# THE DETERMINANTS OF MANAGEMENT ACCOUNTING PERFORMANCE AMONG DIPLOMA IN ACCOUNTANCY STUDENTS AT UITM KEDAH, UITM PERLIS AND UITM PERAK



# INSTITUT PENYELIDIKAN, PEMBANGUNAN DAN PENGKOMERSILAN UNIVERSITI TEKNOLOGI MARA 40450 SHAH ALAM, SELANGOR MALAYSIA

**PREPARED BY:** 

# NORAINI ABDUL RAHIM WAN FAIZAH WAN ABDULLAH MARZLIN MARZUKI SITI SALMAH ABU BAKAR

**30 SEPTEMBER 2005** 

Traceso Peoplet No Tel Gries62213 No ristos Ayos Uralingeas No Tel Griestinia	Sulet Kand Tenkh	100-UITMSP(HEA 9-19) 4 April 2004	Bahagian Ha! Ehwa Akadem
Alamantus enaut Persona Pentatu No Tel SA 450727	Puan Noraini Abd	ui Rahim	Per Surat 151 Per Surat 151 Ch400 Meroox
Rown with: Perimia Erranut No Ter Dir Kschlen	Pensyarah Universiti Teknolo	gi Mara	1937 Darth An an 1910 - 04-4562233 - 04-456000 - 2233
A unul Afri Motiames Pes Susam Makiuman No Tet Gi 4557 11	Cawangan Kedah		Ennas — Dura 562223 Ennas — tpheavidr@vecar im edu
Apigan Romal DiReg Sasteri Manuman No Tel (1443621133) (4	Push		
Feyatur Am No 18 Name 20842.ct			
Zuran Yakot Koranator 044 No Tari 04:4562065	CADANGAN PRO	JEK PENYELIDIKAN	
u Soor Yee Kamonaur (JPA No Tell G4 4557095 * Madya Fakhan Nonc Saman Nooronaur OPS	Merujuk kepada p pada dasamya t penyelidikan kump	erkara di atas, dimaklumkan bahawa lelah membuat persetujuan pada pulan puan yang bertajuk <u>'The Deter</u>	i Jawatankuasa Teknikal Penyelidikar 28 Mac 2004 meluluskan projek minant of Management Accounting
Zenarya Ahriad Goordinaan 248 No. Ter Gel 4522115	Performance Am Perak' dengan be	ong Diploma in Accountancy at L eberapa pindaan / penambahbaika	JiTM Kedah, UiTM Perlis and UiTM n Projek ini akan dijalankan secara
Manudi Marrood Koordinato D44 No. 1a: 04.4562118	berkumpulan dan penyelidikan yang	puan dengan ini bertanggungjawa diluluskan adalah selama satu (1)	36 sebagai Ketua Projek. Tempoh tahun mulai 1 April 2004 hingga 31
Mastar - Rod Hanc Koordinator D-JE No. Tel: 64-45(2119	Sebubuogan dag	ukan penyelibikan yang biluluskan at	uaan berjumian <b>Rm10,085.00</b> .
Kohd Sear: Yusor (C. Yusor) Fernesikas Pra-Jacar Sagana Austa Usong urgang No. Tel. – G4 4563120	Pembangunan dan	an ind, puan bolenan menghubi Pengkormesilan unluk urusan selan	jutnya jutnya
2.шая мечьог Коагандыг РРг не Тиг 04.456.2554	Sekian, Selamat M	aju Jaya	
uri wan Jahan Goronator Bahaso Iso: Tali: 04-45620as			
se Saman Abu Batar Naruraha RDC No Tel 04-4562076	Yang benar		
iour shakur "MSK ac Ter 0445c2123		2	
kukamas Fuad Abouten ocidenzar Usanzsaru Iolifer G4-4562074	PROF. MADYA DR	. ZALIHA HJ HUSSIN	
okan Moleh Lope Aman Shar cordinator e P.J. co Tel: 04-4562372	Pengarah Kampus		
ian <sup>5</sup> a zah Y. av. Add 2037 doratnalor UPENA c. Tail. 04-4562075	sk 1 Pe 2. Tin	nolong Naib Canselor (Penyelidikan) nbalan Pengarah Kampus HEA	
adertsan; Hchamed porishaad LSPP o. Tel. 64.4562122	3. Ko 4. Pei	ordinator UPP nolong Bendahari	
ny male, Calic Soronauz: Existent c. Tel: 64 2552144	5. Fai	l Peribadi	
06 Massan 2010Mar: P.I.C 2. Te : 24-4562218			
mas woranes Stata			

Tarikh30 September 2005No. Fail Projek

Penolong Naib Canselor (Penyelidikan) Institut Penyelidikan, Pembangunan dan Pengkomersilan Universiti Teknologi MARA 40450 Shah Alam Selangor Darul Ehsan

Y. Bhg. Profesor,

# LAPORAN AKHIR PENYELIDIKAN "THE DETERMINANTS OF MANAGEMENT ACCOUNTING PERFORMANCE AMONG DIPLOMA IN ACCOUNTANCY STUDENTS AT UITM KEDAH, UITM PERLIS AND UITM PERAK"

Merujuk kepada perkara di atas, bersama-sama ini disertakan tiga (3) naskah Laporan Akhir Penyelidikan bertajuk "The Determinants Of Management Accounting Performance Among Diploma In Accountancy Students At UiTM Kedah, UiTM Perlis And UiTM Perak"

Sekian. Terima kasih.

Yang benar

**NORAINI ABDUL RAHIM** Ketua Projek Penyelidikan

# **KUMPULAN PENYELIDIK**

NORAINI ABDUL RAHIM KETUA PROJEK

. . . . . . .

(Tandatangan)

WAN FAIZAH WAN ABDULLAH HLI . . . . . . . . . (Tandatangan)

MARZLIN MARZUKI AHLI

. . . . . . .

(Tandatangan)

SITI SALMAH ABU BAKAR AHLI

..... (Tandatangan)

# PENGHARGAAN

Setinggi-tinggi penghargaan dan ribuan terima kasih diucapkan kepada semua pihak yang terlibat secara langsung dan tidak langsung bagi membolehkan penyelidikan ini disiapkan dengan sempurna.

Di antaranya:

Prof. Madya Dr. Zaliha Haji Hussin (Pengarah Kampus UiTM Cawangan Kedah)

Prof. Madya Dr. Ahmad Redzuan Abdul Rahman (Pengarah Kampus UiTM Cawangan Perlis)

Prof Madya Dr. Abdullah Mohamad Said (Pengarah Kampus UiTM Cawangan Perak)

Puan Zauyah Abdul Razak (Timbalan Pengarah Kampus (HEA) UiTM Cawangan Kedah)

> Puan Siti Salmah Abu Bakar (Koordinator URDC UiTM Cawangan Kedah)

> > Prof. Madya Dr. Mohd Baidi Bahari

Semua Kakitangan Bahagian Hal Ehwal Akademik UiTM Cawangan Kedah, Perlis dan Perak

Mohd. Fauzi Abdul Ajis dan Muhammad Shuhaili Samsu

# TABLE OF CONTENTS:

Acknowledgement			V
Contents			vi
List of Tables			ix
List of Appendices			xi
Abstract			xii
CHAPTER 1	INTR	ODUCTION	
	1.1	Research Background	1
	1.2	Research Objectives	3
	1.3	Significance of the Study	4
	1.4	Scope of the Study	4
	1.5	Definition of Terms/Concepts	5
		Used in the Objectives	
	1.6	Theoretical Framework	6
	1.7	Research Questions	9
	1.8	Hypothesis	10
	1.9	Research Report Organization	12
CHAPTER 2	LITE	RATURE REVIEW	
	2.1	Background	14
	2.2	Grade History	14
	2.3	Demographic Background	21
CHAPTER 3	RESF	CARCH METHODOLOGY	
	3.1	Study Location	24
	3.2	Sample Selection	24
	3.3	Sample Size	25
	3.4	Data Collection	26
	3.5	Data Analysis	27
	3.6	Stepwise Multiple Regression	29
		Research Model	

CHAPTER 4

#### RESULTS

4.1	Demographic			31
4.2	Comparison	Between	the	32

- 4.2 Comparison Between the 3 Performance in Each Management Accounting Course of Students With and Without SPM Grade History and Their Demographic Background
- 4.3 The Association of Each SPM 36Subjects and The Performance ofEach Management AccountingCourse
- 4.4 The Joint Effects of SPM 41
  Subjects, Demographic
  Background and Prior
  Management Accounting Course
  on the Performance of Each
  Management Accounting Course.

**CHAPTER 5** 

#### DISCUSSION

- 5.1 Comparison of Management 45
  Accounting Performance Between
  Students Who Sat for Accounting.
  Additional Mathematics and
  Economics in Their SPM and
  Those Who Did Not Sit for the
  Subjects, School Location and
  Gender.
- 5.2 The Association of the SPM 48
   Subjects and the Performance of
   Each Management Accounting
   Course.

5.3	The	Joint	Effects	of	SPM	
	Subje	ects,	Γ	Demo	graphic	
	Back	ground	and	l	Prior	
	Mana	igement	Accoun	ting	on the	
	Perfo	rmance	in	the	Next	
	Mana	gement	Accounti	ng C	ourse.	

50

52

53

54

# CHAPTER 6 CONCLUSION, RECOMMENDATION AND LIMITATION 6.1 Conclusion 6.2 Recommendation 6.3 Limitation References

References	55
Appendix	60
Research Progress Schedule	86

# **LIST OF TABLES:**

- Table 3.1:Total Population According to Campuses and Parts
- Table 3.2:Samples According to Campus and Parts
- Table 4.1:Demographic Data
- Table 4.2:Performance of Each Management Accounting CoursesBetween Students With and Without SPM Accounting
- Table 4.3:Performance of Each Management Accounting CoursesBetween Students With and Without SPM AdditionalMathematics
- Table 4.4:Performance of Each Management Accounting CoursesBetween Students With and Without SPM Economics.
- Table 4.5:Performance of Each Management Accounting CoursesBetween Genders
- Table4.6:Performance of Each Management Accounting CoursesBetween Students from Different Location Of School.
- Table 4.7:Correlation Between SPM Accounting and the Performance of<br/>Each Management Accounting Courses.
- Table 4.8:Correlation Between SPM Additional Mathematics and thePerformance of Each Management Accounting Courses.
- Table 4.9:Correlation Between SPM Economics and the Performance of<br/>Each Management Accounting Courses.
- Table 4.10:Correlation Between SPM Mathematics and the Performance of<br/>Each Management Accounting Courses.

- Table 4.11:Correlation Between SPM English and the Performance of EachManagement Accounting Courses.
- Table 4.12:Effect of SPM Accounting, SPM Additional Mathematics, SPMEconomics, SPM Modern Mathematics, SPM English and<br/>Demographic Background on MAC210.
- Table 4.13:Effect Of SPM Accounting, SPM Additional Mathematics, SPMEconomics, SPM Modern Mathematics, SPM English,Demographic Background and MAC210 on MAC260Performance.

# **LIST OF APPENDICES:**

- APPENDIX A: Syllabus
- APPENDIX B: List of Municipal Councils in Malaysia
- APPENDIX C: Research Form
- APPENDIX D: Results

# ABSTRACT

The main objective of this study is to investigate the determinants that contribute to the success in the performances of Management Accounting 1 (MAC 210) and 2 (MAC 260) of Diploma in Accountancy students at the northern campuses of Universiti Teknologi MARA (Kedah, Perlis and Perak). All the data were obtained from the Academic Affairs Department at the respective campuses. t-test, Pearson Correlations and Stepwise Multiple Regression are used to analyze the data, Findings show that the performance of students with SPM Accounting and SPM Additional Mathematics are higher for all management accounting courses. Students with SPM Economics performed lower for both courses but the difference is insignificant for Management Accounting 2. The results also show that SPM Accounting, SPM Additional Mathematics, SPM Mathematics and SPM Economics except for SPM English have low positive correlations for MAC 210 and MAC 260. For joint effect, only SPM Economics shows positive influence on both MAC performance. Interestingly, MAC 210 has no effect on MAC 260.

# CHAPTER 1

### **INTRODUCTION**

# **1.1 RESEARCH BACKGROUND**

The manufacturing industry has become the main contributor to the growth of the Malaysian economy. The Economic Report 2004/2005 showed that the contribution of manufacturing sector to Gross Domestic Product was expected to grow from 30.8% in 2003 to 32.3% in 2005. With the increase in manufacturing, the demand for management accountants will also be high.

Besides working in the manufacturing industry, management accountants also work in many other different sectors such as banking and financial services, engineering, tourism and government. Their expertise is highly demanded because the management accountants are able to strategize in key areas of management.

