

## **CHAPTER FOUR**

### **DATA ANALYSIS AND RESULTS**

#### **4.1. INTRODUCTION**

This chapter presents the findings of the questionnaire survey. In addition to presenting descriptive statistics, various inferential tests such as Correlation and Regression, Analysis of Variance (ANOVA) and Non-parametric tests were performed.

#### **4.2. RESULTS OF DATA COLLECTION**

Descriptive statistics relating to the above is summarised below in Table 4.1. The highest response was from the Big Five firms, not only because 30% of the questionnaires sent, were to respondents in these firms but also because almost all of the professional staff in these firms are qualified accountants whereas many staff in the non Big Five firms were still acquiring their relevant qualifications and as such, could not be used as respondents. Many of them were very enthusiastic about this study and were willing to share their thoughts, ideas and views on this matter despite having heavy dateline to meet.

Surprisingly, academic staff in institutions of higher learning (who should be familiar with the predicament of researchers endeavouring to collect valid data), were very uncooperative despite frequent pleas for completion of the questionnaires. On the commercial front, poor response was received from accountants in commerce and industry, under the pretext of month end closing of accounts, audit queries, general work pressures or simply total apathy towards the future of the accounting profession.

**TABLE 4.1 DEMOGRAPHIC INFORMATION OF RESPONDENTS**

	<b>FREQUENCY</b>	<b>PERCENTAGE (%)</b>
<b>GENDER</b>		
Male	141	44.9
Female	173	55.1
<b>MIA MEMBER</b>		
Yes	94	29.9
No	220	70.1
<b>QUALIFICATION</b>		
Chartered Accountants	9	2.9
ACCA	69	21.9
CIMA	10	3.2
CPA	53	16.9
Accounting Degree	161	51.3
Others	12	3.8
<b>WORKING ENVIRONMENT</b>		
Big Five	126	40.1
Non- Big Five	44	14.0
Listed Company	33	10.5
Non-listed Company	27	8.6
Private Institution	11	3.5
Public Institution	10	3.2
Public Sector	63	20.1
<b>PLACE OF OCCUPATION</b>		
Wilayah Persekutuan (K.L.)	189	60.4
Selangor	27	8.6
Penang	52	16.6
Johore	22	7.1
Others	23	7.3

A frequency test was run for the variables to categorise the responses received in the questionnaire. The test basically reveals the number of times various subcategories of a certain phenomena occurs, from which percentages and cumulative percentages of their occurrence can be easily calculated (Sekaran, 2000). The results of the test as shown in Table 4.2., are discussed in detail, in Chapter Five on Conclusions and Recommendations..

**TABLE 4.2                      Frequency Tables**

**Adequacy of Education Program**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	10	3.2	3.2	3.2
	Disagree	64	20.3	20.4	23.6
	Neutral	114	36.2	36.4	60.1
	Agree	119	37.8	38.0	98.1
	Strongly Agree	6	1.9	1.9	100.0
	Total	313	99.4	100.0	
Missing	System	2	.6		
Total		315	100.0		

**Adequacy of Prerequisites**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	1.6	1.6	1.6
	Disagree	67	21.3	21.4	23.0
	Neutral	77	24.4	24.6	47.6
	Agree	117	37.1	37.4	85.0
	Strongly Agree	47	14.9	15.0	100.0
	Total	313	99.4	100.0	
Missing	System	2	.6		
Total		315	100.0		

### Expansion of University Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	.6	.6	.6
	Disagree	2	.6	.6	1.3
	Neutral	18	5.7	5.8	7.0
	Agree	171	54.3	54.6	61.7
	Strongly Agree	120	38.1	38.3	100.0
	Total	313	99.4	100.0	
Missing	System	2	.6		
Total		315	100.0		

### Use of Problem Solving Techniques

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.3	.3	.3
	Disagree	4	1.3	1.3	1.6
	Neutral	9	2.9	2.9	4.5
	Agree	159	50.5	50.6	55.1
	Strongly Agree	141	44.8	44.9	100.0
	Total	314	99.7	100.0	
Missing	System	1	.3		
Total		315	100.0		

### Multi Disciplinary Skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.3	.3	.3
	Disagree	2	.6	.6	1.0
	Neutral	7	2.2	2.2	3.2
	Agree	172	54.6	54.8	58.0
	Strongly Agree	132	41.9	42.0	100.0
	Total	314	99.7	100.0	
Missing	System	1	.3		
Total		315	100.0		



### Practical Training

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	1.0	1.0	1.0
	Disagree	5	1.6	1.6	2.5
	Neutral	40	12.7	12.7	15.3
	Agree	135	42.9	43.0	58.3
	Strongly Agree	131	41.6	41.7	100.0
	Total	314	99.7	100.0	
Missing	System	1	.3		
Total		315	100.0		

### IT in Accounting Curriculum

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	23	7.3	7.3	7.3
	Neutral	48	15.2	15.3	22.7
	Agree	170	54.0	54.3	77.0
	Strongly Agree	72	22.9	23.0	100.0
	Total	313	99.4	100.0	
Missing	System	2	.6		
Total		315	100.0		

### Students Capacity of Inquiry

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	.6	.6	.6
	Disagree	4	1.3	1.3	1.9
	Neutral	47	14.9	15.3	17.2
	Agree	178	56.5	57.8	75.0
	Strongly Agree	77	24.4	25.0	100.0
	Total	308	97.8	100.0	
Missing	System	7	2.2		
Total		315	100.0		

### Effective Communication

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.3	.3	.3
	Disagree	3	1.0	1.0	1.3
	Neutral	9	2.9	2.9	4.2
	Agree	172	54.6	55.3	59.5
	Strongly Agree	126	40.0	40.5	100.0
	Total	311	98.7	100.0	
Missing	System	4	1.3		
Total		315	100.0		

### Entrepreneurial Skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	1.0	1.0	1.0
	Disagree	11	3.5	3.5	4.5
	Neutral	75	23.8	24.1	28.6
	Agree	160	50.8	51.4	80.1
	Strongly Agree	62	19.7	19.9	100.0
	Total	311	98.7	100.0	
Missing	System	4	1.3		
Total		315	100.0		

### Public Relations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	.6	.6	.6
	Disagree	6	1.9	1.9	2.6
	Neutral	45	14.3	14.5	17.0
	Agree	170	54.0	54.7	71.7
	Strongly Agree	88	27.9	28.3	100.0
	Total	311	98.7	100.0	
Missing	System	4	1.3		
Total		315	100.0		

### Efficient Strategisers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.3	.3	.3
	Disagree	5	1.6	1.6	1.9
	Neutral	42	13.3	13.5	15.4
	Agree	179	56.8	57.6	73.0
	Strongly Agree	84	26.7	27.0	100.0
	Total	311	98.7	100.0	
Missing	System	4	1.3		
Total		315	100.0		

### Graduates Equipped to Meet Realities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	32	10.2	10.3	10.3
	Disagree	119	37.8	38.3	48.6
	Neutral	113	35.9	36.3	84.9
	Agree	41	13.0	13.2	98.1
	Strongly Agree	6	1.9	1.9	100.0
	Total	311	98.7	100.0	
Missing	System	4	1.3		
Total		315	100.0		

