CHAPTER 8: SURVEY

8.1. Introduction

A statistical analysis is carried out to enable a better interpretation of data collected from the survey. The survey data is analyzed using a descriptive analysis, which refers to the transformation of the raw data into a form that will make them easy to understand and interpret. Descriptive information is obtained by summarizing, categorizing, rearranging and other forms of analysis. The calculation of averages, frequency distributions and percentage distribution are the most applied in the research analysis. Cross tabulations table and chi-square is used to answer the research objectives outlined in Chapter 4.

Answers from respondents are keyed into the Statistical Package for Social Science (SPSS) accordingly. Since the type of measurement is either nominal or ordinal, only non-parametric tests are applicable for the research.

8.2. Reliability Analysis

A reliability test was conducted to measure the goodness of fit. A Cronbach's Alpha for the overall scale is equal to 0.6130. It also suggests that if the ethnic group is deleted, the scale will slightly increase to 0.6214. Thus, deletion of the item may be considered appropriate.

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****** Method 1 (space saver) will be used for this analysis ******
     R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)
Item-total Statistics
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	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Alpha if Item Deleted
GENDER	55.0792	140.6737	-.1261	.6191
MARSTAT	54.8911	134.9780	.2975	.6025
ETHNIC	55.1782	140.3279	-.0809	.6214
INCOME	53.0792	121.4337	.4678	.5714

AGE	53.7921	133.0463	.1886	.6039
OCCUP	54.8119	140.0543	-.0721	.6175
EDUC	53.9208	137.7537	.0926	.6112
OWNERA	55.5941	139.4236	.0000	.6135
OWNERB	55.2970	131.0109	.6347	.5892
OWNERC	55.4356	138.2283	.1229	.6109
OWNDI	52.8317	141.5014	-.1498	.6779
OWNDII	55.8812	120.9257	.2543	.5962
OWNDIII	56.5446	136.0305	.2710	.6050
OWNEI	54.4653	100.4513	.2745	.6218
OWNEII	56.4455	134.3295	.1589	.6065
OWNEIII	56.5941	139.4236	.0000	.6135
FINANAI	54.4356	122.2883	.4082	.5770
FINANAII	56.2475	124.9881	.5488	.5750
FINANBI	54.6238	138.8770	.0952	.6122
FINANBII	56.3168	129.1586	.6342	.5841
FINANCI	53.1287	139.7333	-.0538	.6210
FINANCII	56.1584	123.0147	.5899	.5690
FINANDI	52.4752	119.6319	.3592	.5792
FINANDII	56.0495	117.4075	.5624	.5577
FINANCEE	54.5149	124.8723	.5215	.5756
FINANCEF	55.0891	139.1220	-.0023	.6151
FINANCEG	55.3762	139.9170	-.0678	.6162
TAXA	55.2772	140.3824	-.1063	.6180
TAXBI	54.8218	137.5279	.0493	.6140
TAXBII	54.4257	136.7069	.0894	.6114
TAXBIII	54.6634	137.2655	.0577	.6136
TAXC	55.0792	139.1937	-.0192	.6171
TAXD	55.3762	139.1570	.0072	.6141
TAXE	55.2277	138.6376	.0447	.6130
TAXF	55.0693	139.9051	-.0611	.6169

R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)

Reliability Coefficients

N of Cases =   101.0   N of Items = 35

Alpha =   .6130

8.3. Profile of Respondents

Hundred and two (102) respondents replied to the questionnaires. The demography of the respondents are summarized in the tables below. The survey managed to get approximately the same proportion of gender in which 52% of the respondents are female while the balance 48% is male. Out of this, 36.3% of respondents are single, 56.9% are married with children and only 6.9% married without any children. In terms of the ethnic group, 77.5% are Malays, 13.7% are Chinese, 5.9% are Indians and the balance 2.9% is from other races.

The household annual income of the respondents varies in which the highest group (29.4%) is in the category of RM24,001 – RM40,000 followed by RM40,001 – RM60,000 (20.6%). Less than 14% of respondents fall in each category of other household annual income.

Age group between 26 – 30 years constitutes 36.3%, followed by 31-35 year (31.4%), 36-40 years (14.7%) and 8.8% of respondents comprise of executives age less than 25 years and 41 years old and above, in each category.