The Chartered Institute of Management Accountants (CIMA) offers the Management Accounting qualification, which combines financial and management skills. CIMA is a recognized qualification and it is based in the

1

United Kingdom. Malaysia is one of its divisions in 156 countries (Lan, 2000/2001). Besides CIMA, there are many other public and private universities such as Universiti Teknologi MARA (UiTM) offering the accounting programme. One of the programmes offered by UiTM which acts as a feeder to CIMA is the Diploma in Accountancy (DIA). The DIA graduates may pursue their studies for a Bachelor in Accountancy (BACC) or other accounting professional programmes such as CIMA and the Association of Chartered Certified Accountant (ACCA).

In order to pursue the CIMA programme and to be a management accountant, the DIA students must get good results in management accounting papers. There are two management accounting courses in the DIA programme at UiTM, which are Introduction to Cost and Management Accounting (MAC210) and Basic Management Accounting (MAC260). Normally, the failure rates for these two courses at UiTM Kedah are around 15% to 25%. This motivated the researchers to study the determinants that influence the performance of these two management accounting courses.

Most prior studies have shown that the students' academic background affects their performance in financial accounting courses. However, there were very few studies conducted on the determinants that affect the students' performance in management accounting courses. The lack of research in this area suggests that an investigation should be taken to determine the factors that affect the students' performance. Therefore, the factor to be focused is the academic background. which is the Sijil Pelajaran Malaysia (SPM) results. The entry requirement for this programme requires candidates to pass with credit in Modern Mathematics. English and three other subjects. This leads to a situation where students have slight variations in their academic background such as having taken Accounting, Additional Mathematics and Economics.

# **1.2 RESEARCH OBJECTIVES**

The main objective of this study was to identify and determine the significant factors that influence the DIA students' performance in management accounting courses at UiTM.

The other objectives of the research were:

- 1.2.1 To look at the effects on management accounting performance between students who have taken and students who have not taken each SPM subject (Accounting, Additional Mathematics and Economics) and their demographic background.
- 1.2.2 To determine the correlations between the performance in each SPM subject (Accounting, Additional Mathematics, Economics, Modern Mathematics and English) and the performance of the students in management accounting courses.

1.2.3 To look at the joint effects of SPM subjects (Accounting, Additional Mathematics, Economics, Modern Mathematics and English), demographic factors and prior management accounting course.

# **1.3 SIGNIFICANCE OF THE STUDY**

This study could be of importance to the accounting profession particularly in the area of management accounting because most of the previous studies on accounting performance seldom focus on management accounting. Besides, the results of this study will benefit the lecturers by increasing their understanding of the differential performance among students and in evaluating new developments in the teaching of management accounting courses. The findings also could help the school students in evaluating the suitability of pursuing a DIA programme because the management accounting is an important course in the programme.

#### **1.4 SCOPE OF THE STUDY**

This is a limited study which was conducted on students pursuing the DIA programme at UiTM Kedah, UiTM Perlis and UiTM Perak. The populations were DIA students in parts 5, 6, 7, 8 in the November 2002 – April 2003 semester, who had completed MAC 210 and MAC 260.

# 1.5 DEFINITION OF THE TERMS/CONCEPTS USED IN THE OBJECTIVES

MAC 210 is defined as an introductory course and MAC 260 is defined as an intermediate course. MAC 210 - Introduction to Cost and Management Accounting covers the following topics:

- Introduction to Cost Accounting
- Material
- Labour
- Overheads
- Job and Batch Costing
- Contract Costing
- Process Costing

MAC 260 - Basic Management Accounting covers the following topics:

- Introduction to Management Accounting
- Marginal and Absorption Costing
- Cost Volume Profit
- Budgeting
- Decision Making
- Standard Costing and Variance

#### 1.5.1 Dependent variables

Student performance in each management accounting course.

#### 1.5.2 Independent variables:

1.5.2.1	Academic	Background
---------	----------	------------

1.5.2.1.1	SPM Accounting
1.5.2.1.2	SPM Additional Mathematics
1.5.2.1.3	SPM Economics
1.5.2.1.4	SPM Modern Mathematics
1.5.2.1.5	SPM English
1.5.2.1.6	Prior management accounting course at UiTM

- 1.5.2.2 Demographic background
  - 1.5.2.2.1 Gender (male and female)
  - 1.5.2.2.2 School location (urban and rural)

Schools located in municipal councils are considered as urban schools while schools located outside the municipal councils are considered as rural schools. This is based on the definition given by the Malaysian Education Department. The list of the municipal councils is given in Appendix A.

#### **1.6 THEORETICAL FRAMEWORK**

1.6.1 The comparison between students who have taken and those who have not taken each SPM subject (Accounting, Additional Mathematics and

Economics) and their demographic background with student performance in management accounting courses.



Figure: 1.1

1.6.2 The correlation between the performance in each SPM subject (Accounting, Additional Mathematics, Economics, Modern Mathematics and English), demographic background and the students' performance in management accounting courses.



Figure: 1.2

1.6.3 The joint effects of SPM subjects (Accounting, Additional Mathematics, Economics, Modern Mathematics and English), and demographic background on the performance in MAC 210.



Figure: 1.3

1.6.4 The joint effect of SPM subject (Accounting, Additional Mathematics.Economics, Modern Mathematics and English), demographic background and the performance in MAC 210 on the student performance in MAC 260.



Figure 1.4

# **1.7 RESEARCH QUESTIONS**

1.7.1 Do students who have taken Accounting, Additional Mathematics, and Economics in SPM perform differently in each management accounting course from those students who have not taken the subjects?

- 1.7.2 Do the demographic factors (gender and school location) affect the students' performance in each management accounting course?
- 1.7.3 Does the performance in each SPM subject (Accounting, Additional Mathematics, Economics, Modern Mathematics and English) correlate with the student performance in each management accounting course?
- 1.7.4 Does the academic background at SPM level (Accounting, Additional Mathematics, Economics, Modern Mathematics and English), prior management accounting course and demographic background jointly affect the student performance in management accounting courses?

# **1.8 HYPOTHESES**

- HO<sub>1</sub> : There is no significant difference in the performance of each management accounting course between students who have taken and students who have not taken SPM Accounting.
- HO<sub>2</sub> : There is no significant difference in the performance of each management accounting course between students who have taken and students who have not taken SPM Additional Mathematics.

- HO<sub>3</sub> : There is no significant difference in the performance of each management accounting course between students who have taken and students who have not taken SPM Economics.
- HO<sub>4</sub> : There is no significant difference between gender on the performance in each management accounting course.
- HO<sub>5</sub> : There is no significant difference in each management accounting course performance between school locations.
- HO<sub>6</sub> : There is no correlation between SPM Accounting and the performance in each management accounting course.
- HO<sub>7</sub> : There is no correlation between SPM Additional Mathematics performance in each management accounting course.
- HO<sub>8</sub> : There is no correlation between SPM Economics and the performance in each management accounting course.
- HO<sub>9</sub> : There is no correlation between SPM Modern Mathematics and the performance in each management accounting course.

- $HO_{10}$  : There is no correlation between SPM English and the performance in each management accounting course.
- HO<sub>11</sub> : SPM Accounting, SPM Additional Mathematics, SPM Economics, SPM Modern Mathematics, SPM English and demographic background have no significant effect on MAC 210 performance.
- H0<sub>12</sub> : SPM Accounting, SPM Additional Mathematics, SPM Economics,
   SPM Modern Mathematics, SPM English, demographic
   background and MAC 210 have no significant effect on MAC 260
   performance.

# **1.9 RESEARCH REPORT ORGANISATION**

The report consists of five chapters. Chapter One highlights the research background where the objectives, significance of the project, definition of the terms used, scope of the project, theoretical framework, research questions and hypotheses of the research are discussed. The literature review is presented in Chapter Two. This chapter discusses previous reports related to the factors that influence students' performance in accounting courses. The following chapter discusses on the research methodology. It elaborates on the technique for collecting data, data sampling, and the method for analyzing data. Chapter Four focuses on the research findings. Tables and charts are used appropriately to facilitate understanding of the data. The discussions of the findings are covered in Chapter Five. The last chapter presents the conclusion and limitation of the research. This research report also suggests recommendations for further improvement in the future.

#### CHAPTER 2

### LITERATURE REVIEW

#### 2.1 BACKGROUND

There are several prior studies that have been conducted on students' performance in accounting courses. The studies found that the students' performance can be influenced by many factors. These factors include aptitude, motivation, effort, gender, group or team study involvement and previous academic achievement (Williams, Cheng, Lim & Yow, 1995).

# 2.2 GRADE HISTORY

In Malaysia, a study by Lai Mooi Tho (1994) at University of Malaya found that three academic factors, specifically, high school accounting, mathematics and economics, are important predictors of performance in a first-level tertiary accounting course. The academic courses to be focused on by the researchers in this study are as follows:

#### 2.2.1 Accounting

Earlier studies showed that previous exposure to bookkeeping and performances in tertiary introductory accounting courses have a positive association (Bergin 1983). This result is supported by Gul and Fong (1993), Auyeung and Sands (1994) and Lai Mooi Tho (1994). In Malaysia, a study done by Lai Mooi Tho (1994) revealed that students who took STPM Accounting do better in their first year accounting examination (which consists of 30 percent management accounting topics) than those who did not take the subject. The results indicate that the performance in accounting and STPM Accounting is positively correlated

Williams et. al. (1995) showed that studying bookkeeping courses at high school or any equivalent level may help students in initial accounting courses (Financial Accounting I and Cost and Management Accounting I), but it is not significant for attaining good performance in higher level accounting courses (Financial Accounting II and Cost and Management Accounting II). The Performance in initial accounting courses (Financial Accounting I and Cost and Management Accounting I) is significantly positively correlated with the performance in second year accounting II). The study is supported by Hill. Stratton and Edwards (1996). There is a strong positive relationship between students' performance in the first two accounting courses and that the fundamentals of bookkeeping studied in the first course are significant to the second accounting course (Accounting II which includes parts of management accounting topics) performance. A study by Didia and Hasnat (1998) showed that good performance in accounting enhances performance in the Introductory Finance course.

There are a few research that revealed contradictory results from the above studies. Keef and Roush (1988) studied the effect of performance in the three segments of accounting, which are Financial Accounting, Financial Management and Management Accounting. He found that the level of previous study in accounting had no effect on performance in the course as a whole (p=0.63) or in the three segments of Financial Accounting (p=0.76), Financial Management (p=0.22) and Management Accounting (p=0.72). These results are in agreement with the prior studies by Baldwin and Howe (1982) and Mitchell (1985).

Bartlett. Peel and Pendlebury (1993) who used univariate analysis in their study found that prior study of accounting (at 'A' or 'O' level) did not appear to confer any significant advantage on students in their first year or final year examination in Financial Accounting and Management Accounting even though it shows a significant relationship with performance in the initial test.

16

Doran, Bouillon and Smith (1991) used multiple regression methodology to assess the relative importance of various factors in predicting students' performance in Accounting Principle I (Financial Accounting) and Accounting Principle II (Financial Accounting and Management Accounting). The result suggests that high school bookkeeping appears to benefit only in studying five to six chapters of Accounting Principle I.

#### 2.2.2 Mathematics

Studies by Roy and Macneill (1967) and Clark and Sweeney (1985) (as cited in Gist and Goedde, 1996), found that mathematics and calculus are essential areas of study for accountants. A few studies have examined the relationship between mathematics and the performance of students in Accounting. Gul and Fong (1993) and Wan Faizah, Noraini, Siti Salmah, Marzlin and Wan Zulkipli (2005) found that previous knowledge of mathematics have positive and significant effects on student performance in introductory accounting courses. Eskew and Faley (1988) identified that the students with more university study hours in mathematics and statistics perform better than the other students in first year accounting.

According to Lai Mooi Tho (1994), students who have sat for STPM Mathematics perform better than those who have not in the compulsory Introductory Accounting course at University of Malaya which examines 70% on financial accounting and 30% on management accounting.

Williams et al. (1995) found that basic mathematics course at the 'O' level and mathematics course at the 'A' level are the significant predictors in the students' performance which is a measure of aggregate performance over the two first year accounting courses, namely Financial Accounting 1 and Cost and Management Accounting 1. Their studies also identified that mathematics is significantly and positively correlated with students' aggregate performance over the two second year accounting courses, i.e., Financial Accounting 2 and Cost and Management Accounting 2. Hill et al. (1996) stated that there is a significant positive relationship between mathematics skill and the students' performance in the second introductory accounting course which covers equally financial and management accounting topics. Keef (1988) reported that the level of previous study in mathematics did not have an important influence on the first accounting course as a whole. However, the study showed that mathematics has an important influence on the management accounting section in the final examinations as the course tested the students 50% on management accounting, 25% on financial accounting and 25% on financial management.