### Graduates Ready for Globalization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	17	5.4	5.4	5.4
	Disagree	84	26.7	26.8	32.3
	Neutral	92	29.2	29.4	61.7
	Agree	94	29.8	30.0	91.7
	Strongly Agree	26	8.3	8.3	100.0
	Total	313	99.4	100.0	
Missing	System	2	.6		
Total		315	100.0		

### Graduates Require Assessment of Competence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	9	2.9	2.9	2.9
	Disagree	27	8.6	8.6	11.5
	Neutral	75	23.8	24.0	35.5
	Agree	138	43.8	44.1	79.6
	Strongly Agree	64	20.3	20.4	100.0
	Total	313	99.4	100.0	
Missing	System	2	.6		
Total		315	100.0		

### Knowledge of Specific Areas

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	1.0	1.0	1.0
	Disagree	14	4.4	4.5	5.4
	Neutral	62	19.7	19.9	25.3
	Agree	176	55.9	56.4	81.7
	Strongly Agree	57	18.1	18.3	100.0
	Total	312	99.0	100.0	
Missing	System	3	1.0		
Total		315	100.0		

### Development of Competency Tests

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	11	3.5	3.5	3.5
	Disagree	24	7.6	7.7	11.3
	Neutral	73	23.2	23.5	34.8
	Agree	165	52.4	53.2	88.1
	Strongly Agree	37	11.7	11.9	100.0
	Total	310	98.4	100.0	
Missing	System	5	1.6		
Total		315	100.0		

### Responsibility for Competency Examination

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	10	3.2	3.2	3.2
	Disagree	15	4.8	4.8	8.0
	Neutral	77	24.4	24.7	32.7
	Agree	162	51.4	51.9	84.6
	Strongly Agree	48	15.2	15.4	100.0
	Total	312	99.0	100.0	
Missing	System	3	1.0		
Total		315	100.0		

### Exam open to Accounting & non Accounting Graduates

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	56	17.8	17.9	17.9
	Disagree	63	20.0	20.2	38.1
	Neutral	56	17.8	17.9	56.1
	Agree	105	33.3	33.7	89.7
	Strongly Agree	32	10.2	10.3	100.0
	Total	312	99.0	100.0	
Missing	System	3	1.0		
Total		315	100.0		

### QE to be taken after 3 years Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	33	10.5	10.5	10.5
	Disagree	52	16.5	16.6	27.2
	Neutral	78	24.8	24.9	52.1
	Agree	130	41.3	41.5	93.6
	Strongly Agree	20	6.3	6.4	100.0
	Total	313	99.4	100.0	
Missing	System	2	.6		
Total		315	100.0		

### Competency Exam after QE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	38	12.1	12.2	12.2
	Disagree	63	20.0	20.2	32.4
	Neutral	102	32.4	32.7	65.1
	Agree	84	26.7	26.9	92.0
	Strongly Agree	25	7.9	8.0	100.0
	Total	312	99.0	100.0	
Missing	System	3	1.0		
Total		315	100.0		

### CPD is Required

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	1.6	1.6	1.6
	Disagree	23	7.3	7.4	9.0
	Neutral	108	34.3	34.8	43.9
	Agree	146	46.3	47.1	91.0
	Strongly Agree	28	8.9	9.0	100.0
	Total	310	98.4	100.0	
Missing	System	5	1.6		
Total		315	100.0		

### Common Designation of CA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	36	11.4	11.6	11.6
	Agree	66	21.0	21.3	32.9
	Neutral	82	26.0	26.5	59.4
	Disagree	93	29.5	30.0	89.4
	Strongly Disagree	33	10.5	10.6	100.0
	Total	310	98.4	100.0	
Missing	System	5	1.6		
Total		315	100.0		

### Esteem of CAs in Malaysia

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	34	10.8	11.1	11.1
	Agree	62	19.7	20.2	31.3
	Neutral	116	36.8	37.8	69.1
	Disagree	82	26.0	26.7	95.8
	Strongly Disagree	13	4.1	4.2	100.0
	Total	307	97.5	100.0	
Missing	System	8	2.5		
Total		315	100.0		

### Effects of WTO & AFTA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	54	17.1	17.6	17.6
	Agree	70	22.2	22.9	40.5
	Neutral	33	10.5	10.8	51.3
	Disagree	105	33.3	34.3	85.6
	Strongly Disagree	44	14.0	14.4	100.0
	Total	306	97.1	100.0	
Missing	System	9	2.9		
Total		315	100.0		

### Need for Foreign CPD

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	25	7.9	8.2	8.2
	Agree	61	19.4	19.9	28.1
	Neutral	112	35.6	36.6	64.7
	Disagree	81	25.7	26.5	91.2
	Strongly Disagree	27	8.6	8.8	100.0
	Total	306	97.1	100.0	
Missing	System	9	2.9		
Total		315	100.0		

### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	141	44.8	44.9	44.9
	Female	173	54.9	55.1	100.0
	Total	314	99.7	100.0	
Missing	System	1	.3		
Total		315	100.0		

### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	141	44.8	44.9	44.9
	Female	173	54.9	55.1	100.0
	Total	314	99.7	100.0	
Missing	System	1	.3		
Total		315	100.0		

### Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Chartered Accountant	9	2.9	2.9	2.9
	ACCA	69	21.9	22.0	24.8
	CIMA	10	3.2	3.2	28.0
	CPA	53	16.8	16.9	44.9
	Accounting Degree	161	51.1	51.3	96.2
	Others	12	3.8	3.8	100.0
	Total	314	99.7	100.0	
Missing	System	1	.3		
Total		315	100.0		

### Working Environment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Big Five	126	40.0	40.1	40.1
	Non Big Five	44	14.0	14.0	54.1
	Listed Company	33	10.5	10.5	64.6
	Non Listed Company	27	8.6	8.6	73.2
	Private Institution	11	3.5	3.5	76.8
	Public Institution	10	3.2	3.2	79.9
	Public Sector	63	20.0	20.1	100.0
	Total	314	99.7	100.0	
Missing	System	1	.3		
Total		315	100.0		



### **4.3. FACTOR ANALYSIS**

Factor analysis attempts to identify underlying variables or factors, that explain the pattern of correlations within a set of observed variables. It is often used in data reduction to identify a small number of factors that explain most of the variance observed in a much larger number of manifest variables. Factor analysis can also be used to generate hypotheses regarding causal mechanisms or to screen variables for subsequent analysis. Since the questionnaire contains 26 questions and 7 demographic variables, factor analysis helps to reduce vast number of variables to a meaningful, interpretable and manageable set of factors. An attempt was made using the Kaiser-Meyer-Olkin and Bartlett's test, to evaluate if there were some specific factors that could explain the response to all the questions i.e. the opinions expressed in a group of questions is very closely related

The closer the measure of sampling adequacy is to 1.0, the greater is the chances that some factors can explain the whole range of responses.

#### **SECTION A: ACCOUNTING EDUCATION**

This section of the questionnaire contains essentially 12 questions. Table 4.3 shows that the Kaiser-Meyer-Olkin and Bartlett's test shows that 3 factors are able to achieve a measure of sampling adequacy of 0.8 and they explain 58% of the responses.

