secondary school	3.17	
	Diploma	3.17	
	Degree	3.21	
	Master or higher	3.29	
Environmental Management Services	Primary school	2.82	1.65
	Secondary school	2.81	
	Diploma	2.83	
	Degree	3.00	
	Master or higher	2.95	
Community Health Services	Primary school	3.27	.746
	Secondary school	3.12	
	Diploma	3.20	
	Degree	3.14	
	Master or higher	2.96	
Law Enforcement Services	Primary school	2.69	1.699
	Secondary school	2.92	
	Diploma	2.79	
	Degree	2.77	
	Master or higher	2.76	
Community Development Services	Primary school	2.41	.789
	Secondary school	2.67	
	Diploma	2.64	
	Degree	2.69	
	Master or higher	2.56	
Complaining Services	Primary school	3.05	1.156
	Secondary school	2.87	
	Diploma	2.92	
	Degree	2.78	
	Master or higher	2.84	

Note: \*\*  $p < 0.01$ , \*  $p < 0.05$

All groups' household income is statistically significantly different among each other in term of basic services amenities. It was found that household income group above RM5000 are higher compared to other groups. Besides that, Table 4.12 below shows that household income group RM1001 to RM2000, RM2001 to RM5000 and above RM5000 are significantly different one another in term of street and light services. The result found that household income group RM2001 to RM5000 is recorded higher than two other groups. Meanwhile, the result also revealed that household income group RM 1000 and RM 2001 to RM5000 is significantly different in term of environmental management services. Whereas, household income group of residents between

RM1000 to RM2000 and RM2001 to RM5000 indicated significantly different for the same services.

Table 4.12: Differences in the Quality of Service Delivery by Household Income.

Dimensions	Household income	Mean	F
Basic Amenities Services	<RM1000	2.66**	4.92**
	RM1001 - RM2000	2.54**	
	RM2001 - RM5000	3.06**	
	>RM5000	3.29**	
Street and Light Services	<RM1000	3.13	4.73**
	RM1001 - RM2000	3.04**	
	RM2001 - RM5000	3.32**	
	>RM5000	3.28**	
Environmental Management Services	<RM1000	2.78**	4.42**
	RM1001 - RM2000	2.73**	
	RM2001 - RM5000	3.00**	
	>RM5000	2.92	
Community Health Services	<RM1000	3.05	2.30
	RM1001 - RM2000	3.10	
	RM2001 - RM5000	3.27	
	>RM5000	3.13	
Law Enforcement Services	<RM1000	2.89	.48
	RM1001 - RM2000	2.83	
	RM2001 - RM5000	2.89	
	>RM5000	2.81	
Community Development Services	<RM1000	2.66	.71
	RM1001 - RM2000	2.59	
	RM2001 - RM5000	2.67	
	>RM5000	2.74	
Complaining Services	<RM1000	2.90	2.05
	RM1001 - RM2000	2.91	
	RM2001 - RM5000	2.85	
	>RM5000	2.70	

Note: \*\*  $p < 0.01$ , \*  $p < 0.05$

The results of the analysis in Table 13 revealed that respondents age group 30 years old or less and 31 to 40 years old are significantly different from one another in term of street and light services. It shows that respondent age group 30 years old or less is higher than respondent age group 31 to 40 years old. Besides that, the table presented below shows respondents belong to age group 30 years old or less are statistically significantly different with respondent belong to age 31 to 40 years old and respondents belong to age more than 50 years old in term of complaining services. The group age 30 years old or less are higher compared to age group 31 to 40 years old and above 50 years old respondents.

Table 4.13: Differences in the Quality of Services Delivery by Age.