A UK study by Bartlett et al. (1993) examined the effects of the prior study in mathematics on the first year and third year management accounting courses. Their results showed that students who have 'A' level mathematics did not, on average, significantly outperform the students without these qualifications in both the first year and third year management accounting courses.

#### 2.2.3 English

The literature gathered contain mixed results about the significance of languange on student performance.

Jackling and Anderson (1998), looked at language as one of the features of the students' background to explain the students' performance in an intermediate accounting course. They surveyed students in a single second year management accounting subject and found that language has no significant impact on student performance. Bergevin and Davison (1994), and Rankin. Silvester. Vallely and Wyatt (2003), also found that language has no significant impact on performance.

However, Drennan, Rohde and Smith (2002) (as cited in Wright, Baker and Perera, 2004) suggested that students whose primary language is English are likely to outperform others in higher level subjects with less structured interpretive contents. This has been supported by Wright, Baker and Perera (2004). They found that English language proficiency significantly improves performance in the management accounting course. In fact, they stated that there is a relative disadvantage to students for whom English is their second language and the degree of disadvantage appears to be greater in those subjects which have higher reliance on language skills.

#### 2.2.4 Economics

A few studies have examined the relationship between students who have been exposed to economics courses in high school and the performance of students in the accounting courses, but the results have been inconsistent. Wan Faizah et.al (2005) found that SPM Economics has a negative effect on the performance of students in introductory accounting courses. However, Lai Mooi Tho (1994) found that STPM Economics influenced the performance in the introductory accounting course which tested the students 30% on management accounting topics.

Keef (1988) reported that the level of previous study of economics has an important influence on the first accounting course as a whole. The major benefit was associated with the management accounting section which covers 50% of the final examination questions. The empirical findings in Bartlett et. al. (1993) showed that the most consistent explanatory variable

of first and third year management accounting courses examination performance is the prior study of economics at 'A' Level. However, the prior study of economics at 'O' level does not exhibit a similar influence on all the examination performances.

#### 2.3 DEMOGRAPHIC BACKGROUND

Very few of the demographic variables appear to have a significant influence on student performance in university accounting examination (Bartlett et.al., 1993). The demographic study in this research concentrates on the gender and school location.

#### 2.3.1 Gender

The literature on the effect of gender on accounting course performance has shown inconclusive conflicting results. Females perform significantly better in second year accounting courses but not in first year accounting courses (Williams et al., 1995). A recent study by Gammie. Paver and Duncan (2003) showed that females outperformed their male counterparts in the first year accounting module. However, they found no gender differences in any of the final year module.

On the other hand, males are found to perform better than females. Doran et al. (1991) found that males perform significantly better in the introductory accounting course, but not in the second course.

Studies also found that there is no association between gender and performance. Lipe (1989) as cited in Park, Hayes and Step (1994) found no gender effects on lower division managerial accounting students' performance. The results of this study were consistent with studies by Hanks and Shivaswamy (1985). Mutchler, Turner and William (1987), Tyson (1989), Canlar and Bristol (1988), Eskew and Faley (1988), Buckless, Lipe and Ravenscroft (1991), Carpenter, Friar and Lipe (1993) and Gist and Goedde (1996) Doran et al. (1991), and Keef and Roush (1997). In Malaysia, a study by Lai Mooi Tho (1994) reported that gender did not contribute significantly to performance in the first level accounting course whereas in another study by Wan Faizah et al. (2005) gender did not significantly affect the accounting performance at the introductory and intermediate levels.

#### 2.3.2 Residential status

Wan Faizah et al. (2005) found that students from urban schools performed significantly better only in the first introductory course. In their study, schools are categorized into rural and urban schools depending on their location. Schools located in municipal councils are considered as urban schools whereas schools outside municipal councils are considered as rural schools. Lai Mooi Tho (1994) found no difference in performance between rural and urban status schools. It is hypothesized in Lai Mooi Tho's study that students from urban areas, where educational facilities are well developed and easily available, would perform better than students from rural areas. Urban status is defined as schools in capital cities and large towns in the states of Malaysia.

# CHAPTER 3

# **RESEARCH METHODOLOGY**

# 3.1 STUDY LOCATION

The study was carried out at UiTM northern region namely, UiTM Cawangan Kedah, UiTM Cawangan Perlis and UiTM Cawangan Perak

#### **3.2 SAMPLE SELECTION**

3.2.1 Selection Criteria

Full-time DIA students from parts 5, 6, 7 and 8 in semester November 2002 - April 2003, at UiTM northern campuses, in Kedah. Perlis and Perak.

#### 3.2.2 Exclusion Criteria

- 3.2.2.1 Students with incomplete record in their personal file.
- 3.2.2.2 Students who have not sat for all management accounting courses.
- 3.2.2.3 Students who had sat for STPM
### 3.3 SAMPLE SIZE

Samples were selected randomly from Part 5, 6, 7 and 8 DIA students from UiTM northern region campuses who had taken MAC210 and MAC260. 85% of samples were obtained from each campus population. All respondents were taught management accounting courses using a common syllabus and sat for a common final exam paper. The data of the samples are illustrated in Table 3.1 and Table 3.2.

Part	Campus						
	Kedah	Perlis	Perak				
5	62	101	85				
6	72	114	114				
7	15	42	21				
8	4	34	12				
TOTAL	153	291	232				

 Table 3.1: Total Population According to Campuses and Part

 Table 3.2: Samples According to Campus and Part

Part	Campus							
	Kedah	Perlis	Perak					
5	53	86	72					
6	61	97	97					
7	13	36	18					
8	3	29	10					
TOTAL	130	247	197					

The final grade was based on ongoing assessments (40%) and performance in the final examination (60%). The final examinations were uniformly graded which provided a control on individual lecturer grading effects. Samples who had not taken any of the management accounting courses and samples who had taken STPM were excluded from the final sample.

#### **3.4 DATA COLLECTION**

A research form was developed by the researchers to facilitate the data collection. The study form comprised three different parts (Appendix C).

- 3.4.1 Part A provided demographic information such as gender, branch campus, previous school and location of the previous school.
- 3.4.2 Part B sought information about the respondents' grade history in Accounting, Mathematics, Additional Mathematics, English and Economics at the SPM level.
- 3.4.3 Part C gathered information regarding the students' grades for management accounting courses at UiTM.

The data were obtained from the three UiTM branches' academic office records (Kedah, Perlis and Perak).

Data collections were done by the researchers themselves to avoid errors. Only students' first attempt grades were taken into consideration for this study. Any results unavailable in the personal file were sought out in the Integrated Student Information System (ISIS) at the respective campuses.

#### 3.5 DATA ANALYSIS

Data were analyzed using the Statistical Package for Social Sciences (SPSS) version 11.0 programme. Missing data (subjects that were not taken at SPM by the samples) were coded as 0 and the students' performance were coded 1 to 9 (1 for poor and 9 for good). The performance in management accounting courses was coded as 0.00 to 4.33 (0.00 for poor and 4.33 for excellent). Gender was coded as 0 for male and 1 for female. For the school location, urban was coded as 0 and rural was coded as 1.

3.5.1 Comparison between the performance in each management accounting course of students with and without SPM grade history and their demographic background.

The differences in the performance of students who had taken each SPM subject and the students' demographic background were tested using independent t-test to see the difference between the mean performances

between the groups. A p value < 0.05 was considered significant. This independent t-test was used to test hypotheses H<sub>01</sub> to H<sub>05</sub>.

3.5.2 Correlation between the performance in each SPM subject and the performance of each management accounting course.

Pearson Correlation test was used to evaluate the correlation between the student performance in each SPM subject and the performance in management accounting courses. R value of 0.75 or more is considered as a strong correlation, 0.46 to 0.74 as moderate and less than 0.46 as weak. A significant level of 0.05 or less is used. This Pearson Correlation was used to test hypotheses  $H_{06} - H_{010}$ .

3.5.3 The joint effects of SPM subjects, demographic background and prior management accounting courses in the prediction of the performance of students in each management accounting course.

Stepwise Multiple Regression model was used to analyze the joint effects of SPM grade history, the demographic background and prior management accounting courses on the students' performance in each management accounting course. The Stepwise Multiple Regression model has also been used by studies on student performance in examination such as Moses (1987), Eskew and Faley (1988), Gul and Fong (1993), William et.al.(1995) and Lai Mooi Tho (1994). This Stepwise Multiple Regression Model was used to test hypotheses  $H_{011}$  and  $H_{012}$ .

## 3.6 STEPWISE MULTIPLE REGRESSION RESEARCH MODEL

#### 3.6.1 Model 1

This model was used to examine a set of independent variables which might potentially influence the MAC210 performance. The equation for this model is:

$$MAC210 = B_o + B_1SPMAcc + B_2SPMMath + B_3SPMAddMath + B_4SPMEng + B_5SPMEco + B_6Gen + B_7SchLoc + e_1$$

where:

MAC210	=	Management Accounting I performance
SPMAcc	=	Accounting At SPM Level
SPMMath	=	Mathematics At SPM Level
SPMAddMath	=	Additional Mathematics At SPM Level
SPMEng	=	English At SPM Level
SPMEcon	=	Economics At SPM Level
Gen	=	Gender (Male, Female)
SchLoc	=	School Location (Urban. Rural)

#### 3.6.2 Model 2

This model was used to examine a set of independent variables which might potentially influence the MAC260 performance. The equation for model 2 is:

$$MAC260 = B_{o} + B_{1}SPMAcc + B_{2}SPMMath + B_{3}SPMAddMath + B_{4}SPMEng + B_{5}SPMEco + B_{6}Gen + B_{7}SchLoc - B_{8}MAC210 + e_{1}$$

where:

MAC260	=	Management Accounting II performance	
--------	---	--------------------------------------	--

#### **CHAPTER 4**

#### RESULTS

#### 4.1 DEMOGRAPHIC DATA

The study was carried out on DIA students at UiTM Kedah, Perlis and Perak branches. The number of samples selected in this study were 574 students from parts 5, 6, 7 and 8 and 123 students were excluded from the study due to incomplete data. The division of the usable data is 116 from Kedah, 164 from Perlis and 171 from Perak. Table 4.1 shows the demographic data of the students.

Parameters	Number of students	Percentage (%)
Gender		
Male	124	27.5
Female	325	72.1
Level of study		
Part 5	132	29.3
Part 6	256	56.8
Part 7	37	8.2
Part 8	26	5.8
School location		
Rural	169	37.5
Urban	260	57.6

Tal	ble	4.1	:	Demogra	phic	Data
-----	-----	-----	---	---------	------	------

# 4.2 COMPARISON BETWEEN THE PERFORMANCE IN EACH MANAGEMENT ACCOUNTING COURSE OF STUDENTS WITH AND WITHOUT SPM GRADE HISTORY AND THEIR DEMOGRAPHIC BACKGROUND

4.2.1 H<sub>01</sub>: There is no significant difference in the performance of each management accounting course between students who have taken and students who have not taken SPM Accounting.

Table 4.2: Performance Of Each Management Accounting Course B	letween
Students With And Without SPM Accounting	

	SPM	N	Mean	Std.	Std. Error	Significant
	Accounting			Deviation	Mean	(2 tailed)
Grade	Without	192	2.0346	.85863	.06197	0.000
Point MAC210	With	243	2.4158	.88062	.05649	
Grade	Without	147	2.3627	.86186	.07109	0.006
Point MAC260	With	202	2.6152	.82800	.05826	

The results in Table 4.2 show that the mean performance in all management accounting courses (MAC210 and MAC260) are significantly higher for students with SPM Accounting compared to the performance of students without SPM Accounting. The two-tailed significant value for all management accounting courses are less than 0.05 and thus  $H_{01}$  is rejected.

4.2.2 H<sub>02</sub>: There is no significant difference in the performance of each management accounting course between students who have taken and students who have not taken SPM Additional Mathematics

Table 4.3:	Performance O	f Each Manage	ment Accoun	ting Course	Between
Sti	udents With An	d Without SPM	f Additional N	Mathematics	

	SPM Add. Math	N	Mean	Std. Deviation	Std. Error Mean	Significant (2 tailed)
Grade	Without	217	2.1123	.89386	.06068	0.002
MAC210	With	218	2.3730	.87572	.05931	
Grade	Without	165	2.3958	.85875	.06685	0.020
MAC260	With	182	2.6096	.83750	.06208	

The results in Table 4.3 show that the mean score in the management accounting courses are consistently higher among the students with SPM Additional Mathematics compared to those without SPM Additional Mathematics. The differences in the mean scores are significant for MAC210 and MAC260 as shown by the significant 2-tailed values of 0.002 and 0.020 respectively. Therefore,  $H_{02}$  is rejected.

4.2.3 H<sub>03</sub>: There is no significant difference in the performance of each management accounting course between students who have taken and students who have not taken SPM Economics.