**TABLE 4.3 KMO and Bartlett's Test for Accounting Education**

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.842
Bartlett's Test of Sphericity	Approx. Chi-Square	1219.155
	df	66
	Sig.	.000

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.509	37.575	37.575	4.509	37.575	37.575	2.836	23.635	23.635
2	1.284	10.700	48.275	1.284	10.700	48.275	2.794	23.287	46.922
3	1.171	9.762	58.036	1.171	9.762	58.036	1.334	11.115	58.036
4	.871	7.257	65.293						
5	.822	6.851	72.144						
6	.744	6.198	78.343						
7	.690	5.751	84.093						
8	.506	4.217	88.310						
9	.486	4.051	92.361						
10	.383	3.193	95.555						
11	.308	2.571	98.125						
12	.225	1.875	100.000						

Extraction Method: Principal Component Analysis.

The three factors (components) as shown in Table 4.4, have been categorized as

Factor 1      Multi-disciplinary Skills

Factor 2      Communication Skills

Factor 3      Accounting Education.

**TABLE 4.4. Factor Table for Accounting Education****Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Multi Disciplinary Skills	.797		
Expansion of University Education	.758		
Use of Problem Solving Techniques	.710		
Students Capacity of Inquiry	.539		
IT in Accounting Curriculum	.503		
Practical Training	.486		
Public Relations		.855	
Entrepreneurial Skills		.846	
Efficient Strategisers		.811	
Effective Communication		.603	
Adequacy of Education Program			.751
Prerequisite are sufficient			.694

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

**SECTION B: EDUCATION FOR GRADUATES**

This section of the questionnaire contains essentially 10 questions. Table 4.5 shows that the Kaiser-Meyer-Olkin and Bartlett's test shows that 4 factors are able to achieve a measure of sampling adequacy of 0.7 and they explain 64% of the responses.

**TABLE 4.5. KMO and Bartlett's Test for Education for Graduates****KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.668
Bartlett's Test of Sphericity	Approx. Chi-Square	515.393
	df	45
	Sig.	.000

### Total Variance Explained

Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
25.662	25.662	25.662	2.390	23.898	23.898			
14.680	14.680	40.342	1.402	14.024	37.923			
12.363	12.363	52.705	1.315	13.149	51.071			
11.512	11.512	64.217	1.315	13.145	64.217			
9.066	9.066	73.283						
6.837	6.837	80.120						
6.457	6.457	86.576						
5.362	5.362	91.938						
4.901	4.901	96.839						
3.161	3.161	100.000						

Method: Principal Component Analysis.

Factors as shown in Table 4.6, have been categorized as

Assessment of Competency

Globalization

Continuing Professional Education

Qualifying Examination

### Factor Table for Education for Graduates

#### Rotated Component Matrix<sup>a</sup>

	Component			
	1	2	3	4
Specific Areas	.869			
require Assessment of Competence	.747			
of Competency Tests	.743			
for Competency Examination	.702			
equipped to Meet Realities		.824		
ready for Globalization		.768		
Accounting & non Accounting Graduates			.670	
red			.621	
Exam after QE				.854
after 3 years Experience				.676

Method: Principal Component Analysis.

Method: Varimax with Kaiser Normalization.

Iteration converged in 6 iterations.

## SECTION C: SIGNIFICANCE OF A SINGLE DESIGNATION

This section of the questionnaire contains essentially 4 questions. Table 4.7 shows that the Kaiser-Meyer-Olkin and Bartlett's test shows that one factor is able to achieve a measure of sampling adequacy of 0.66 and they explain 48% of the responses.

**TABLE 4.7. KMO and Bartlett's Test for Significance Of A Single Designation**

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.655
Bartlett's Test of Sphericity	Approx. Chi-Square	159.987
	df	6
	Sig.	.000

### Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.910	47.740	47.740	1.910	47.740	47.740
2	.951	23.767	71.507			
3	.611	15.272	86.778			
4	.529	13.222	100.000			

Extraction Method: Principal Component Analysis.

The factor as shown in Table 4.8, has been categorized as "CA Designation "

**TABLE 4.8. Factor Table for Significance Of A Single Designation**

Component Matrix <sup>a</sup>	
	Component
	1
Effects of WTO & AFTA	.804
Esteem of CAs in Malaysia	.757
Common Designation of CA	.647
Need for Foreign CPD	.521

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

#### **4.4. BIVARIATE ANALYSIS**

A one-way analysis of variances (ANOVA) helps to examine the significant mean differences between many groups on a ratio scaled dependent variable. The technique is one-way because it deals with only one independent variable, although several levels of the variable may be used.

##### **4.4.1. GENDER**

**Objective:** To determine whether there is a significant difference between the responses from males and females.

**Table 4.9. Results of the oneway ANOVA procedure performed**

Descriptives				
		N	Mean	Std. Deviyy
Multi-disciplinary Skills	Male	136	5.52E-02	.8937427
	Female	166	-4.5E-02	1.0798770
	Total	302	8.82E-17	1.0000000
Communication Skills	Male	136	2.09E-02	1.0481812
	Female	166	-1.7E-02	.9615946
	Total	302	1.18E-16	1.0000000
Accounting Education	Male	136	2.95E-02	1.1435209
	Female	166	-2.4E-02	.8677844
	Total	302	2.12E-16	1.0000000
Assesment of Competency	Male	136	5.40E-02	1.0780162
	Female	168	-4.4E-02	.9330756
	Total	304	6.14E-17	1.0000000
Globalization	Male	136	8.75E-02	1.1387337
	Female	168	-7.1E-02	.8688142
	Total	304	-5.8E-18	1.0000000
CPD	Male	136	1.56E-02	1.0602418
	Female	168	-1.3E-02	.9514711
	Total	304	-2.2E-16	1.0000000
QE	Male	136	1.14E-02	1.0222265
	Female	168	-9.2E-03	.9846131
	Total	304	-1.2E-16	1.0000000
CA Designation	Male	138	-5.1E-02	1.0670198
	Female	165	4.23E-02	.9414999
	Total	303	1.29E-16	1.0000000

**Test of Homogeneity of Variances**

	Levene Statistic	df1	df2	Sig.
Multi-disciplinary Skills	1.149	1	300	.285
Communication Skills	.575	1	300	.449
Accounting Education	9.038	1	300	.003
Assesment of Competency	.163	1	302	.687
Globalization	8.464	1	302	.004
CPD	1.434	1	302	.232
QE	.004	1	302	.953
CA Designation	2.471	1	301	.117

# ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Multi-disciplinary Skills	Between Groups	.753	1	.753	.752	.386
	Within Groups	300.247	300	1.001		
	Total	301.000	301			
Communication Skills	Between Groups	.108	1	.108	.108	.743
	Within Groups	300.892	300	1.003		
	Total	301.000	301			
Accounting Education	Between Groups	.215	1	.215	.215	.643
	Within Groups	300.785	300	1.003		
	Total	301.000	301			
Assesment of Competency	Between Groups	.719	1	.719	.718	.397
	Within Groups	302.281	302	1.001		
	Total	303.000	303			
Globalization	Between Groups	1.886	1	1.886	1.891	.170
	Within Groups	301.114	302	.997		
	Total	303.000	303			
CPD	Between Groups	6.016E-02	1	6.016E-02	.060	.807
	Within Groups	302.940	302	1.003		
	Total	303.000	303			
QE	Between Groups	3.183E-02	1	3.183E-02	.032	.859
	Within Groups	302.968	302	1.003		
	Total	303.000	303			
CA Designation	Between Groups	.648	1	.648	.647	.422
	Within Groups	301.352	301	1.001		
	Total	302.000	302			

Conclusion: Since the p-value is > than 0.05 for all the variables,

there is no significant differences between opinions

expressed by male and female respondents

## 4.4.2. MIA MEMBERSHIP

**Objective:** To determine whether there is a significant difference between

the responses from members and non-members of MIA.