Dimensions	Age (Years)	Mean	F
Basic Amenities Services	<30	2.95	1.53
	31 - 40	2.75	
	41 - 50	2.88	
	> 50	2.91	
Street and Light Services	<30	3.29*	2.43*
	31 - 40	3.07*	
	41 - 50	3.22	
	> 50	3.20	
Environmental Management Services	<30	2.94	1.09
	31 - 40	2.79	
	41 - 50	2.88	
	> 50	2.90	
Community Health Services	<30	3.27	2.49
	31 - 40	3.07	
	41 - 50	3.08	
	> 50	3.24	
Law Enforcement Services	<30	2.88	1.55
	31 - 40	2.77	
	41 - 50	2.93	
	> 50	2.83	
Community Development Services	<30	2.71	.47
	31 - 40	2.60	
	41 - 50	2.68	
	> 50	2.65	
Complaining Services	<30	3.05*	3.17*
	31 - 40	2.83*	
	41 - 50	2.85	
	> 50	2.79*	

Note: \*\*  $p < 0.01$ , \*  $p < 0.05$

## 5. Discussion of Results and Conclusion

Recently, most researchers rely on use the performance of measurement from other studies as culled from the standard literature review to establish the goodness of a measure. In order to develop comprehensive measurement based on local perception, this study take initiative to test the dimensionality of quality of customer service delivery by local authority for the 40-item version. To a certain extent we have accomplished that by getting a 34 items service delivery instrument which is capable explaining sufficient variation in the construct being measured. This research showed that the instrument has reasonable levels of validity (content, construct, convergent, and discriminant) and reliability for continued use. Besides that, this study was to examine the differences of demographic profile of residents on the seven dimensions of quality of service delivery of low-cost and medium-cost housing in Kajang district.

The findings showed significant differences existed only for one dimensions of quality of service delivery between male and female. Female residents indicated significantly higher on street and

light services as compared to male residents. It is because female more concern on security especially on the night day.

For housing ownership status, the results of owner occupiers revealed one significantly higher in terms of basic amenities services. The reason for such finding may due to owner occupiers had invested large amount of money to buy a house in the most suitable, comfortable, and convenient area for a longer period of time.

In the present study, it was found that marital status has no significant differences arose on the quality of services deliver. It could be explained by the fact that every resident can adopted the level of service delivery offered by local authority.

For project type, residents of medium cost housing shows significantly higher quality of services delivery on basic amenities services, street light services, environmental management services and community health services. It may be due to the fact that they have high expectation to have better services for their housing area. Furthermore, residents in medium-cost housing are classified to have high household income per month. Meanwhile, residents of low cost housing shows higher compared to residents of medium cost on complaining services.

It was also revealed in the study that Chinese resident's shows significantly higher on law enforcement services compared to Indian resident. Malay and others races shows no significant different in term of law enforcement services. In term of complaining services only Indian and Malay resident show significant different one another. From the finding an Indian resident shows higher significant on complaining services compared to Malay resident.

For educational background, results of this study demonstrated that degree qualification shows significant different with primary and secondary school qualification in term of basic amenities services. Other services have no significant different with educational level. It can be interpreted as the higher the educational qualification of the residents, the more information they search for certain aspects of their life. Therefore, they are very particular about all aspects of basic amenities need services of their housing condition/area.

For household income, all groups' income is statistically significantly different among each other in term of basic services amenities. Residents with their household income of more than RM5000 were significantly higher compared to other group incomes. It may be due to the fact that the rich people feel that they are more willing to pay more in order to get something which can benefit them in the future. Similarly, the higher the income, the more satisfied would the residents be with their housing because they might have the greater capacity to find a better home.

In the present study, respondent's age group 30 years old or less and 31 to 40 years old are significantly different from one another in term of street and light services. In term of complaining services shows respondents age group 30 years old or less is higher than respondent's age group 31 to 40 years old and above 50 years old. It can be says that younger residents do not really emphasized on services provided by local government because they are more concerned with their daily work.

As conclusion, the measurements of quality of services delivery proposed are valid and reliable. Local government should apply the perceptions of their residents to measure the quality of service delivery. Findings also suggest that, respondents demographic factor is one of the key factors in contributing the level of quality of services delivery. Local government need to know the background of their residents in order to fulfill the need of service delivery.

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