	SPM Economics	N	Mean	Std. Deviation	Std. Error Mean	Significant (2 tailed)
Grade	Without	293	2.3106	.86245	.05038	0.021
MAC210	With	146	2.1027	.92910	.07689	
Grade	Without	237	2.5566	.85061	.05525	0.107
Point MAC260	With	114	2.4005	.83911	.07859	

 Table 4.4 Performance Of Each Management Accounting Course Between

 Students With And Without SPM Economics

Table 4.4 shows that the mean performance of MAC210 and MAC260 are lower for students with SPM Economics as compared to the performance of students without SPM Economics. The two-tailed significant difference value for MAC210 is 0.021 which indicates a significant difference. The difference in the MAC260 is not significant (t = 0.107). Therefore, the null hypothesis H<sub>03</sub> is rejected only for MAC210.

4.2.4  $H_{04}$ : There is no significant difference between gender on the performance in each management accounting course.

	Gender	N	Mean	Std. Deviation	Std. Error Mean	Significant (2 tailed)
Grade	Female	318	2.3134	.88440	.04959	0.006
MAC210	Male	119	2.0532	.88607	.08123	
Grade	Female	256	2.5480	.85325	.05333	0.184
MAC260	Male	93	2.4116	.82582	.08563	

 Table 4.5: Performance Of Each Management Accounting Course

 Between Gender

The results in Table 4.5 show that female students perform significantly better than their male counterparts (t = 0.006) in the Management Accounting MAC 210. The difference in performance, however, diminished in Management Accounting MAC 260. Even though female students perform slightly better, yet the result is not significant. Therefore, the null hypothesis  $H_{04}$  is rejected for MAC210.

4.2.5 H<sub>05</sub>: There is no significant difference in each management accounting course performance between school locations.

 Table 4.6: Performance Of Each Management Accounting Course Between

 School Locations

	School Location	N	Mean	Std. Deviation	Std. Error Mean	Significant (2 tailed)
Grade	Rural	165	2.1292	.87914	.06844	0.029
MAC210	Urban	252	2.3241	.89373	.05630	
Grade	Rural	133	2.5811	.78271	.06787	0.210
MAC260	Urban	204	2.4623	.89089	.06238	

Table 4.6 shows that students from urban schools performed significantly superior in MAC 210 (t = 0.029) but the difference diminished in the higher level course, Management Accounting MAC 260. Therefore, the null hypothesis  $H_{05}$  is rejected for MAC210.

## 4.3 THE ASSOCIATION OF EACH SPM SUBJECT AND THE PERFORMANCE OF EACH MANAGEMENT ACCOUNTING COURSE

Pearson Correlation is used to test the correlations of students' performance in their SPM Accounting, Additional Mathematics, Economics, English, Mathematics and the performance of each management accounting course. Numbers I to 9 were used to denote the score for SPM subjects. Number I represents poor performance where else 9 is for excellent performance. The score in Management Accounting was given as 0.00 as poor and 4.33 as excellent. The missing data was omitted to avoid the effect on the evaluation.

4.3.1  $H_{06}$ : There is no correlation between SPM Accounting and the performance in each management accounting course.

The results in Table 4.7 show a positive correlation between SPM Accounting and all management accounting courses. The R values are all less than 0.46 which indicate low correlation but significant at the 0.01 level and therefore  $H_{06}$  is rejected.

		SPM Accounting
	Pearson Correlation	1
SPM Accounting	Sig. (2-tailed)	
Б	Ν	252
	Pearson Correlation	.173**
MAC210	Sig. (2-tailed)	.006
	Ν	247
	Pearson Correlation	.223**
MAC260	Sig. (2-tailed)	.001
	Ν	204

 Table 4.7: Correlation between SPM Accounting and the performance in each management accounting course

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

4.3.2  $H_{07}$ : There is no correlation between SPM Additional Mathematics and the performance in each management accounting course.

The results in the Table 4.8 show a positive correlation between SPM Additional Mathematics and all management accounting courses. The R values are all less than 0.46, which indicate low correlation but significant at the 0.01 level and thus  $H_{07}$  is rejected.

		SPM Add. Math
	Pearson Correlation	1
SPM Add. Math	Sig. (2-tailed)	
	Ν	228
	Pearson Correlation	.306**
MAC210	Sig. (2-tailed)	.000
	Ν	222
	Pearson Correlation	.245**
MAC260	Sig. (2-tailed)	.001
	N	186

#### Table 4.8: Correlation between SPM Additional Mathematics and the performance in each management accounting course

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

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

4.3.3  $H_{08}$ : There is no correlation between SPM Economics and the performance in each management accounting course.

Table 4.9 shows that there are positive correlations between SPM Economics and both management accounting courses (MAC210 and MAC260). The R values are less than 0.46 which indicate low correlation but significant at 0.01. Thus, the null hypothesis  $H_{08}$  is rejected for all management accounting courses.

		SPM Economics
	Pearson Correlation	1
SPM Economics	Sig. (2-tailed)	
	Ν	150
	Pearson Correlation	.296**
MAC210	Sig. (2-tailed)	.000
	Ν	146
	Pearson Correlation	.253**
MAC260	Sig. (2-tailed)	.007
	Ν	114

 Table 4.9: Correlation between SPM Economics and the performance in each management accounting course

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

4.3.4 H<sub>09</sub>: There is no correlation between SPM Modern Mathematics and the performance in each management accounting course.

The results in Table 4.10 show that there are positive correlations between SPM Mathematics and both management accounting courses. The R values are all below 0.46 which indicate low correlation but significant at the 0.01 level and thus  $H_{09}$  is rejected.

		SPM Modern Math
SPM	Pearson Correlation	I
Modern	Sig. (2-tailed)	
Math	Ν	444
	Pearson Correlation	.261**
MAC210	Sig. (2-tailed)	.000
	Ν	436
	Pearson Correlation	.174**
MAC260	Sig. (2-tailed)	.001
	N	348

 Table 4.10:
 Correlation between SPM Mathematics and the performance in each management accounting course

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

4.3.5  $H_{010}$ : There is no correlation between SPM English and the performance in each management accounting course.

Table 4.11 shows that there are low positive correlations between SPM English and MAC 210. However, there is no significant correlation between SPM English and MAC 260. Therefore,  $H_{010}$  is rejected for MAC 210 only.

		SPM English
	Pearson Correlation	1
SPM English	Sig. (2-tailed)	4
2.9.0	Ν	444
	Pearson Correlation	.191**
MAC210	Sig. (2-tailed)	.000
	Ν	432
	Pearson Correlation	.023
MAC260	Sig. (2-tailed)	.665
	N	344

 
 Table 4.11: Correlation between SPM English and the performance in each management accounting course

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

# 4.4 THE JOINT EFFECTS OF SPM SUBJECTS, DEMOGRAPHIC BACKGROUND AND PRIOR MANAGEMENT ACCOUNTING COURSE ON THE PERFORMANCE OF EACH MANAGEMENT ACCOUNTING COURSE

To evaluate the predictor for the performance in each management accounting course, the Stepwise Multiple Regression analysis was applied. One of the SPM papers consistently excluded by the Stepwise Multiple Regressions was SPM Additional Mathematics.

4.4.1 H<sub>011</sub>: SPM Accounting, SPM Additional Mathematics, SPM Economics,

SPM Modern Mathematics, SPM English and demographic background have no significant effect on MAC 210 performance.

#### Table 4.12: Effect of SPM Additional Mathematics, SPM Accounting, SPM Economics, SPM Modern Mathematics, SPM English and demographic background on MAC 210 performance

Included independent variables	Unstandardized Coefficients B	Std. Error	Sig.
(Constant)	0.724	.583	.254
SPM Economics	.254	.093	.030

Excluded independent variables	Beta In	t	Sig.
SPM Accounting	508	-1.579	.165
SPM Modern Mathematics	097	343	.743
SPM Additional Mathematics	463	-2.175	.073

#### **Model Summary**

R Square	F	Sig
.515	7.424	0.030

The result of the Stepwise Multiple Regression Model 1 is reported in Table 4.12. It shows that the R square is 0.515 which is more than 0.5 and the value is significant. Thus, the model will be able to predict up to 51.5% of MAC 210 performance. The only independent variable included in the model is SPM Economics. The independent variables excluded in

the model are SPM Accounting, SPM Mathematics and SPM Additional Mathematics. Thus the model developed by the analysis is:

MAC 210 = 0.724 + 0.254 (SPM Economics) +  $e_1$ 

4.4.2 H<sub>012</sub>: SPM Accounting, SPM Additional Mathematics, SPM Economics,
 SPM Modern Mathematics, SPM English, demographic
 background and MAC 210 have no significant effect on MAC 260
 performance.

Table 4.13: Effect of SPM Additional Mathematics, SPM Accounting, SPM Economics, SPM Modern Mathematics, SPM English, demographic background and MAC 210 on MAC 260 performance

Included independent variables	Unstandardized Coefficients B	Std. Error	Sig.
(Constant)	1.237	.431	.010
SPM Economics	.222	.072	.006

Excluded independent variables	Beta In	t	Sig.
SPM English	.196	1.032	.316
SPM Add. Math	.242	1.188	.250
MAC 210	.021	.096	.925

#### **Model Summary**

R Square	F	Sig
.337	9.661	0.006

Table 4.13 reports on the independent variables affecting the MAC 260 performance. SPM Economics again shows a positive influence on MAC 260 performance. The excluded variables are SPM English, SPM Additional Mathematics and MAC 210. The R square value obtained is 0.337, which explains a significant portion of 33.7 % of variation in students' performance in MAC 260. Thus, the equation obtained from the Stepwise Multiple Regression Model 2 is as follows:

 $MAC \ 260 = 1.237 + 0.222 \ (SPM \ Economics) + e_1$ 

#### **CHAPTER 5**

#### DISCUSSION

5.1 COMPARISON OF MANAGEMENT ACCOUNTING PERFORMANCE BETWEEN STUDENTS WHO SAT FOR ACCOUNTING, ADDITIONAL MATHEMATICS AND ECONOMICS IN THEIR SPM AND THOSE WHO DID NOT SIT FOR THE SUBJECTS, SCHOOL LOCATION AND GENDER

#### 5.1.1 SPM Subjects

The positive effect of SPM Accounting on management accounting courses is consistent with the findings found by Lai Mooi Tho (1994) which, shows that the performance of students who had taken accounting is better than those who had not taken accounting. Other studies done by Bergin and Davinson (1983), Gul and Fong (1993) and Auyeung and sands (1994) also support the findings.

The findings of SPM Additional Mathematics corresponded to the previous studies (Lai Mooi Tho, 1994; Williams et al., 1995; Hill et al., 1996; Keef, 1988) which found that the students' performance with previous knowledge of mathematics are better than those without previous knowledge in mathematics for management accounting courses. The results are also supported by Gul and Fong (1993) and Wan Faizah et al. (2005). However, the finding contradicted Bartlett et al. (1993) who found that students who have studied mathematics at 'A' level did not on average significantly outperform the students without these qualifications in management accounting courses.

A positive effect is found between SPM Economics and the students' performance in MAC 210 only. This finding is similar to the findings of previous studies by Lai Mooi Tho (1994), Keef (1998) and Bartlett et al. (1993). The negative effect of SPM Economics on MAC 260 is similar to the findings by Wan Faizah et al. (2005).

#### 5.1.2 Gender

The result on MAC 210 corresponded to the survey of instruction by Gammie et al. (2003) that showed that females are perceived to be better accounting students than male students in the introductory accounting course, but not in the second course.

However, the result did not correspond with the finding by Doran et. al. (1991) where males are found to have significantly higher examination scores in the introductory accounting course, but not in the second course. The results of this study also differs from a previous study by Lipe (1989) ( as cited in Park et al., 1994) which found no gender effects on performance in a lower division managerial accounting course. A New Zealand study by Keef (1988) also found gender is not significant in the performance of management accounting. A local study conducted by Wan Faizah et al. (2005) reported that gender did not significantly affect the accounting performance in both the introductory and intermediate courses. Lai Mooi Tho (1994) also reported that gender did not contribute significantly to performance in the first level accounting course. Other studies that reported no gender effect on accounting performance were Tyson (1989), Canlar and Bristol (1988), Eskew and Farley (1988), Buckless et al. (1991), Carpenter et al. (1993), Gist and Godde (1996), Hanks and Shivaswamy (1985).

#### 5.1.3 School Location

The results obtained is consistent with a study by Wan Faizah et al.(2005). They found that students from urban schools performed significantly better in the first accounting paper only. This could be due to the fact that students from urban schools are expected to have better facilities and exposure to resources. However, for the higher level management accounting course, there is no significant difference between students from different school locations. This result could be explained by the fact that as students proceed to a higher semester, the facilities and exposure to resources enjoyed at school has no effect anymore. They now share the same facilities and are exposed to the same resources at UiTM. The finding did not correspond to the study by Lai Mooi Tho (1994) who found that there was no significant difference in the performance between students from rural and urban areas. However, Lai Mooi Tho (1994) studied the students' residence and not the location of their school. In the Malaysian scenario, the location of schools may be a better indicator of exposure to better facilities as there are students from rural areas who study in urban and boarding schools.