In terms of occupation, 74 respondents or 72.5% are working in the private sector, while 25.5% in the government sector and the balance 2% is unemployed. Out of this, 73.5% are Degree/Master/PhDs. holders, while only 18.6% has STPM/HSC/Diploma and the balance 7.8% has SRP/SPM/LCE certification.

Profile of Respondents

Respondent gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	49	48.0	48.0	48.0
	Female	53	52.0	52.0	100.0
	Total	102	100.0	100.0	

Marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	37	36.3	36.3	36.3
	Married with children	58	56.9	56.9	93.1
	Married without children	7	6.9	6.9	100.0
	Total	102	100.0	100.0	

Ethnic group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	79	77.5	77.5	77.5
	Indian	6	5.9	5.9	83.3
	Chines	14	13.7	13.7	97.1
	Other	3	2.9	2.9	100.0
	Total	102	100.0	100.0	

Household income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	1.0	1.0	1.0
	<RM12,000	12	11.8	11.8	12.7
	RM12,000 - RM24,000	11	10.8	10.8	23.5
	RM24,001 - RM40,000	30	29.4	29.4	52.9
	RM40,001 - RM60,000	21	20.6	20.6	73.5
	RM60,001 - RM80,000	14	13.7	13.7	87.3
	>RM80,000	13	12.7	12.7	100.0
	Total	102	100.0	100.0	

Age group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<25 years	9	8.8	8.8	8.8
	26 - 30 years	37	36.3	36.3	45.1
	31 - 35 years	32	31.4	31.4	76.5
	36 - 40 years	15	14.7	14.7	91.2
	41 -45 years	6	5.9	5.9	97.1
	>45 years	3	2.9	2.9	100.0
	Total	102	100.0	100.0	

Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Government Employee	26	25.5	25.5	25.5
	Private Sector Employee	74	72.5	72.5	98.0
	Unemployed	2	2.0	2.0	100.0
	Total	102	100.0	100.0	

Education level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SRP/SPM/LCE	8	7.8	7.8	7.8
	STPM/HSC/Diploma	19	18.6	18.6	26.5
	Degree/Master/Phd	75	73.5	73.5	100.0
	Total	102	100.0	100.0	

8.4. Car Ownership

Of all the respondents, only one respondent does not own a car. The remaining respondents either own one car (75.2%), or two cars (19.8%) or having more than two cars (5%). A cross tabulation of household income and number of cars owned revealed that there is a significant positive relationship between the two variable. This is evidenced from the chi-square test which indicates a Pearson relationship of <0.05. In other words, the higher the income of an individual, the higher possibility of owning a car or more than one car.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.527[a]	12	.006
Likelihood Ratio	27.937	12	.006
Linear-by-Linear Association	16.610	1	.000
N of Valid Cases	101		

a. 14 cells (66.7%) have expected count less than 5. The minimum expected count is .05.

Crosstab

			No of cars owned			Total
			One	Two	> Two	
Household income	0	Count	1			1
		% within Household income	100.0%			100.0%
		% within No of cars owned	1.3%			1.0%
		% of Total	1.0%			1.0%
	<RM12,000	Count	10	1		11
		% within Household income	90.9%	9.1%		100.0%
		% within No of cars owned	13.2%	5.0%		10.9%
		% of Total	9.9%	1.0%		10.9%
	RM12,000 - RM24,000	Count	11			11
		% within Household income	100.0%			100.0%
		% within No of cars owned	14.5%			10.9%
		% of Total	10.9%			10.9%
	RM24,001 - RM40,000	Count	27	2	1	30
		% within Household income	90.0%	6.7%	3.3%	100.0%
		% within No of cars owned	35.5%	10.0%	20.0%	29.7%
		% of Total	26.7%	2.0%	1.0%	29.7%
	RM40,001 - RM60,000	Count	13	7	1	21
		% within Household income	61.9%	33.3%	4.8%	100.0%
		% within No of cars owned	17.1%	35.0%	20.0%	20.8%
		% of Total	12.9%	6.9%	1.0%	20.8%
	RM60,001 - RM80,000	Count	9	5		14
		% within Household income	64.3%	35.7%		100.0%
		% within No of cars owned	11.8%	25.0%		13.9%
		% of Total	8.9%	5.0%		13.9%
	>RM80,000	Count	5	5	3	13
		% within Household income	38.5%	38.5%	23.1%	100.0%
		% within No of cars owned	6.6%	25.0%	60.0%	12.9%
		% of Total	5.0%	5.0%	3.0%	12.9%
Total		Count	76	20	5	101
		% within Household income	75.2%	19.8%	5.0%	100.0%
		% within No of cars owned	100.0%	100.0%	100.0%	100.0%
		% of Total	75.2%	19.8%	5.0%	100.0%