**Table 4.10. Results of the oneway ANOVA procedure performed**

**Descriptives**

		N	Mean	Std. Deviation
Multi-disciplinary Skills	No	210	-6.7E-02	1.0057840
	Yes	92	.1518331	.9751035
	Total	302	8.23E-17	1.0000000
Communication Skills	No	210	5.17E-02	.9437762
	Yes	92	-.1179313	1.1143461
	Total	302	1.35E-16	1.0000000
Accounting Education	No	210	-8.9E-02	.9385429
	Yes	92	.2038667	1.1064291
	Total	302	2.00E-16	1.0000000
Assesment of Competency	No	212	3.36E-02	.9415764
	Yes	92	-7.8E-02	1.1248512
	Total	304	1.31E-16	1.0000000
Globalization	No	212	6.52E-02	.9517177
	Yes	92	-.1503403	1.0939468
	Total	304	-4.1E-17	1.0000000
CPD	No	212	.1053766	.8053128
	Yes	92	-.2428244	1.3192642
	Total	304	-2.1E-16	1.0000000
QE	No	212	-3.3E-02	.9416211
	Yes	92	7.51E-02	1.1249997
	Total	304	-1.5E-16	1.0000000
CA Designation	No	214	-3.7E-02	1.0358205
	Yes	89	8.91E-02	.9074639
	Total	303	1.06E-16	1.0000000

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Multi-disciplinary Skills	Between Groups	3.050	1	3.050	3.071	.081
	Within Groups	297.950	300	.993		
	Total	301.000	301			
Communication Skills	Between Groups	1.840	1	1.840	1.845	.175
	Within Groups	299.160	300	.997		
	Total	301.000	301			
Accounting Education	Between Groups	5.499	1	5.499	5.583	.019
	Within Groups	295.501	300	.985		
	Total	301.000	301			
Assesment of Competency	Between Groups	.793	1	.793	.793	.374
	Within Groups	302.207	302	1.001		
	Total	303.000	303			
Globalization	Between Groups	2.982	1	2.982	3.001	.084
	Within Groups	300.018	302	.993		
	Total	303.000	303			
CPD	Between Groups	7.779	1	7.779	7.957	.005
	Within Groups	295.221	302	.978		
	Total	303.000	303			
QE	Between Groups	.745	1	.745	.744	.389
	Within Groups	302.255	302	1.001		
	Total	303.000	303			
CA Designation	Between Groups	1.000	1	1.000	1.000	.318
	Within Groups	301.000	301	1.000		
	Total	302.000	302			

Results: The p-value is < than 0.05 for accounting education and sufficiency of CPD but > than 0.05 for the other variables.

For accounting education, the MIA members had a significantly higher score than non-members

For sufficiency of CPD, the non-members had a significantly higher score than MIA members.

To confirm further the above findings are correct, we use the Levene Test of Homogeneity of Variances, the results of which are shown on Table 4.11.

**TABLE 4.11: Levene Test**

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Multi-disciplinary Skills	.584	1	300	.445
Communication Skills	1.896	1	300	.170
Accounting Education	1.301	1	300	.255
Assesment of Competency	2.646	1	302	.105
Globalization	2.325	1	302	.128
CPD	12.779	1	302	.000
QE	2.544	1	302	.112
CA Designation	4.318	1	301	.039

Results: As seen from the table the p-value is valid ( $>$  than 0.05) for accounting education but not for sufficiency of CPD. Therefore to confirm the significant difference in sufficiency of CPD, we perform the non-parametric test (Kruskal-Wallis Test).

**TABLE 4.12: Kruskal-Wallis Test**

Test Statistics <sup>a,b</sup>			
	Chi-Square	df	Asymp. Sig.
Multi-disciplinary Skills	2.097	1	.148
Communication Skills	.820	1	.365
Accounting Education	2.519	1	.112
Assesment of Competency	.748	1	.387
Globalization	2.517	1	.113
CPD	5.532	1	.019
QE	2.310	1	.129
CA Designation	.576	1	.448

a. Kruskal Wallis Test

b. Grouping Variable: MIA Membership

The results for the Kruskal-Wallis Test are reflected in Table 4.12. The p-value of the test is 0.19, which confirms that there is a significant difference between members and non-members in relation to the sufficiency of CPD programmes to maintain and improve the professional competence of accountants. This can be construed as members of MIA are either satisfied or dissatisfied with the CPD programmes provided whilst the non-members are neutral since they have not experienced CPD programmes. This provides further support for this study which seeks to ascertain the need for an assessment of competency and also opens an area for further research.

#### **4.4.3. PROFESSIONAL AFFILIATION / QUALIFICATION**

Objective: To determine whether there is a significant difference between the respondents from diverse professional / academic backgrounds.

Table 4.13. Results of the oneway ANOVA procedure performed

**TABLE 4.13 Results of the oneway ANOVA procedure performed**

Descriptives		N	Mean	Std. Deviation
Multi-disciplinary Skills	Chartered Accountant	9	.3415377	.7504694
	ACCA	65	-.2616136	1.0689762
	CIMA	10	.4593984	1.3312428
	CPA	51	3.40E-02	.8221013
	Accounting Degree	155	5.68E-02	1.0201582
	Others	12	-.1001603	.6781444
	Total	302	9.71E-17	1.0000000
Communication Skills	Chartered Accountant	9	1.06E-02	.7593287
	ACCA	65	.2371029	.9607874
	CIMA	10	-.7395618	1.4421517
	CPA	51	-.2066928	.7344422
	Accounting Degree	155	3.89E-02	1.0573952
	Others	12	-.3004119	.7870089
	Total	302	1.59E-16	1.0000000
Accounting Education	Chartered Accountant	9	-.1084263	1.2837345
	ACCA	65	-.1316713	.8554134
	CIMA	10	.5546777	1.0550804
	CPA	51	-.7.0E-02	.9912118
	Accounting Degree	155	7.62E-02	1.0281856
	Others	12	-.3540054	1.0476721
	Total	302	2.59E-16	1.0000000
Assesment of Competency	Chartered Accountant	9	.4601569	1.1883741
	ACCA	67	6.12E-02	1.0152510
	CIMA	9	-.2.5E-02	1.2865327
	CPA	53	-.7.8E-02	.9565972
	Accounting Degree	154	-.3.4E-02	1.0087188
	Others	12	.1185037	.6280637
	Total	304	6.72E-17	1.0000000
Globalization	Chartered Accountant	9	-.2639995	.8133690
	ACCA	67	-.5.0E-02	1.0143895
	CIMA	9	.4922490	1.2399198
	CPA	53	-.1041127	.9184723
	Accounting Degree	154	4.82E-02	1.0403071
	Others	12	-.5.3E-02	.6109317
	Total	304	-.1.5E-17	1.0000000
CPD	Chartered Accountant	9	-.1798457	1.5340107
	ACCA	67	-.8.2E-02	1.2031276
	CIMA	9	-.7057310	1.9656354
	CPA	53	-.1705578	.8844075
	Accounting Degree	154	.1021605	.8108715
	Others	12	.5625210	.6244376
	Total	304	-.2.0E-16	1.0000000
QE	Chartered Accountant	9	-.1684464	1.2180926
	ACCA	67	-.1053922	1.0449188
	CIMA	9	.1062694	1.0526125
	CPA	53	-.4.3E-03	.9734590
	Accounting Degree	154	3.10E-02	1.0054349
	Others	12	.2564101	.6194353
	Total	304	-.1.3E-16	1.0000000
CA Designation	Chartered Accountant	9	-.1329664	1.1592215
	ACCA	66	-.8.6E-02	.9346246
	CIMA	10	.3080817	.6381399
	CPA	51	.1063695	.8967038
	Accounting Degree	155	-.3.3E-02	1.0834820
	Others	12	.2859208	.7684911
	Total	303	1.25E-16	1.0000000

## ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Multi-disciplinary Skills	Between Groups	8.289	5	1.658	1.676	.140
	Within Groups	292.711	296	.989		
	Total	301.000	301			
Communication Skills	Between Groups	12.621	5	2.524	2.591	.026
	Within Groups	288.379	296	.974		
	Total	301.000	301			
Accounting Education	Between Groups	6.964	5	1.393	1.402	.223
	Within Groups	294.036	296	.993		
	Total	301.000	301			
Assesment of Competency	Between Groups	2.830	5	.566	.562	.729
	Within Groups	300.170	298	1.007		
	Total	303.000	303			
Globalization	Between Groups	3.940	5	.788	.785	.561
	Within Groups	299.060	298	1.004		
	Total	303.000	303			
CPD	Between Groups	12.167	5	2.433	2.493	.031
	Within Groups	290.833	298	.976		
	Total	303.000	303			
QE	Between Groups	2.039	5	.408	.404	.846
	Within Groups	300.961	298	1.010		
	Total	303.000	303			
CA Designation	Between Groups	3.320	5	.664	.660	.654
	Within Groups	298.680	297	1.006		
	Total	302.000	302			

Results: The p-value is < than 0.05 for communicational skills and sufficiency of CPD but > than 0.05 for the other variables, i.e. there are significant differences for these two factors. To confirm further we use the Levene Test of Homogeneity of Variances, the results of which are shown on Table 4.14.

TABLE 4.14: Levene Test

## Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Multi-disciplinary Skills	1.432	5	296	.213
Communication Skills	1.603	5	296	.159
Accounting Education	1.027	5	296	.402
Assesment of Competency	.970	5	298	.436
Globalization	.844	5	298	.520
CPD	5.070	5	298	.000
QE	.415	5	298	.838
CA Designation	2.611	5	297	.025

However the Levene Test of Homogeneity of Variances (Table 4.14) shows that the p-value for communicational skills is 0.159 but for sufficiency of CPD it is < than 0.05 thus necessitating further confirmation. This is achieved by performing the non-parametric test (Kruskal-Wallis Test) to confirm the difference between the groups for sufficiency of CPD..

**TABLE 4.15: Kruskal-Wallis Test**

Test Statistics <sup>a,b</sup>			
	Chi-Square	df	Asymp. Sig.
Multi-disciplinary Skills	8.825	5	.116
Communication Skills	13.862	5	.017
Accounting Education	7.219	5	.205
Assessment of Competency	2.211	5	.819
Globalization	5.176	5	.395
CPD	8.029	5	.155
QE	1.448	5	.919
CA Designation	2.121	5	.832

a. Kruskal Wallis Test

b. Grouping Variable: Qualification

The results for the Kruskal-Wallis Test are reflected in Table 4.15. The p-value of the test for sufficiency of CPD is 0.155 (i.e. > 0.05) therefore it does not show a significant difference for sufficiency of CPD. However for communicational skills, the p-value is 0.017, thus showing that there is a significant difference.

To further investigate which groups were different for communication skills, the Post Hoc Duncan's Test was performed. The results gave two sub groups.

**TABLE 4.16: Post Hoc Duncan's Test**

**Post Hoc Tests  
Homogeneous Subsets**

**Communication Skills**

Duncan<sup>a,b</sup>

Qualification	N	Subset for alpha = .05	
		1	2
CIMA	10	-.7395618	
Others	12	-.3004119	
CPA	51	-.2066928	
Chartered Accountant	9		1.06E-02
Accounting Degree	155		3.89E-02
ACCA	65		.2371029
Sig.		.128	.151

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 17.863.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

<b>Group A:</b>	<b>CIMA</b>	<b>Group B:</b>	<b>CHARTERED ACCOUNTANTS</b>
	<b>Others</b>		<b>ACCA</b>
	<b>CPA</b>		<b>ACCOUNTING DEGREE</b>

Group B seems to have a higher score compared to Group A i.e. indicating that they feel communication skills is an important facet of accounting education. This could be explained as Group B courses have a more specialised curriculum thus requiring extensive expression of thought in the fields of accounting theory and auditing. Thus candidates of this background have already acquired such skills.

**4.4.4. WORKING ENVIRONMENT**

Objective: To determine whether there is a significant difference between the respondents from different working environments.



**TABLE 4.17: Results of the oneway ANOVA procedure performed**

**Descriptives**

		N	Mean	Std. Deviation
Multi-disciplinary Skills	Big Five	119	-.1450253	1.1163342
	Non Big Five	41	-.1361553	.9369291
	Listed Company	33	-.1178321	.8862881
	Non Listed Company	25	8.68E-02	.9266924
	Private Institution	11	4.16E-02	.8099158
	Public Institution	10	.1480460	.7616291
	Public Sector	63	.3590720	.8893419
	Total	302	9.41E-17	1.0000000
Communication Skills	Big Five	119	.1272640	.9017115
	Non Big Five	41	.2748839	.8904791
	Listed Company	33	-.9.6E-02	.8210944
	Non Listed Company	25	-.6250980	1.0985093
	Private Institution	11	.1799843	1.4350423
	Public Institution	10	.3459481	1.3955959
	Public Sector	63	-.2074060	1.0284242
	Total	302	1.47E-16	1.0000000
Accounting Education	Big Five	119	-.1.3E-02	.8710487
	Non Big Five	41	-.1981371	.9536665
	Listed Company	33	6.12E-02	1.1082773
	Non Listed Company	25	-.2703201	1.1037139
	Private Institution	11	-.1572510	1.1573676
	Public Institution	10	-.5.9E-02	1.2837557
	Public Sector	63	.2636755	1.0632888
	Total	302	2.59E-16	1.0000000
Assesment of Competency	Big Five	121	-.8.4E-03	.8974423
	Non Big Five	43	7.89E-02	1.0043603
	Listed Company	30	-.9.9E-02	.9093994
	Non Listed Company	27	2.71E-03	1.1793303
	Private Institution	11	.3825317	.8217712
	Public Institution	10	-.1870431	1.1135509
	Public Sector	62	-.3.2E-02	1.1685806
	Total	304	8.47E-17	1.0000000
Globalization	Big Five	121	1.41E-02	1.0019382
	Non Big Five	43	-.1368837	.8224454
	Listed Company	30	.1383915	.7906381
	Non Listed Company	27	-.6.2E-02	.9921402
	Private Institution	11	-.2405480	1.4227847
	Public Institution	10	-.8.8E-02	1.0501303
	Public Sector	62	8.51E-02	1.1277637
	Total	304	-.1.2E-17	1.0000000
CPD	Big Five	121	.1805259	.7976724
	Non Big Five	43	-.2.5E-02	.9178454
	Listed Company	30	-.5366375	1.7927420
	Non Listed Company	27	-.1229875	.8419276
	Private Institution	11	-.8.9E-02	.9488366
	Public Institution	10	-.2.2E-02	.6507461
	Public Sector	62	-.1.5E-03	.9376738
	Total	304	-.2.4E-16	1.0000000
QE	Big Five	121	-.1152346	.9889052
	Non Big Five	43	.1462442	.9869301
	Listed Company	30	.3572163	1.1376195
	Non Listed Company	27	-.2080269	.9286739
	Private Institution	11	-.1695082	.9869680
	Public Institution	10	-.6.9E-02	.7830220
	Public Sector	62	8.24E-02	1.0544707
	Total	304	-.1.2E-16	1.0000000
CA Designation	Big Five	118	-.2.0E-02	.9789719
	Non Big Five	44	7.89E-02	1.0134707
	Listed Company	32	.2313656	.7734975
	Non Listed Company	26	4.76E-02	.9071363
	Private Institution	11	-.2514668	1.2171878
	Public Institution	10	-.2547782	1.3247536
	Public Sector	62	-.7.1E-02	1.0861024
	Total	303	1.35E-16	1.0000000

# ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Multi-disciplinary Skills	Between Groups	12.270	6	2.045	2.089	.054
	Within Groups	288.730	295	.979		
	Total	301.000	301			
Communication Skills	Between Groups	19.360	6	3.227	3.380	.003
	Within Groups	281.640	295	.955		
	Total	301.000	301			
Accounting Education	Between Groups	8.234	6	1.372	1.383	.221
	Within Groups	292.766	295	.992		
	Total	301.000	301			
Assesment of Competency	Between Groups	2.627	6	.438	.433	.857
	Within Groups	300.373	297	1.011		
	Total	303.000	303			
Globalization	Between Groups	2.653	6	.442	.437	.854
	Within Groups	300.347	297	1.011		
	Total	303.000	303			
CPD	Between Groups	13.175	6	2.196	2.250	.039
	Within Groups	289.825	297	.976		
	Total	303.000	303			
QE	Between Groups	8.307	6	1.385	1.395	.216
	Within Groups	294.693	297	.992		
	Total	303.000	303			
CA Designation	Between Groups	3.751	6	.625	.620	.714
	Within Groups	298.249	296	1.008		
	Total	302.000	302			

Results: The p-value is < than 0.05 for communicational skills and sufficiency of CPD but > than 0.05 for the other variables, i.e. there are significant differences for these two factors. To confirm further we use the Levene Test of Homogeneity of Variances, the results of which are shown on Table 4.18.

**TABLE 4.18: Levene Test****Test of Homogeneity of Variances**

	Levene Statistic	df1	df2	Sig.
Multi-disciplinary Skills	.694	6	295	.654
Communication Skills	1.877	6	295	.085
Accounting Education	1.604	6	295	.146
Assesment of Competency	1.225	6	297	.293
Globalization	2.230	6	297	.040
CPD	7.340	6	297	.000
QE	.491	6	297	.815
CA Designation	1.975	6	296	.069

However the Levene Test of Homogeneity of Variances (Table 4.18) shows that the p-value for communicational skills is 0.085 but for sufficiency of CPD it is < than 0.05 thus necessitating further confirmation. This is achieved by performing the non-parametric test (Kruskal-Wallis Test) to confirm the difference between the groups for sufficiency of CPD.

**TABLE 4.19 Kruskal-Wallis Test****Test Statistics<sup>a,b</sup>**

	Chi-Square	df	Asymp. Sig.
Multi-disciplinary Skills	12.587	6	.050
Communication Skills	19.908	6	.003
Accounting Education	6.995	6	.321
Assesment of Competency	3.283	6	.773
Globalization	2.445	6	.875
CPD	5.161	6	.523
QE	13.503	6	.036
CA Designation	2.159	6	.905

a. Kruskal Wallis Test

b. Grouping Variable: Working Environment

The results for the Kruskal-Wallis Test are reflected in Table 4.19. The p-value of the test for sufficiency of CPD is 0.523 (i.e.  $> 0.05$ ) therefore it does not show a significant difference for sufficiency of CPD. However for communicational skills, the p-value is 0.03, thus showing that there is a significant difference.

To further investigate which groups were different for communication skills, the Post Hoc Duncan's Test was performed. The results gave two sub groups.

**TABLE 4.19 Post Hoc Duncan's Test**

Descriptives			
Communication Skills			
	N	Mean	Std. Deviation
Big Five	119	.1272640	.9017115
Non Big Five	41	.2748839	.8904791
Listed Company	33	-.96E-02	.8210944
Non Listed Company	25	-.6250980	1.0985093
Private Institution	11	.1799843	1.4350423
Public Institution	10	.3459481	1.3955959
Public Sector	63	-.2074060	1.0264242
Total	302	1.47E-16	1.0000000

Communication Skills			
Duncan <sup>a,b</sup>			
Working Environment	N	Subset for alpha = .05	
		1	2
Non Listed Company	25	-.6250980	
Public Sector	63	-.2074060	
Listed Company	33	-.96E-02	
Big Five	119		.1272640
Private Institution	11		.1799843
Non Big Five	41		.2748839
Public Institution	10		.3459481
Sig.		.085	.097

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 22.589.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**Group A:****Non-listed companies****Public sector****Listed Companies****Group B:****Big five firms****Non Big Five firms****Private & Public Institutions**

Group B seems to have a higher score compared to Group A i.e. indicating that accountants in practice and the institutions of higher learning are of the opinion that communication skills is an important facet of accounting education. This could be because of the fact that accountants in public practice and the academia are required good communicational skills, the former, in the conduct of an audit or preparation of a tax advisory and the latter, in the conduct and delivery of lectures. In the commercial and public sectors reporting is relatively standardised. Of course a study on this has not been carried out nor has it been tested empirically, thus it provides

**4.4.5. PLACE OF OCCUPATION**

Objective: To determine whether there is a significant difference between the respondents from the different States of Malaysia .