## 5.2 THE ASSOCIATION OF THE SPM SUBJECTS AND THE PERFORMANCE OF EACH MANAGEMENT ACCOUNTING COURSE

Pearson Correlation (refer to Table 4.7) shows that there are low positive correlations between SPM Accounting and the performance in all management accounting courses i.e. MAC210 and MAC260. Finding by Williams et al (1995) only corresponded for initial accounting courses (Financial Accounting 1 and Cost and Management Accounting 1) but not for the higher level accounting

courses. This finding also does not corresponded very well to Lai Mooi Tho (1994), who found that performance in first year accounting examination and STPM Accounting has a high positive correlation coefficient. One possible explanation for this finding could be due to the level of previous accounting background. Students who have STPM Accounting have basic knowledge of Cost and Management Accounting since it is included in the syllabus, while SPM Accounting syllabus just focuses on Financial Accounting. The study contradict s results from studies done by Keef (1988) and Bartlett et al.(1993). Their studies found that the level of previous study of accounting had no effect on the performance in the course of Management Accounting.

In the previous chapter, the correlation between SPM Additional Mathematics and Mathematics and the performance in each management accounting course is shown in Table 4.8 and Table 4.10 respectively. Both tables indicate that there are low positive correlations between SPM Additional Mathematics and the performance in all management accounting courses as well as SPM Mathematics and the performance in all management accounting courses. This study corresponded to Williams et al. (1995) and Hill et al. (1996) where it was found that mathematics courses have a positive relationship with students' performance not only in financial accounting but also in cost and management accounting. However, the study contradicts results of a study done by Bartlett et al. (1993). SPM Economics is positively associated with the performance in both management accounting courses. However, the correlations are low though they are significant. This finding corresponded to Keef (1998) and Bartlett et al. (1993).

There is a low positive correlation between SPM English and the performance in MAC 210 only. The finding is similar to previous research reported by Wright, Baker and Perera (2004). They found that English language proficiency improves performance in management accounting. This is only relevant to MAC210.

On the other hand, Jackling and Anderson (1998), Bergevin and Davison (1994), and Rankin et al (2003) reported that language has no significant impact on performance. This is only relevant to the MAC 260 findings.

# 5.3 THE JOINT EFFECTS OF SPM SUBJECTS, DEMOGRAPHIC BACKGROUND AND PRIOR MANAGEMENT ACCOUNTING ON THE PERFORMANCE IN THE NEXT MANAGEMENT ACCOUNTING COURSE

Stepwise Multiple Regression analysis shows that only SPM Economics seems to be the best determinant to predict the performance of MAC210 and MAC 260. Other independent variables, specifically, SPM Accounting, SPM English, SPM Additional Mathematics, SPM Mathematics, gender as well as school location are not significant and are excluded from the model.

The Stepwise Multiple Regression model obtained an R square of 0.515 and 0.337 for Model 1 and Model 2 respectively. The R square obtained in this study indicates that Model 1 could predict up to 51.5% of the performance in MAC210 and 33.7% of the performance in MAC260.

This study also found that most of the SPM subjects do not contribute significantly to the performance of management accounting courses subsequent to MAC210 as shown by the result from the Stepwise Multiple Regression analysis except for SPM Economics which still contributes to MAC260.

These findings are consistent with the findings previously reported by Bartlett et al. (1993) and Keef (1988). They found that the most consistent explanatory variable is economics studied previously.

#### CHAPTER 6

# CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS

## 6.1 CONCLUSIONS

Students who have taken SPM Accounting and SPM Additional Mathematics perform significantly better in all management accounting courses than students who have not taken both papers. The performance of MAC210 and MAC260 are lower for students with SPM Economics as compared to the performance of students without SPM Economics. However, the results is only significant for MAC 210. Demographic background, gender and school location have significant effect only on the MAC210 course but the difference in performance diminished in MAC260.

The association of SPM Accounting, SPM Additional Mathematics, SPM Mathematics and SPM Economics with the performance in all management accounting courses is low positive but significant. However, SPM English has low positive association but is significant only for the MAC210 course.

The joint effect of independent variables on the performance in MAC210 showed that only SPM Economics contributes significantly to the performance in MAC210. In another management accounting course, MAC260. again SPM Economics indicated a positive influence on student performance.

#### 6.2 **RECOMMENDATIONS**

The findings show that the students' performance in MAC 210 and MAC 260 are significantly different between the students who have taken and have not taken Accounting and Additional Mathematics in their SPM examinations. Therefore, it is recommended that the Faculty of Accountancy enroll students who have taken SPM Accounting and SPM Additional Mathematics.

Besides that, the Faculty of Accountancy is recommended to arrange programmes for potentially poor performers to supplement them with topics related to Basic Accounting and Mathematics. The group of students who may require these supporting programmes should include students without SPM Accounting, student without Additional Mathematics and students with SPM Economics. The programme could be in the form of a basic management accounting course, extra lectures and tutorials, and computer aided learning. Secondly, the results also show that SPM Accounting, SPM Additional Mathematics, SPM Mathematics and SPM Economics are the best predictors for MAC 210 and MAC 260. As such, UiTM should consider giving priority to applicants who have good results in their SPM Accounting, SPM Additional Mathematics, SPM Mathematics and SPM Economics as entry requirements to the DIA programme.

## 6.3 LIMITATIONS

This research has been based only on students from three out of eleven UiTM campuses offering DIA programme. Thus, the generalization of the results to similar courses in other universities should be viewed with some caution.

Besides, on going assessments, that is, tests, quizzes, assignments and projects are not controlled since this study covered three branches with different lecturers which resulted in different on-going testing and evaluation.

#### REFERENCES

- Auyeung, P.K., & Sands, D.F., (1994). Predicting success in first-year university accounting using gender-based learning analysis. *Accounting Education*, 3(3), 259-272.
- Baldwin, B.A., & Howe, K.R. (1982). Secondary-level study of accounting and subsequent performance in the first college course. *Accounting Review*, 57 (3), 619-627.
- Bartlett, S., Peel, M.J., & Pendlebury, M. (1993). From fresher to finalist: A three year analysis of student performance on an accounting degree programme. *Accounting Education*, 2 (2), 111-122.
- Bergevin, P.M., & Davison, D.L. (1994). The relationship between objective format accounting examination validity and student native language. *The Journal of Language for International Business*, 6 (1), 23-32.
- Bergin, L.J. (1983). The effect of previous accounting study on student performance in the first college-level financial accounting course. *Issues in Accounting Education*, 19-28.
- Buckless, F. A., Lipe, M.G., & Ravenscroft, S.P. (1991). Do gender effects on accounting course performance persist after controlling for general academic aptitude. *Issues In Accounting Education*, 6 (2), 248-261.

- Canlar, M. & Bristol, J. T. (1988). Female and male undergraduate accounting students. *The Woman CPA*, *50*(2), 20-23.
- Carpenter, V. L., Friar, S. & Lipe, M. G. (1993). Evidence on the performance of accounting students: Race, gender and expectations. *Issues in Accounting Education*, 8(1), 1-17.
- Didia, D. & Hasnat, B. (1998). The determinants of performance in the university introductory finance course. *Financial Practice and Education*, 102-107.
- Doran, B.M., Bouillon, M.L., & Smith, C.G. (1991). Determinants of student performance in accounting principles I and II. *Issues In Accounting Education*, 6(1), 74-84.
- Drennan L., Rohde F., & Smith, C.G. (2002). Determinants of performance in advanced undergraduate management accounting: An empirical investigation. *Accounting and Finance*, 42(1), 27-40.
- Eskew, R.K., & Faley, R.H. (1988). Some determinants of student performance in the first college-level financial accounting course. *The Accounting Review*, *LXIII*(1), 137-147.
- Gammie, E., Paver, B., Gammie, B., & Duncan, F. (2003). Gender differences in accounting education: An undergraduate exploration. *Accounting Education*, *12*(2), 177-196.
- Gist, W.E. & Goedde, H. (1996). The influence of mathematical skills and other factors on minority student performance in principles of accounting. *Issues In Accounting Education*, 11(1), 49-60.

- Gul, F.A., & Fong, S.C.C. (1993). Predicting success for introductory students: Some further Hong Kong evidence. Accounting Education, 2(1), 33-41.
- Hanks, G., & Shivaswamy, M. (1985). Academic performance in accounting: Is there a gender gap?. *Journal of Business Education*, 154-156.
- Hill, M.C., Stratton, R., & Edwards, J.D. (1996). Transfer of learning in the introductory accounting course sequence. *Accounitng Educators' Journal*, 8(1), 27-49.
- Jackling B., & Anderson, A. (1998). Study mode, general ability and performance in accounting: A research note. *Accounting Education*, 7(1), 65-73.
- Keef, S.P. (1988). Preparation for a first level university accounting course: The experience in New Zealand. *Journal of Accounting Education*, 6(2), 293-307.
- Keef, S.P., & Roush, M.L. (1997). New Zealand evidence on the performance of accounting students:Race, gender and self-concept. Issues in Accounting Education. 12(2), 315-330.
- Lai, M.T. (1994). Some evidence on the determinants of student performance in the University of Malaya introductory accounting course. *Accounting Education*, 3(4), 331-340.

- Lan, C.S. (2000/2001). The management accounting qualification. *Accounting Journal*. University of Malaya, 58.
- Ministry of Finance. (2004). Economic Report 2004 2005. Kuala Lumpur:Percetakan Nasional Malaysia Berhad.
- Mitchell, F. (1985). School accounting qualifications and student performance in a first level university accounting examination. *Accounting and Business Research*, 15(58), 81-86.
- Mutchler, J.F., Turner, J.H., & William, D.D. (1987). The performance of female versus male accounting students. *Issues in Accounting Education*, 2(1), 103-111.
- Park, L.J., Hayes, R.S., & Step, F. (1994). Men & Women: Equal in accounting?. Journal of Education for Business Washington, 69(6), 349.
- Rankin, M., Silvester. M., Vallely, & Wyatt, A. (2003). An analysis of the implications of diversity for students' first level accounting performance. *Accounting and Finance*, 43(3), 365-393.
- Tyson, T. (1989). Grade performance in introductory accounting courses: Why female students outperform males. *Issues In Accounting Education*, 4(1), 153-160.
- Wan Faizah Wan Abdullah, Noraini Abdul Rahim, Siti Salmah Abu Bakar, Marzlin Marzuki, Wan Zulkipli Wan Salleh. (2005). Predicting success factors in financial accounting

courses for diploma in accountancy programme (Northern region UiTM). Proceedings of the Conference on Scientific & Social Research 2005. Proceeding. 12.

- Williams, J.J., Cheng, T.C., Lim, S.H., & Yow, Y.M. (1995). Factors influencing student performance in university accounting subjects: Evidence from Singapore. *Accounting and Business Review*, 2(2), 291-315.
- Wright, S., Baker, P., & Perera, S. (March 2004). Determinants of student performance in intermediate accounting subject. First Semester 2004 Seminar Series, Macquarie University, Australia.