The survey also indicates that 84.2% of respondents owned a Malaysian-made car, whereas another 15.8% owned a foreign-made car. However, the chi-square test proved that there is no significant relationship between household income and the ownership of Malaysian-made or foreign-made car. In terms of Malaysian-made car, 34.7% of respondents owned Proton Wira, followed by Proton Iswara (12.9%) and Perodua Kancil (10.9%). Other categories include Saga, Satria, Perdana and Kembara.
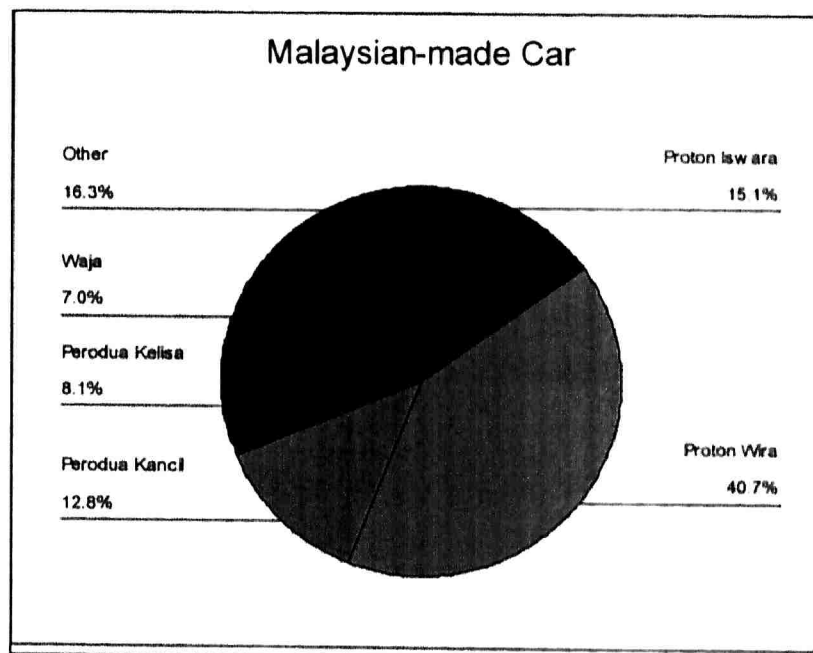
In respect of foreign-made car, Honda and Nissan lead with 22.2% each, followed by Mercedes Benz (18.5%), Kia and Toyota each comprises of 11.1% and BMW with 7.4% of total foreign-made car owned by respondents.

Foreign-made Car
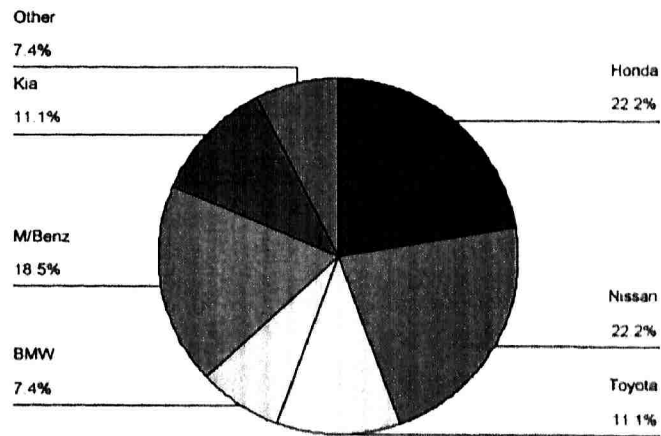
8.5. Method of Financing

The following Chi-square test is also carried out to determine the relationship between household income and selling price of vehicles purchased. The test indicates that household income has a positive relationship with the selling price of the vehicle purchased. In addition, there is a significant relationship between the two variables. In other words, the higher the household income, the higher is the selling price of vehicle purchased by respondents.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	33.072[a]	30	.319
Likelihood Ratio	39.944	30	.106
Linear-by-Linear Association	11.417	1	.001
N of Valid Cases	101		

a. 35 cells (83.3%) have expected count less than 5. The minimum expected count is .01.