**TABLE 4.21: Results of the oneway ANOVA procedure performed**

Descriptives		N	Mean	Std. Deviation
Multi-disciplinary Skills	Selangor	25	-.2921477	.9432491
	KL	182	.1328866	1.0173050
	Penang	51	-.2874691	.9257225
	Johor	21	-8.7E-02	1.1479805
	Others	23	-1.8E-02	.7803319
	Total	302	8.55E-17	1.0000000
Communication Skills	Selangor	25	3.22E-02	.8756555
	KL	182	-6.6E-02	.9998088
	Penang	51	-6.9E-02	1.0769402
	Johor	21	.2434444	1.0706155
	Others	23	.4142799	.8121263
	Total	302	1.76E-16	1.0000000
Accounting Education	Selangor	25	-.2631241	.9198073
	KL	182	5.81E-02	1.0626011
	Penang	51	-.1180669	.9503766
	Johor	21	-.1306802	.5875775
	Others	23	.2074206	.9499776
	Total	302	2.47E-16	1.0000000
Assesment of Competency	Selangor	26	-.1754138	.8175119
	KL	183	8.61E-02	1.0337579
	Penang	51	-6.8E-02	1.0362591
	Johor	22	-.1896305	.9601318
	Others	22	-.1625417	.8447350
	Total	304	8.18E-17	1.0000000
Globalization	Selangor	26	2.87E-02	.9586321
	KL	183	4.37E-02	.9655043
	Penang	51	-.2942874	.9068771
	Johor	22	.3334845	1.3348759
	Others	22	-4.9E-02	1.0809267
	Total	304	-2.3E-17	1.0000000
CPD	Selangor	26	.2685389	.7425837
	KL	183	-4.5E-02	1.1445438
	Penang	51	-6.7E-02	.7531704
	Johor	22	8.97E-02	.6011316
	Others	22	.1212861	.7519392
	Total	304	-1.7E-16	1.0000000
QE	Selangor	26	9.55E-03	.9632461
	KL	183	5.41E-02	1.0327981
	Penang	51	-.2399296	.9426526
	Johor	22	.3326888	.8875386
	Others	22	-.2381601	.9139169
	Total	304	-1.1E-16	1.0000000
CA Designation	Selangor	25	.1069138	.8328984
	KL	185	-2.5E-02	1.0260968
	Penang	49	7.50E-02	1.0159190
	Johor	21	-.3027749	.8656072
	Others	22	.1982675	1.0592632
	Total	302	-8.6E-04	1.0015482

#### Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Multi-disciplinary Skills	.993	4	297	.412
Communication Skills	.292	4	297	.883
Accounting Education	1.780	4	297	.133
Assesment of Competency	.481	4	299	.750
Globalization	1.957	4	299	.101
CPD	2.940	4	299	.021
QE	.816	4	299	.516
CA Designation	.836	4	297	.503

#### ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Multi-disciplinary Skills	Between Groups	9.727	4	2.432	2.479	.054
	Within Groups	291.273	297	.981		
	Total	301.000	301			
Communication Skills	Between Groups	6.242	4	1.561	1.572	.182
	Within Groups	294.758	297	.992		
	Total	301.000	301			
Accounting Education	Between Groups	4.404	4	1.101	1.103	.355
	Within Groups	296.596	297	.999		
	Total	301.000	301			
Assesment of Competency	Between Groups	3.761	4	.940	.939	.441
	Within Groups	299.239	299	1.001		
	Total	303.000	303			
Globalization	Between Groups	7.288	4	1.822	1.842	.121
	Within Groups	295.712	299	.989		
	Total	303.000	303			
CPD	Between Groups	2.972	4	.743	.741	.565
	Within Groups	300.028	299	1.003		
	Total	303.000	303			
QE	Between Groups	7.158	4	1.789	1.808	.127
	Within Groups	295.842	299	.989		
	Total	303.000	303			
CA Designation	Between Groups	3.466	4	.866	.862	.487
	Within Groups	298.467	297	1.005		
	Total	301.933	301			

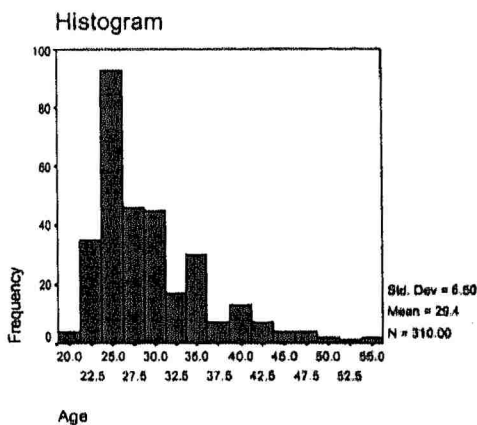
Conclusion: Since the p-value is > than 0.05 for all the variables, there is no significant differences between opinions expressed by respondents in the different States of Malaysia

# 4.5. ANALYSIS OF CONTINUOUS VARIABLES

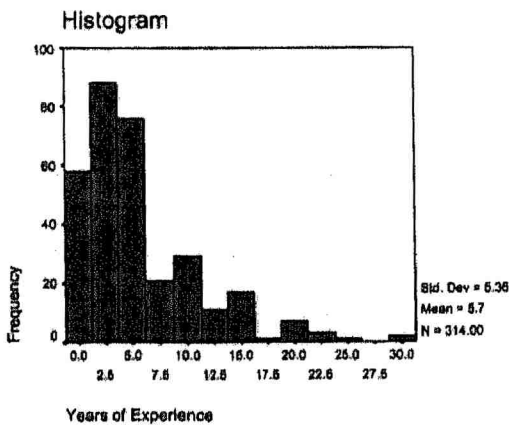
TABLE 4.22 Descriptives for Age & Experience

Descriptives			Statistic	Std. Error
Age	Mean		29.37	.37
	95% Confidence Interval for Mean	Lower Bound	28.65	
		Upper Bound	30.10	
	5% Trimmed Mean		28.78	
	Median		27.00	
	Variance		42.293	
	Std. Deviation		6.50	
	Minimum		21	
	Maximum		54	
	Range		33	
	Interquartile Range		8.00	
	Skewness		1.386	.138
	Kurtosis		1.809	.276
Years of Experience	Mean		5.67	.30
	95% Confidence Interval for Mean	Lower Bound	5.07	
		Upper Bound	6.26	
	5% Trimmed Mean		5.04	
	Median		4.00	
	Variance		28.760	
	Std. Deviation		5.36	
	Minimum		1	
	Maximum		30	
	Range		29	
	Interquartile Range		6.00	
	Skewness		1.779	.138
	Kurtosis		3.511	.274

Age



Years of Experience





#### **4.5.1 Age**

Table 4.22 shows that the age of the respondent range from 21 years to 54 years. The mean score is 29.37 years. Although the Histogram reflect some degree of skewness, it is advantageous in this study because, since we are discussing the future of accounting education, education for fresh graduates and a common designation for accountants, the most affected group would be the new accountants who are just entering or have just entered the profession. However the views of the thoroughbreds are equally important in that they are able to shed some light based on their own experiences and reveal the shortcomings and banes of the current system, so that required rectification can be done to improve the system.

#### **4.5.2 Experience**

The respondent's experience in accounting varies from one to thirty years as shown in Table 4.22. Again, although the Histogram reflects some degree of skewness, it is does not make the study redundant, because the median is still 4 years of experience, which is just over the 3 years experience prerequisite for attaining professional membership with the various professional accountancy bodies. The field of accountancy is constantly changing to meet the requirements of the dynamic business environment in which it participates. Thus the new blood in the industry would be able to portray more vividly the major difficulties faced in applying what they studied in universities and colleges whilst pursuing their accounting courses.