#### APPENDIX A

Below is the summarized topics covered under Introduction to Cost and Management Accounting (MAC210) and Management Accounting (MAC260) courses:

#### MANAGEMENT ACCOUNTING COURSES

#### TOPICS

MAC210 Introduction to Cost and Management Accounting	Introduction Materials Labour Overheads Job and batch Costing Contract Costing Process Costing
MAC260 Management Accounting	Introduction to Management Accounting Cost Behaviour Marginal Costing and Absorption Costing CVP Analysis Short Decision Making Budgets and Budgetary Control Standard Costing and Variance Analysis
# APPENDIX B

# KEDAH

PBT	
Majlis Perbandaran Kota Setar Jalan Kolam Air 05675 ALOR SETAR, KEDAH. TEL : 04 - 7332499 FAX : 04 - 7320622	Majlis Perbandaran Sungai Petani 08000 SUNGAI PETANI, KEDAH. TEL : 04 - 4212205 FAX : 04 - 4233416
Majlis Perbandaran Kulim No 104-121, Lorong Kenari 5/1 Kota Kenari 09000 KULIM, KEDAH. TEL : 04 - 4907525 / 6 FAX : 04 - 4901443	Majlis Daerah Baling d/a Pejabat Daerah Baling 717 Jalan Mahmud 09100 BALING, KEDAH. TEL : 04 - 4701800 FAX : 04 - 4701580
Majlis Perbandaran Langkawi Bandaraya Pelancongan 07000 LANGKAWI, KEDAH. TEL : 04 - 9666590 FAX : 04 - 9666158	Majlis Daerah Bandar Baharu 09800 SERDANG, KEDAH. TEL : 04 - 4077264 FAX : 04 - 4077581
Majlis Daerah Kubang Pasu 06000 JITRA, KEDAH. TEL : 04 - 9171901 FAX : 04 - 9174057	<u>Majlis Daerah Padang Terap</u> 06300 KUALA NERANG, KEDAH. TEL : 04 - 7866328 FAX : 04 - 7866639
Majlis Daerah Sik 08200 SIK, KEDAH. TEL : 04 - 4695394 FAX : 04 - 4695448	Majlis Daerah Pendang 06700 PENDANG, KEDAH. TEL : 04 - 7596077 FAX : 04 - 7596709
Majlis Daerah Yan 06900 YAN, KEDAH. TEL : 04 - 4655745 FAX : 04 - 4655990	Pihakberkuasa Tempatan Taman Perindustrian Hi-Tech Kulim P. O Box 28, 09000 KULIM, KEDAH TEL : 04 - 4912266 FAX : 04 - 4912277

#### PERLIS

РВТ	
Majlis Perbandaran Kangar. No 192, Jln Kangar 01000 KANGAR, PERLIS. TEL: 04- 9762188 / 9762688 FAX : 04 9766052	

# PERAK

PBT	
Majlis Bandaraya Ipoh Peti Surat 1009 30820 IPOH, PERAK. TEL : 05 - 2413733 FAX : 05 - 2537396 / 2540144	Majlis Perbandaran Manjung Pejabat Majlis Perbandaran Manjung Kompleks Pentadbiran Daerah Manjung 32040 MANJUNG, PERAK TEL: 05 - 6883121 / 6882122 FAX: 05 - 6882102
Majlis Perbandaran Taiping	<u>Majlis</u> Daerah <u>Gerik</u>
Wisma Perbandaran	Jalan Haji Meor Yahaya
Jalan Taming Sari	33000 GERIK, PERAK.
34000 TAIPING, PERAK.	TEL : 05 - 7912305 / 7912686
TEL : 05 - 8080777	FAX : 05 - 7912288
FAX : 05 - 8053000	E-Mail: <u>mdgerik@tm.net.my</u>
Majlis Daerah Hilir Perak	Majlis Daerah Kinta Selatan
36000 TELUK INTAN, PERAK	JKR 163, Jalan Batu
TEL: 05 - 6221299 / 6221277	31900 KAMPAR, PERAK.
FAX: 05 - 6212446	TEL : 05 - 4666004 / 4664823
E-Mail: mdhpti@tm.net.my	FAX : 05 - 4665136
<u>Majlis Daerah Kerian</u>	Majlis Daerah Kinta Barat
No 1, Wisma Majlis Daerah Kerian	Jalan Dewangsa
Jalan Padang	31007 BATU GAJAH, PERAK.
34200 PARIT BUNTAR, PERAK.	TEL : 05 - 3661216
TEL : 05 - 7163658	FAX : 05 - 3665930 / 3662702

FAX : 05 - 7169268 E-Mail: <u>mdk@pop.jaring.my</u>	E-Mail: mdkb@po.jaring.my
<u>Majlis Daerah Kuala Kangsar</u> Jalan Raja Chulan 33000 KUALA KANGSAR, PERAK. TEL : 05 - 7763199 FAX : 05 - 7761004	Majlis Daerah Lenggong Jalan Alang Iskandar 33400 LENGGONG. PERAK. TEL : 05 - 7677207 FAX : 05 - 7677002
Majlis Daerah Perak Tengah Aras Bumi Kompleks Pentadbiran Daerah Perak Tengah 32600 SERI ISKANDAR, PERAK. TEL : 05 - 3762088 FAX : 05 - 3762089 E-Mail: <u>mdpt@tm.net.my</u>	Majlis Daerah Pengkalan Hulu 33100 PENGKALAN HULU, PERAK TEL : 04 - 4778224 FAX : 04 - 4778458
Majlis Daerah Selama 34100 SELAMA, PERAK. TEL : 05 - 8394201 FAX: 05 - 8394377	Majlis Daerah Tapah Jalan Station 35000 TAPAH, PERAK. TEL : 05 - 4011326 FAX : 05 - 4012288
Majlis Daerah Tanjung Malim NO. 1, Jalan Raja Itam 35900 TANJUNG MALIM, PERAK. TEL : 05 - 4490100 FAX : 05 - 4490102	

# JOHOR

РВТ	
Majlis Bandaraya Johor Bahru Jalan Dato' Onn Peti Surat 232 80720 JOHOR BAHRU, JOHOR. TEL : 07 - 2248833 / 2282525 FAX : 07 - 2230619	Majlis Perbandaran Kluang Jalan Pejabat Kerajaan 86000 KLUANG, JOHOR. TEL : 07 - 7723912 / 7723911 FAX : 07 - 7713209
Majlis Daerah Labis 85300 Labis , JOHOR. TEL : 07 - 9251781 FAX : 07 – 9251308	Majlis Perbandaran Batu Pahat 83000 BATU PAHAT, JOHOR. TEL : 07 - 4341045 / 4341944 FAX : 07 - 4321164

Majlis Perbandaran Muar	Majlis Daerah Tangkak
Karung Berkunci No 516	Pejabat Besar Majlis Daerah Tangkak
84009 MUAR, JOHOR.	84900 TANGKAK, JOHOR.
TEL : 06 - 9521204 - 206	TEL : 06 - 9781261 / 9782226
FAX : 06 -9522691	FAX : 06 - 9782670
Majlis Perbandaran Johor Bahru Tengah 81300 Skudai, Johor Bahru JOHOR TEL : 07 - 5561005 / 5571730 FAX : 07 - 5568007	Majlis Daerah Simpang Renggam Jalan Pejabat 86200 SIMPANG RENGAM, JOHOR. TEL : 07 - 7551300 / 7551303 FAX : 07 - 7556131 FAX : 07 - 7551302
Majlis Daerah Yong Peng	Majlis Daerah Pontian
KM 1, Jalan Labis	Bangunan Majlis Daerah
83700 Yong Peng, JOHOR	82000 PONTIAN, JOHOR.
TEL : 07 - 4671276 / 4675649	TEL : 07 - 6871442 / 6870292
FAX : 07 - 4671712	FAX : 07 - 6873131
Majlis Daerah Segamat	Majlis Daerah Kulai
No 1, Jalan Abdullah	Jalan Pejabat Kerajaan
85000 SEGAMAT, JOHOR.	81000 KULAI, JOHOR.
TEL : 07 - 9314455 / 9312710	TEL : 07 - 6631511 / 6632132
FAX : 07 - 9312712	FAX : 07 - 6632407
Majlis Daerah Kota Tinggi	Majlis Daerah Mersing
Jalan Padang	243 Jalan Ibrahim
81900 KOTA TINGGI, JOHOR.	86800 MERSING, JOHOR.
TEL : 07 - 8831004 / 8834558	TEL : 07 - 7992969
FAX : 07 - 8834015	FAX : 07 - 7993975
Lembaga Bandaran Johor Tenggara Ibu Pejabat KEJORA Jalan Dato' Onn Bandar Penawar, Desaru 81900 KOTA TINGGI, JOHOR. TEL : 07 - 8221601 - 8221610 FAX : 07 - 8221216	Pihakberkuasa Tempatan Pasir Gudang L3 - 06, Kompleks Pusat Bandar Jalan Bandar 81700 PASIR GUDANG, JOHOR. TEL : 07 - 2513720 FAX : 07 -2515260

# KELANTAN

PBT	
Majlis Perbandaran Kota Bharu 15000 KOTA BHARU, KELANTAN. TEL : 09 - 7483344 / 7483209 FAX : 09 - 7486026	Majlis Daerah Bachok 16300 BACHOK, KELANTAN. TEL : 09 - 7788524 FAX : 09 - 7789563
Majlis Daerah Kota Bharu 16450 KETEREH, KELANTAN. TEL : 09 - 7886112 / 7887267 FAX : 09 - 7886031 ( Pej MD )	Majlis Daerah Kuala Krai Selatan 18200 DABONG, KELANTAN. TEL : 09 - 7440725 FAX : 09 – 7440725
Majlis Daerah Gua Musang 18300 GUA MUSANG, KELANTAN. TEL : 09 - 9121235 FAX : 09 - 9121044	Majlis Daerah Jeli 17600 JELI, KELANTAN. TEL : 09 - 9440023 / 63 FAX : 09 - 9440007 / 9440250
Majlis Daerah Tanah Merah 17500 TANAH MERAH, KELANTAN. TEL : 09 - 9556026 FAX : 09 - 9556826	Majlis Daerah Tumpat 16200 TUMPAT, KELANTAN. TEL : 09 - 7257285 / 7257788 FAX : 09 - 7256919
Majlis Daerah Kuala Krai Utara 18000 KUALA KRAI, KELANTAN. TEL : 09 - 9665215 / 9666121 FAX : 09 - 9663284	Majlis Daerah Pasir Mas 17000 PASIR MAS, KELANTAN. TEL : 09 - 7909250 FAX : 09 - 7903250
Majlis Daerah Machang Pejabat Majlis Daerah Machang Tingkat 1 & 2, Bangunan Aked MDM Jalan Dato' Hashim 18500 MACHANG, KELANTAN. TEL : 09 - 9751076 FAX : 09 - 9751431	Majlis Daerah Pasir Puteh 16800 PASIR PUTEH, KELANTAN. TEL : 09 - 7866011 FAX : 09 -7867011

# MELAKA

17

PBT	
Majlis Bandaraya Melaka Bersejarah Bangunan Graha Makmor No I, Lebuh Ayer Keroh 75450 MELAKA. TEL : 06 - 2336411 FAX : 06 - 2325716 E-Mail: mbs@mpmbb.org.my	<u>Majlis Perbandaran Alor Gajah</u> JKR No. 2239, 78000 ALOR GAJAH, MELAKA. TEL : 06 - 5562575 FAX : 06 - 5564909
Majlis Daerah Jasin 77000 JASIN, MELAKA. TEL : 06 - 5291245 / 5291994 FAX : 06 - 5293537	

#### NEGERI SEMBILAN

PBT	
Majlis Perbandaran Nilai	Majlis Perbandaran Port Dickson
Peti Surat No. 52	71009 PORT DICKSON,
71800 NILAI,NEGERI SEMBILAN.	NEGERI SEMBILAN
TEL : 06 - 8501890	TEL : 06 - 6473904 / 6474962
FAX : 06 - 8501893	FAX : 06 - 6474007 / 6474984
Majlis Daerah Jelebu	Majlis Daerah Kuala Pilah
d/a Dewan Besar	Jalan Seremban
71600 JELEBU,	72009 KUALA PILAH.
NEGERI SEMBILAN.	NEGERI SEMBILAN.
TEL : 06 - 6136479 / 6136991	TEL : 06 - 4814025
FAX : 06 - 6137515	FAX : 06 - 4811042
Majlis Perbandaran Seremban Wisma Perbandaran Jalan Yam Tuan 70990 SEREMBAN, NEGERI SEMBILAN. TEL : 06 - 7642944 FAX : 06 - 7637449	Majlis Daerah Jempol 721120 Bandar Baru Serting NEGERI SEMBILAN. TEL : 06 - 4581233 FAX : 06 - 4585800
Majlis Daerah Rembau	Majlis Daerah Tampin
Jalan Dato' Maharaja Lela	73000 TAMPIN.
71309 REMBAU,	NEGERI SEMBILAN

# PAHANG

РВТ	
<u>Majlis</u> Perbandaran <u>Kuantan</u> Jalan Tanah Puteh 25100 KUANTAN, PAHANG. TEL : 09 - 5132311 FAX : 09 - 5130644	Majlis Daerah Cameron Highlands 29007 TANAH RATA, PAHANG TEL : 05 - 4911455 / 4912097 FAX : 05 - 4911728 FAX : 05 - 4911843 (Pej MD)
Majlis Perbandaran Temerloh 28000 TEMERLOH, PAHANG. TEL : 09 - 2961477 FAX : 09 - 2962664	Majlis Daerah Bentong 28700 BENTONG, PAHANG TEL : 09 - 2221148 FAX : 09 - 2223729
Majlis Daerah Bera 28300 Triang Tel: 09-2553870 Fax: 09-2554243	Majlis Daerah Jerantut 27000 JERANTUT, PAHANG. TEL : 09 - 2662205 FAX : 09 - 2661545, 2665513
Majlis Daerah Pekan Jalan Tengku Mahkota 26600 PEKAN, PAHANG. TEL : 09 - 4224350 / 4221350 FAX : 09 - 4221954	Majlis Daerah Raub 27600 RAUB, PAHANG. TEL : 09 - 3551175 / 3551804 FAX : 09 - 3554270
Majlis Daerah Lipis 27100 KUALA LIPIS, PAHANG. TEL : 09 - 3121253 FAX : 09 - 3123953	Majlis Daerah Maran d/a Pejabat Daerah Maran 26500 MARAN, PAHANG. TEL : 09 - 4771411 / 4771412 FAX : 09 - 4771511
Majlis Daerah Rompin 26800 KUALA ROMPIN, PAHANG. TEL : 09 - 4146677 / 4146688 FAX : 09 - 4146077	