67

Symmetric Measures

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Interval by Interval	Pearson's R	.338	.085	3.572	.001[c]
Ordinal by Ordinal	Spearman Correlation	.310	.092	3.245	.002[c]
N of Valid Cases		101			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Out of 101 respondents who answered the following section, 96 respondents financed the vehicle by credit and 4 respondents settled the payment in full/cash upon purchase. The credit period of 6-7 years applied to 53.9% of respondents, followed by 4-5 years (35.3%). As expected, the higher the amount of down payment paid, the lower the amount of monthly installment made by the respondent, depending again on the credit period of the financing. 42.2% paid more than RM6,000 as down payment for the car purchased. Moreover, 53.5% of respondents paid RM501 – RM800 monthly installment for the vehicle. Out of this, 17.8% are from the annual household income group of RM24,001 – RM40,000 and 12.9% in the RM40,001–RM60,000 group. We can also infer that, assuming an individual earning a minimum RM2,000 per month (RM24,000 per annum), and paying a minimum of RM501 monthly for installment of his car, he is actually paying 25% or one quarter of his monthly salary for the car. This excludes the fuel consumption and maintenance of the car. And again, the chi-square test indicates that there is a positive relationship between annual household income and installment payment and the relationship is proved to be very significant at 0.000 significance level (<0.05).

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	45.520ᵃ	30	.035
Likelihood Ratio	43.001	30	.059
Linear-by-Linear Association	17.273	1	.000
N of Valid Cases	101		

a. 35 cells (83.3%) have expected count less than 5. The minimum expected count is .04.

In addition, 41.6% found the monthly installment payment is a burden. 24.8% of the result comes from the group of respondents that pays RM501-RM800 installment per month. On the other hand, 54.5% of the respondents are of the opinion that the installment payment is not a burden and 28.7% of them are also paying RM501-RM800 per month. However, the result cannot be conclusive because it all depends on the household income as well as other factors such as number of dependence in the family and other liabilities or responsibilities held by an individual. However, surprisingly it is found that only 41.2% of respondents are of the opinion that the selling price of vehicle is affordable.

8.6. Awareness of AFTA and Tax Legislation

67.6% of respondents are aware of AFTA and its implication. The result is not surprising assuming 74.3% of respondents are well educated (Degree,Master, Phd. holder), even though 21.8% of this group is not aware of AFTA and its implication. However, only 56%, 34% and 48% of respondents know the meaning of import duty, excise duty and sales tax respectively. The remaining respondents either do not know or are not sure the meaning of the above. In addition, the statistical test shows that even though the education level has a positive relationship with the knowledge on tax legislation, but the relationship is not significant. The result indicates that the level of education does not guarantee the knowledge of the tax legislation but exposure in working

environment or general knowledge will determine their level of understanding of the above terms.

When asked on the respondents perception on the prices of vehicles as a result of AFTA, 64.4% agreed that they perceived the prices of vehicles should be cheaper, 19.8% perceived there will be no price changes and another 15.8% perceived that there the prices of cars will be more expensive.

In respect of the new tax legislation affecting motor vehicles, 79.2% of respondents are aware of the reduction in import duty on motor vehicles. But the percentage reduces on the awareness of the imposition/increment of excise duties on motor vehicles, whereby only 64.4% of respondents are aware of the new laws. Again, the knowledge does not correspond significantly with the education level of the respondents.

Finally, 48.5% knows the impact of the new legislation; whereas another 51.5% does not know the impact of the new tax legislation. Out of those respondents who answered that they know the impact of the new legislation, 30.7% were of the opinion that the price will be cheaper, 10.9% believed that the price will be more expensive and 6.9% had the view that there will be no change in car prices as a result of the changes in the legislation.

Perception of Afta * Impact of new legislation Crosstabulation

			Impact of new legislation		Total
			Yes	No	
Perception of Afta	A cheaper price	Count	31	34	65
		% of Total	30.7%	33.7%	64.4%
	A more expensive price	Count	11	9	20
		% of Total	10.9%	8.9%	19.8%
	No change	Count	7	9	16
		% of Total	6.9%	8.9%	15.8%
Total		Count	49	52	101
		% of Total	48.5%	51.5%	100.0%

70