### 4.5.3 CORRELATION AND REGRESSION

TABLE 4.23: Correlation And Regression

Correlations		Age	Years of Experience
Age	Pearson Correlation		**
Years of Experience	Pearson Correlation	**	
Multi-disciplinary Skills	Pearson Correlation	.132*	.147*
	Sig. (2-tailed)	.022	.011
	N	299	302
Communication Skills	Pearson Correlation	-.128*	-.092
	Sig. (2-tailed)	.027	.112
	N	299	302
Accounting Education	Pearson Correlation	.091	.082
	Sig. (2-tailed)	.118	.153
	N	299	302
Assesment of Competency	Pearson Correlation	.020	.037
	Sig. (2-tailed)	.735	.522
	N	300	304
Globalization	Pearson Correlation	-.046	-.070
	Sig. (2-tailed)	.426	.224
	N	300	304
CPD	Pearson Correlation	-.041	-.041
	Sig. (2-tailed)	.479	.476
	N	300	304
QE	Pearson Correlation	.141*	.128*
	Sig. (2-tailed)	.014	.025
	N	300	304
CA Designation	Pearson Correlation	.104	.130*
	Sig. (2-tailed)	.072	.023
	N	300	303

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

### Regression

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.140 <sup>a</sup>	.020	.013	.9934330

a. Predictors: (Constant), Years of Experience, Age

### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.861	2	2.931	2.969	.053 <sup>a</sup>
	Residual	292.125	296	.987		
	Total	297.986	298			

a. Predictors: (Constant), Years of Experience, Age

b. Dependent Variable: Multi-disciplinary Skills

## Regression

### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.681	2	2.840	2.874	.058 <sup>a</sup>
	Residual	292.485	296	.988		
	Total	298.166	298			

a. Predictors: (Constant), Years of Experience, Age

b. Dependent Variable: Communication Skills

## Regression

### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.932	1	5.932	6.050	.014 <sup>a</sup>
	Residual	292.201	298	.981		
	Total	298.133	299			

a. Predictors: (Constant), Age

b. Dependent Variable: QE

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.653	.266		-2.456	.015
	Age	2.170E-02	.009	.141	2.460	.014

a. Dependent Variable: QE

## Regression

ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.661	1	4.661	4.743	.030 <sup>a</sup>
	Residual	292.897	298	.983		
	Total	297.558	299			

a. Predictors: (Constant), Years of Experience

b. Dependent Variable: CA Designation

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.142	.083		-1.699	.090
	Years of Experience	2.335E-02	.011	.125	2.178	.030

If the p-value is  $< 0.05$ , and the Pearson Correlation (R-value) is significant (i.e. denoted as \*), then there is an association between the 2 variables. Secondly we need to analyse whether the association is direct or inverse.

P-value  $<$  than 0.05 & a significant R-value is seen for:

### ☞ Multi disciplinary Skills

Older and more experienced respondents are of the view that accountants should have multi disciplinary skills. This is in line with prior studies conducted (Tho and Ho, 1992; Simyar, 1996 Ahmad Mustapha Ghazali, 1999; Susela, 2001).

### ☞ Communication Skills

Here there is an inverse association i.e. Older respondents do not emphasise communication skills as important for accountants, possibly because the "older generation" view good communication skills as a fundamental feature of being called "educated" as indicated in previous literature (Krzysztofik and Fein, 1988; Stanga and Ladd, 1990).

### ☞ Qualifying examination

Older and more experienced respondents are of the view that a qualifying examination is necessary because they have seen the decline in the standard of accounting education in comparison to the stringent requirements that had to be fulfilled before being conferred the esteemed designation of accountant, in their time. This is merely an opinion expressed and has not been empirically proven.

In the case of the regression analysis no major significant associations have been noted, thus nullifying the need for further analysis.

## 4.6. QUALITATIVE ANALYSIS

The results of written opinions expressed by respondents and the people interviewed have been summarised and categorically tabulated below.

	Accounting Education	Education for Graduates	Significance of a Single Designation
<b>Favourable</b>		<ul style="list-style-type: none"> <li>☞ Competency examination is the best way to improve the professional status of accountants – 3 years of experience is no guarantee of knowledge &amp; competence</li> <li>☞ CPD programmes are essential for accountants to keep a breast of recent developments in the profession</li> <li>☞ Qualifying examinations serve to synchronize accounting practice in the country and streamline the status of accountants in Malaysia.</li> <li>☞ 3 years experience may be only in one particular area or in a specific environment</li> </ul>	<ul style="list-style-type: none"> <li>☞ Quality of accountants is not something static – MIA should constantly strive to enhance the knowledge, competency &amp; professionalism of its members</li> <li>☞ A mandatory requirement will act as a coercive force for accountants to maintain / improve their professional competence</li> <li>☞ Serves as a prelude to give impetus to meet the challenges in the era of globalisation &amp; with WTO, AFTA etc. whereby Malaysian accountants will face strong competition from foreign accountants.</li> </ul>
<b>Unfavourable</b>	<ul style="list-style-type: none"> <li>☞ education today is too theoretical</li> <li>☞ lack of logical thinking &amp; critical analysis</li> <li>☞ not enough general knowledge coverage e.g. business strategy, financial planning. Option futures etc.</li> <li>☞ organisation of seminars,</li> </ul>	<ul style="list-style-type: none"> <li>☞ Unfair to recognize local graduates but not foreign graduates – no difference in quality observed</li> <li>☞ Competency is not easy to evaluate</li> <li>☞ Structure of the competency test should be carefully thought through to ensure that the objective is achieved</li> </ul>	<ul style="list-style-type: none"> <li>☞ A professional competency examination will not put Malaysian CAs on par with their foreign counterparts – It depends on the individual's efforts and determination</li> <li>☞ Quality, professionalism and competence cannot</li> </ul>

	<ul style="list-style-type: none"> <li>☞ use of case studies</li> <li>☞ industrial attachment / practical should be made compulsory</li> <li>☞ research &amp; independent study should be encouraged</li> <li>☞ IT content is insufficient i.e. students still lagging behind on IT skills</li> </ul>		<ul style="list-style-type: none"> <li>be evaluated</li> <li>☞ Single designation provides more room for accountants to "fool the public"</li> </ul>
--	---	--	--

In the area of accounting education, the opinions seem to confirm the characteristics portrayed in the normative model designed earlier in Chapter two. They support the stand adopted by prior researchers (Paten & Williams, 1990; Tho and Ho, 1992; Simyar, F, 1996; Nelson, Bailey & Nelson, 1998; Porter & Carr, 1999; S. Susela Devi, 2001), that the accounting education today is too theoretical, devoid of practical exposure acquired through the use case studies in lectures, organization of seminars and making vacation training or industrial attachments mandatory.

Likewise, there is a general consensus that a multi - stage competency examination should be enforced to provide the assurance of knowledge and professional competency, though its structure, content and implementation requires extensive thought and discussion. Mixed responses were notice with regard to the qualifying examination, with some determined that it would be the tool to synchronise accounting practice an streamline the status of accountant in Malaysia, whilst others hold the view that it is an inequitable move since there is

no study proving the superiority of graduates. **from** local universities. This should provide scope for future research .

The analysis of the data together with the **qualitative** analysis seems to support the view that a mandatory implementation of **the** competency examination will serve to consolidate and enhance the **technical** proficiency and professional competency of members of the accounting **fraternity**. This will make them less vulnerable to competitive threat of an influx **of** foreign accountant to Malaysia once the WTO, AFTA etc are in place. **However** employers of accountants interviewed expressed that the use of the **chartered** accountant designation does not equate Malaysia accountants to their **foreign** counterparts i.e. it depends on the individual's efforts and determination to **succeed**.

#### **4.7. CONCLUSION**

This chapter has indicated the statistical **tests** performed on the data collected and tabulation of opinions expressed and **the** results obtained together with the inferences drawn from these results. The **next chapter** will draw conclusions from the inferences made and proceed to make **recommendations**.