# PULAU PINANG

PBT	
Majlis Perbandaran Pulau Pinang Tingkat 17, Bangunan KOMTAR 10675 PULAU PINANG TEL : 04 - 2624400 FAX : 04 - 2626260	Majlis Perbandaran Seberang Perai Jalan Datuk Hj Ahmad Said 12000 BUTTERWORTH, PULAU PINANG. TEL : 04 - 3105500 FAX : 04 - 3322140 FAX : 04 - 3322339 ( Ibu Pej MPSP )

# SELANGOR

PBT	
<u>Majlis Bandaraya Shah Alam</u>	Majlis Perbandaran Ampang Jaya
Tingkat 1, Wisma MBSA	Menara MPAJ, Persiaran MPAJ
Peti Surat 7200	Jalan Pandan Utama, Pandan Indah
40706 SHAH ALAM, SELANGOR	55100 KUALA LUMPUR
TEL : 03 - 55105133	TEL : 03 - 42968000
FAX : 03 - 55108010	FAX : 03 - 42968060
<u>Majlis Perbandaran Klang</u>	Majlis Perbandaran Petaling Jaya
Jalan Perbandaran	Jalan Yong Shook Lin
41675 KLANG, SELANGOR	46675 PETALING JAYA, SELANGOR
TEL : 03 - 33716044	TEL : 03 - 79563544
FAX : 03 - 33720344	FAX : 03 - 79586491 / 79575476
Majlis Perbandaran Kajang 43000 KAJANG, SELANGOR TEL : 03 - 87377899 FAX : 03 - 87377897	Majlis Perbandaran Selayang Persiaran 3, Bandar Baru Selayang KM 15, Jalan Ipoh 68100 BATU CAVES, SELANGOR. TEL : 03 - 61380001 FAX : 03 - 61388933
<u>Majlis Perbandaran Subang Jaya</u>	Majlis Daerah Hulu Selangor
Persiaran Perpaduan, Jalan USJ5	Jalan Bukit Kerajaan
47610 SUBANG JAYA, SELANGOR	44000 HULU SELANGOR, SELANGOR
TEL : 03 - 80263131	TEL : 03 - 60641331
FAX : 03 - 56376585	FAX : 03 - 60643991
Majlis Daerah Kuala Langat	Majlis Daerah Kuala Selangor
Teluk Datok	45000 KUALA SELANGOR, SELANGOR.

42700 BANTING, SELANGOR. TEL : 03 -31872825 / 732 FAX : 03 -31879304	TEL : 03 - 8891439 FAX : 03 - 8891101
Majlis Daerah Sepang Tingkat 1, Bangunan Tun Aziz Salak Tinggi 43900 SEPANG, SELANGOR. TEL : 03 - 87061016 / 87061090 FAX : 03 - 87061971	Majlis Daerah Sabak Bernam 45300 SUNGAI BESAR, SELANGOR TEL : 03 - 32241655 FAX : 03 - 32242766

# TERENGGANU

РВТ								
	Majlis Perbandaran Kuala Terengganu Tingkat 8, Menara PERMINT Jalan Sultan Ismail 20200 KUALA TERENGGANU, TERENGGANU TEL : 09 - 6221044 / 6221662 FAX : 09 - 6226570	Majlis Daerah Hulu Terengganu 21700 Kuala Berang, Hulu Terengganu TERENGGANU TEL : 09 - 6811466 / 6811149 FAX : 09 - 6811655						
	Majlis Perbandaran Kemaman 24000 KEMAMAN, TERENGGANU TEL : 09 - 8597777 / 8597700 FAX : 09 - 8595455	<u>Majlis Daerah Besut</u> 22200 BESUT, TERENGGANU TEL : 09 - 6956388 / 6956389 FAX : 09 - 6956199						
	Majlis Daerah Dungun 23000 DUNGUN, TERENGGANU TEL : 09 - 8441931 / 8441932 / 020 / 4386 FAX : 09 - 8483210	Majlis Daerah Setiu Wisma Majlis Daerah Setiu Bandar Permaisuri 22100 SETIU, TERENGGANU TEL : 09 - 6099377 / 6099434 FAX : 09 - 6099367						
	Majlis Daerah Marang 21600 MARANG, TERENGGANU TEL : 09 - 6182366 / 6182368 FAX : 09 - 6181963							

	PBT			
Dewan Bandaraya Kuching Utara	Majlis Perbandaran Padawan			
Bukit Siol, Jalan Semariang, Petra Jaya	Kota Padawan, Pasar Batu 10			
93050 KUCHING, SARAWAK.	Jalan Penrissen			
TEL : 082 - 446688	93250 KUCHING, SARAWAK.			
FAX : 082 - 446414	TEL : 082 - 615566			
E-Mail: <u>dbkuqrc@po.jaring.my</u>	FAX : 082-611832			
Majlis Bandaraya Kuching Selatan	Majlis Perbandaran Miri			
Jalan Padungan	Jalan Raja			
93675 KUCHING, SARAWAK	98000 MIRI, SARAWAK.			
TEL : 082 - 242311	TEL : 085 - 433439			
FAX : 082 - 417372	FAX : 085 - 415486			
Majlis Perbandaran Sibu Jalan Wong Nai Siong Peti Surat 557 96007 SIBU, SARAWAK. TEL : 084 - 333411 FAX : 084 - 320240 E-Mail: <u>mpsibu@po.jaring.my</u>	Majlis Daerah Bau 94000 BAU, SARAWAK TEL : 082 - 763128 FAX : 082 - 763545			
Majlis Daerah Kanowit	Majlis Daerah Kapit			
96700 KANOWIT, SARAWAK	96800 KAPIT, SARAWAK			
TEL : 084 - 752093	TEL : 084 - 796266			
FAX : 084 - 752695	FAX : 084 - 796323			
Majlis Daerah Lawas	Majlis Daerah Limbang			
Peti Surat 80	P.O. Box 390			
98857 LAWAS, SARAWAK	98708 LIMBANG, SARAWAK			
TEL : 085 - 284001	TEL : 085 - 211358			
FAX : 085 - 285485	FAX : 085 - 212577			
Majlis Daerah Lundu 94500 LUNDU. SARAWAK TEL : 082 - 735501 / 735729 FAX : 082 - 735035	Majlis Daerah Maradong & Julau Jalan Mahkamah 96507 BINTANGOR, SARAWAK TEL : 084 - 693232 FAX : 084 - 693973			
Majlis Daerah Betong	Majlis Daerah Marudi			
Bangunan Kubu Rentap	Peti Surat 374, Marudi			
95700 BETONG, SARAWAK	98058 BARAM, SARAWAK			
TEL : 083 - 472124	TEL : 085 - 755755			
FAX : 083 - 472192	FAX : 085 - 755336			

Majlis Daerah Dalat & Mukah Jalan Kubu,Peti Surat 68 96400 MUKAH, SARAWAK TEL : 084 - 871622 FAX : 084 - 871041	Majlis Daerah Luar Bandar Sibu Jalan Bujang Suntong Peti Surat 1318 96008 SIBU, SARAWAK. TEL : 084 - 336077 FAX : 084 - 324694
Majlis Daerah Lubok Antu	Majlis Daerah Matu & Daro
95800 ENGKILILI, SARAWAK	96250 MATU, SARAWAK
TEL : 083 - 563915	TEL : 084 - 832233
FAX : 083 - 563144	FAX : 084 - 832343
Majlis Daerah Samarahan 94300 KOTA SAMARAHAN, SARAWAK TEL : 082 - 671023 FAX : 082 - 671342	Majlis Daerah Saratok 95400 SARATOK, SARAWAK TEL : 083 - 436104 FAX : 083 - 436511
Majlis Daerah Sarikei	Majlis Daerah Simunjan
Jalan Nyelong, Peti Surat 420	Jalan Kapitan 94800 SIMUNJAN,
96100 SARIKEI, SARAWAK	SARAWAK
TEL : 084 - 651201	TEL : 082 - 803610 / 803622
FAX : 085 - 653702	FAX : 082 - 803785
Majlis Daerah Serian	Majlis Daerah Sri Aman Peti Surat 78
94700 SERIAN, SARAWAK	95007 SRI AMAN, SARAWAK
TEL : 084 - 874154	TEL : 083 - 322072
FAX : 084 - 874799	FAX : 083 - 320829
Majlis Daerah Subis 98150 BEKENU, SARAWAK TEL : 085 - 719018 FAX : 085 - 719527	

# SABAH

РВТ							
Dewan Bandaraya Kota Kinabalu	Majlis Perbandaran Sandakan						
No. 1, Jalan Bandaran	Peti Surat 221						
88675 KOTA KINABALU, SABAH	90007 SANDAKAN, SABAH						
TEL: 088 - 254063	TEL: 089 - 273753						
FAX: 088 - 219175	FAX: 089 - 272112						
Majlis Perbandaran Tawau	Majlis Daerah Beaufort						
Peti Surat 412	Peti Surat Bil 181						

91007 TAWAU, SABAH TEL : 089 - 772868 FAX : 089 - 762267	89808 BEAUFORT. SABAH TEL : 087 - 211550 FAX : 087 - 211539 FAX : 087 - 211519 ( Pej Daerah )
Majlis Daerah Kinabatangan	Majlis Daerah Kuala Penyu
W.D.T. NO. 8,	Peti Surat No. 120
90200 KINABATANGAN, SABAH	89740 KUALA PENYU, SABAH
TEL : 089 - 560101	TEL : 087 - 884248
FAX : 089 - 560100	FAX : 087 - 884709
Majlis Daerah Kota Belud	Majlis Daerah Kota Marudu
Peti Surat No 8	Peti Surat 129
89157 KOTA BELUD, SABAH	89100 KOTA MARUDU, SABAH
TEL : 088 - 976529	TEL : 088 - 661323
FAX : 088 - 976529	FAX : 088 - 661163
Majlis Daerah Beluran Peti Surat 20 90107 BELURAN, SABAH TEL : 089 - 511255 FAX : 089 - 511272	Majlis Daerah Lahad Datu Peti Surat 60249 91112 LAHAD DATU, SABAH TEL : 089 - 881621 FAX : 089 - 881832
Majlis Daerah Keningau	Majlis Daerah Papar
Peti Surat 181	Peti Surat 177,
89008 KENINGAU, SABAH	89608 PAPAR, SABAH
TEL : 087 - 341146	TEL : 088 - 912318 / 911094
FAX : 087 - 339986	FAX : 088 - 913608
Majlis Daerah Kunak	Majlis Daerah Penampang
Peti Surat Bil. 15	Peti Surat 80
91207 KUNAK, SABAH	89507 PENAMPANG, SABAH
TEL : 089 - 851205	TEL : 088 - 711712
FAX : 089 - 851398	FAX : 088 - 712588
Majlis Daerah Nabawan Peti Surat No 27 89957 NABAWAN PENSIANGAN. SABAH TEL : 087 - 366194 FAX : 087 - 366212	Majlis Daerah Sipitang Peti Surat 28 89857 SIPITANG, SABAH TEL : 087 - 821701 FAX : 087 - 821284
Majlis Daerah Ranau	Majlis Daerah Semporna
Peti Surat No 57	Peti Surat Bil 134
89308 RANAU, SABAH	91308 SEMPORNA. SABAH
TEL : 088 - 876411	TEL : 089 - 785350
FAX : 088 - 875542	FAX : 089 - 785484
Majlis Daerah Tambunan	Majlis Daerah Tenom

89650 TAMBUNAN, SABAH TEL : 087 - 770126 / 770127 FAX : 087 - 774441	Peti Surat 114 89907 TENOM, SABAH TEL : 087 - 735553 FAX : 087 - 735553
Majlis Daerah Tuaran	Lembaga Bandaran Kudat
Peti Surat Bil 580	Peti Surat No 201
89208 TUARAN, SABAH	89058 KUDAT, SABAH
TEL : 088 - 788303/ 550	TEL : 088 - 611266
FAX : 088 - 787573	FAX : 088 - 613002

# APPENDIX C

	UNIVERSITI TEKNOLOGI MARA SERIAL NO :	For Office Use Only
	THE DETERMINANTS OF MANAGEMENT ACCOUNTING PERFORMANCE AMONG DIPLOMA IN ACCOUNTANCY STUDENTS AT UITM KEDAH, PERLIS AND PERAK	
	Noraini Abdul Rahim / Wan Faizah Wan Abdullah / Marzlin Marzuki / Siti Salmah Abu Bakar	
RE	SEARCH FORM	
PA	RT A	
1.	Student ID : (please specify)	
2.	Name of branch campus : (please specify)	
3.	Age (as at 1/1/2003) : (please specify)	
4.	Part: 5 6 7 8	
5.	Gender: Male Female	
6.	Secondary school attended for SPM: Boarding school Daily school	

7. Town in which your school was located:

Urban

Rural

#### PART B

8. Grades obtained for each subject at SPM level.

	Al	A2	B3	B4	C5	C6	D7	D8	G9
Accounting									
Commerce									
English									
Mathematics									
Additional Mathematics									
Economics									

#### PART C

9. Grades obtained for each subject at UiTM Diploma in Accountancy Programme (Please indicate the first attempt grade only)

	A+	А	A-	B+	В	B-	C+	С	C-	D+	D	D-	E	F
MAC210														
MAC260														

# APPENDIX D

Parameters	Number of students	Percentage (%)
Gender		
Male	124	27 5
Female	325	72.1
Level of study		
Part 5	132	29.3
Part 6	256	56.8
Part 7	37	8.2
Part 8	26	5.8
School location		
Rural	169	37.5
Urban	260	57.6

# DEMOGRAPHIC TABLE

#### PERFORMANCE OF EACH MANAGEMENT ACCOUNTING COURSE BETWEEN STUDENTS WITH AND WITHOUT SPM ACCOUNTING

	spm accounting	N	Mean	Std. Deviation	Std. Error Mean	Significant (2 tail)
grade point mac210	without	192	2 0346	.85863	06197	0.000
	with	243	2.4158	.88062	05649	
grade point mac260	without	147	2.3627	.86186	07109	0.006
	with	202	2.6152	.82800	05826	
grade point fmc330	without	104	2.2661	.92603	.09080	0.011
	with	168	2.5533	.88508	.06829	

#### PERFORMANCE OF EACH MANAGEMENT ACCOUNTING COURSE BETWEEN STUDENTS WITH AND WITHOUT SPM ADDITIONAL MATHEMETICS

	spm add math	N	Mean	Std. Deviation	Std. Error Mean	Significant (2 tail)
grade point mac210	without	217	2.1123	.89386	.06068	0.002
	with	218	2.3730	.87572	.05931	
grade point mac260	without	165	2.3958	.85875	.06685	0.020
	with	182	2.6096	.83750	.06208	
grade point fmc330	without	127	2.3622	.88286	.07834	0.154
	with	141	2.5222	.94139	.07928	

#### PERFORMANCE OF EACH MANAGEMENT ACCOUNTING COURSE BETWEEN STUDENTS WITH AND WITHOUT SPM ECONOMIC

	spm economic	N	Mean	Std. Deviation	Std. Error Mean	Significant (2 tail)
grade point mac210	without	293	2.3106	.86245	.05038	0.021
	with	146	2.1027	.92910	.07689	
grade point mac260	without	237	2.5566	.85061	.05525	0.107
	with	114	2.4005	.83911	07859	
grade point fmc330	without	185	2.5224	.88299	.06492	0.037
	with	87	2.2757	.94863	.10170	

#### PERFORMANCE OF EACH MANAGEMENT ACCOUNTING COURSE BETWEEN GENDER

	gender	N	Mean	Std. Deviation	Std. Error Mean	Significant (2 tail)
grade point mac210	female	318	2.3134	.88440	.04959	0.006
	male	119	2.0532	.88607	.08123	
grade point mac260	female	256	2.5480	.85325	.05333	0.184
	male	93	2.4116	.82582	.08563	
grade point fmc330	female	202	2.5197	.86950	.06118	0.019
	male	70	2.2236	.99222	.11859	

#### PERFORMANCE OF EACH MANAGEMENT ACCOUNTING COURSE BETWEEN SCHOOL LOCATIONS

	school location	N	Mean	Std. Deviation	Std. Error Mean	Significant (2 tail)
grade point mac210	rural	165	2.1292	.87914	.06844	0.029
	urban	252	2.3241	.89373	.05630	
grade point mac260	rural	133	2.5811	.78271	.06787	0.210
	urban	204	2.4623	.89089	.06238	
grade point fmc330	rural	90	2.4440	.79328	.08362	0.947
	urban	169	2.4360	.98324	.07563	

		MAC 210	aandur	school	spm-	ann analish	spm-	and a distant la	spm-
MAC 210	Pearson Correlation	MAC 210	gender	location	accounting	spin-english	mathematics	spm-add math	economics
	Sig (2-tailed)	· ·							
	N								
	Decement Completion	439							
gender	Pearson Correlation	130(**)	1						
	Sig (2-tailed)	.006				1			
	N	437	449						
school location	Pearson Correlation	.107(*)	- 032	1					
	Sig (2-tailed)	.029	507						
	N	417	428	429					
spm-accounting	Pearson Correlation	.173(**)	- 076	- 020	1				
	Sig (2-tailed)	.006	229	758					
	N	247	252	242	252				
spm-english	Pearson Correlation	.191(**)	- 069	136(**)	244(**)	1			
	Sig (2-tailed)	.000	145	005	000				
	N	432	442	425	250	444			
spm-mathematics	Pearson Correlation	261(**)	- 007	071	306(**)	301(**)	1		
	Sig (2-tailed)		876	141	000				
	N	.000	070	141	252	111	1.10		
spm add math	Pearson Correlation	430	440	428	232	444	440	h	
spin-add.math		.306(**)	- 020	001	236(**)	195(**)	558(**)	1	
	Sig (2-tailed)	.000	767	989	008	.003	000		
	N	222	226	218	126	228	228	228	
spm-economics	Pearson Correlation	.296(**)	- 181(*)	078	_246(*)	160	287(**)	366	1
	Sig (2-tailed)	.000	027	359	037	.053	000	()94	
	N	146	149	140	72	147	150	22	150

#### CORRELATION BETWEEN THE PERFORMANCE OF MANAGEMENT ACCOUNTING 210, SPM SUBJECTS AND DERMOGRAPHIC DATA

\*\* Correlation is significant at the 0.01 level (2-tailed).
\* Correlation is significant at the 0.05 level (2-tailed).

CORELLATION BETWEEN THE PERFORMANCE OF MANAGEMENT ACCOUNTING 260, MANAGEMENT ACCOUNTING 210, SPM
SUBJECTS AND DERMOGRAPHIC DATA

		MAC 260	MAC 210	gender	school location	spm- accounting	spm-english	spm- mathematics	spm-add math	spm- economics
MAC 260	Pearson Correlation	1								
	Sig (2-tailed)									
	N	351								
MAC 210	Pearson Correlation	.433(**)	1							
	Sig (2-tailed)	.000								
	N	346	439							
gender	Pearson Correlation	072	- 130(**)	1						
	Sig (2-tailed)	.177	.006							
	N	349	437	449						
school location	Pearson Correlation	069	107(*)	- 032						
	Sig (2-tailed)	.209	029	507						
	N	337	417	428	429					
spm-accounting	Pearson Correlation	.223(**)	173(**)	- 076	- 020	1			1	
	Sig (2-tailed)	.001	.006	229	758					
	N	204	247	252	242	252				
spm-english	Pearson Correlation	.023	191(**)	- 069	136(**)	244(**)	1			
	Sig (2-tailed)	.665	000	145	005	000				
	N	344	432	442	425	250	444			
spm-mathematics	Pearson Correlation	.174(**)	261(**)	- 007	071	306(**)	301(**)	1		
	Sig (2-tailed)	.001	000	876	141	000	000			
	N	348	436	446	428	252	444	448		
spm-add math	Pearson Correlation	.245(**)	306(**)	020	001	236(**)	. 195(**)	558(**)	1	
	Sig. (2-tailed)	.001	000	767	989	008	003	000		
	N	186	222	226	218	126	228	228	228	

spm-economics	Pearson Correlation	.253(**)	296(**)	- 181(*)	078	246(*)	160	287(**)	366	1
	Sig (2-tailed)	.007	000	.027	.359	.037	053	000	()94	
	N	114	146	149	140	72	147	150	22	150

\*\* Correlation is significant at the 0.01 level (2-tailed). \* Correlation is significant at the 0.05 level (2-tailed).

0	
( OPPO	latione
<b>UDDE</b>	anous

		gender	school location	spm- accounting	spm-english	spm- mathematics	spm- add.math	spm- economics	costing part 03	costing part 04	finance part 05
gender	Pearson Correlation Sig. (2-tailed)	1		<u> </u>					<u> </u>		
	Ν	449									
school location	Pearson Correlation	032	1								
	Sig. (2-tailed)	.507									
	Ν	428	429								
spm-accounting	Pearson Correlation	076	020	1							
	Sig. (2-tailed)	.229	.758								
	N	252	242	252							
spm-english	Pearson Correlation	- 069	.136(**)	.244(**)	1						
	Sig. (2-tailed)	.145	.005	.000	-						
	N	442	425	250	444						
spm-mathematics	Pearson Correlation	007	.071	.306(**)	.301(**)	1					
	Sig. (2-tailed)	.876	.141	.000	.000	4					
	N	446	428	252	444	448					
spm-add.math	Pearson Correlation	020	.001	.236(**)	.195(**)	.558(**)	1				
	Sig. (2-tailed)	.767	.989	.008	.003	.000	4				
	N	226	218	126	228	228	228				
spm-economics	Pearson Correlation	181(*)	.078	.246(*)	.160	.287(**)	.366	1			
	Sig. (2-tailed)	.027	.359	.037	.053	.000	.094	4			
	Ν	149	140	72	147	150	22	150			

costing part 03	Pearson Correlation	- 130(**)	.107(*)	.173(**)	.191(**)	.261(**)	.306(**)	.296(**)	1		
	Sig. (2-tailed)	.006	.029	.006	.000	.000	.000	.000			
	Ν	437	417	247	432	436	222	146	439		
costing part 04	Pearson Correlation	072	069	.223(**)	.023	.174(**)	.245(**)	.253(**)	.433(**)	1	
	Sig. (2-tailed)	.177	.209	.001	.665	.001	.001	.007	.000		
	N	349	337	204	344	348	186	114	346	351	
finance part 05	Pearson Correlation	143(*)	004	.257(**)	.071	.179(**)	.183(*)	.412(**)	.514(**)	.457(**)	1
	Sig. (2-tailed)	.019	.947	.001	.246	.003	.028	.000	.000	.000	
	Ν	272	259	168	267	270	145	87	267	243	272

Correlation is significant at the 0.05 level (2-tailed).
 \*\* Correlation is significant at the 0.01 level (2-tailed).

# Predictor for MAC 210 (stepwise multiple regression)

#### Model Summary(b)

R Square	F	Sig
0.515	7.424	0.030

a Predictors: (Constant), spm-economics

b Dependent Variable: costing part 03

Included variables					
	Unstandardizec	Sig.			
	В	Std. Error			
(Constant)	0.724	.583	.254		
spm-economics	0.254	.093	.030		

a Dependent Variable: costing part 03

Excluded Variables				
	Beta In	t	Sig	
spm-accounting	508(a)	-1.579	.165	
spm-mathematics	097(a)	- 343	.743	
spm-add.math	463(a)	-2.175	.073	

a Predictors in the Model: (Constant), spm-economics

b Dependent Variable: costing part 03

#### Model

MAC 210 = 0.724 + 0.254 (SPM-economics) +  $e_1$ 

#### Predictor for MAC 260 (stepwise multiple regression)

#### Model Summary(b)

R Square	F	Significant
0.337	9.661	0.006

a Predictors: (Constant), spm-economics

b Dependent Variable: costing part 04

Included variables

	Unstandardized Coefficients		Sig.	
	В	Std. Error		
(Constant)	1.237	.431	.010	
spm-economics	.222	.072	.006	

a Dependent Variable: costing part 04

	Excluded Variables			
	Beta In	t	Sig.	
spm-english	. 196(a)	1.032	.316	
spm-add.math	.242(a)	1.188	.250	
costing part 03	.021(a)	.096	925	

a Predictors in the Model: (Constant), spm-economics

b Dependent Variable: costing part 04

Model

MAC 260 = 1.237 + 0.222 (SPM-economics) +  $e_1$ 

# **PROGRESS SCHEDULE**

Date Activity	4,5,6,7 (2004)	8,9 (2004)	10,11,12 (2004),1(2005)	2,3,4,5 (2005)	6,7 (2005)	8,9 (2005)
Literature Review/						
framework						
Research Design/						
Research						
Methodology/ Theoretical						
Drafting Questionnaire & Pilot testing						
Data Collection/ Interviews Conducted						
Data Analysis						
Results and Findings						
Writing Up						