

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



**THE EFFECTS OF ENTREPRENEURIAL MANAGEMENT,  
ENTREPRENEURIAL ORIENTATION AND ETHICS ON THE  
WOMEN-OWNED SMES BUSINESS PERFORMANCE  
IN MALAYSIA**

**UMI KARTINI BINTI RASHID**



**UUM**  
Universiti Utara Malaysia

**DOCTOR OF PHILOSOPHY  
UNIVERSITI UTARA MALAYSIA  
MAC 2017**

**THE EFFECTS OF ENTREPRENEURIAL MANAGEMENT,  
ENTREPRENEURIAL ORIENTATION AND ETHICS ON THE  
WOMEN-OWNED SMES BUSINESS PERFORMANCE  
IN MALAYSIA**

**By**



**UMI KARTINI BINTI RASHID**

**UUM**  
**Universiti Utara Malaysia**

**Thesis Submitted to  
School of Business,  
Universiti Utara Malaysia,  
In Fulfillment of the Requirement  
for the Degree of Doctor of Philosophy**



**Pusat Pengajian Pengurusan Perniagaan**  
(School of Business Management)

**Kolej Perniagaan**  
(College of Business)

**Universiti Utara Malaysia**

**PERAKUAN KERJA TESIS / DISERTASI**  
(Certification of thesis / dissertation)

Kami, yang bertandatangan, memperakukan bahawa  
(We, the undersigned, certify that)

**UMI KARTINI RASHID**

calon untuk Ijazah **DOCTOR OF PHILOSOPHY**  
(candidate for the degree of)

telah mengemukakan tesis / disertasi yang bertajuk:  
(has presented his/her thesis / dissertation of the following title):

**THE EFFECTS OF ENTREPRENEURIAL MANAGEMENT, ENTREPRENEURIAL ORIENTATION AND ETHICS ON THE WOMEN-OWNED SMEs BUSINESS PERFORMANCE IN MALAYSIA**

seperti yang tercatat di muka surat tajuk dan kulit tesis / disertasi.  
(as it appears on the title page and front cover of the thesis / dissertation).

Bahawa tesis/disertasi tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan, sebagaimana yang ditunjukkan oleh calon dalam ujian lisan yang diadakan pada:

**15 Mac 2017.**

(That the said thesis/dissertation is acceptable in form and content and displays a satisfactory knowledge of the field of study as demonstrated by the candidate through an oral examination held on:

**15 Macrh 2017.**

Pengerusi Viva  
(Chairman for Viva)

**Assoc. Prof. Dr. Sa'ari Ahmad**

Tandatangan  
(Signature)

Pemeriksa Luar  
(External Examiner)

**Prof. Dr. Izaidin Abdul Majid (UTEM)**

Tandatangan  
(Signature)

Pemeriksa Dalam  
(Internal Examiner)

**Assoc. Prof. Dr. Norashidah Hashim**

Tandatangan  
(Signature)

Tarikh: **15 Mac 2017**  
(Date)

Nama Nama Pelajar : Umi Kartini Rashid  
(Name of Student)

Tajuk Tesis / Disertasi : **The Effects of Entrepreneurial Management, Entrepreneurial  
(Title of the Thesis / Dissertation) Orientation and Ethics on the Women-Owned SMEs Business  
Performance in Malaysia**

Program Pengajian : **Doctor of Philosophy**  
(Programme of Study)

Nama Penyelia/Penyelia-penyelia : **Prof. Dr. Rosli Mahmood**  
(Name of Supervisor/Supervisors)



Tandatangan



**UUM**  
Universiti Utara Malaysia

## PERMISSION TO USE

In presenting this thesis in fulfilment of the requirements for a postgraduate degree from Universiti Utara Malaysia, I agree that the Universiti Library may make it freely available for inspection. I further agree that permission for the copying of this thesis in any manner, in whole or in part, for scholarly purpose may be granted by my supervisor(s) or, in their absence, by the Dean of School of Business Management. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to Universiti Utara Malaysia for any scholarly use which may be made of any material from my thesis.

Requests for permission to copy or to make other use of materials in this thesis, in whole or in part, should be addressed to:

Dean of School of Business Management

College of Business  
Universiti Utara Malaysia  
06010 UUM Sintok  
Kedah Darul Aman.



## ABSTRACT

Being one of the major players in economic growth, the number of women-owned SMEs in Malaysia is increasing and researches are directed on their business performance. Notwithstanding the vital importance of this area, very few studies have been done to look at the relationships between entrepreneurial management, entrepreneurial orientation and ethics, and the performance of women-owned businesses particularly in Malaysia. Therefore, this study focused primarily on testing the possibility of ethics as the mediating variable in the relationships between entrepreneurial management and entrepreneurial orientation, and women-owned SMEs business performance. Based on the literature, six dimensions of entrepreneurial management: entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, and strategic orientation; and three dimensions of entrepreneurial orientation: innovativeness, pro-activeness and risk taking, were selected, and 18 direct and indirect hypotheses were developed. Measurement tools were based on scales previously established in the literature for measuring entrepreneurial management, entrepreneurial orientation, ethics, and also business performance. A total of 207 usable data were gathered through a mail questionnaire survey, and multiple regressions analysis was employed to analyse the data. The empirical findings revealed significant relationships between women-owned SMEs business performance and resource orientation, reward philosophy, strategic orientation, innovativeness, pro-activeness as well as risk taking. Ethics was found to mediate the relationships between reward philosophy, strategic orientation, pro-activeness, risk taking and women-owned SMEs business performance. The research framework of this study contributes to the existing body of knowledge of women entrepreneurs and entrepreneurship literature. The theoretical contributions and practical implications are also significant findings for women owners-managers of SMEs and women entrepreneurial development in the country. Finally, some limitations are also acknowledged that indicate future research directions.

**Keywords:** Ethics, entrepreneurial management, entrepreneurial orientation, women-owned SMEs, business performance

## ABSTRAK

Perusahaan Kecil dan Sederhana (PKS) yang dimiliki oleh wanita adalah salah satu elemen penyumbang utama kepada pertumbuhan ekonomi, maka jumlah PKS milik wanita di Malaysia semakin meningkat dan penyelidikan tertumpu kepada prestasi perniagaan mereka. Walaupun ia penting, namun kajian tentang hubungan antara pengurusan keusahawanan, orientasi keusahawanan dan etika, serta prestasi perniagaan milik wanita khususnya di Malaysia adalah kurang dilakukan. Oleh itu, tumpuan kajian ini adalah untuk menguji kemungkinan etika sebagai pemboleh ubah pengantara dalam hubungan antara pengurusan keusahawanan dan orientasi keusahawanan, serta prestasi perniagaan PKS milik wanita. Berdasarkan kajian literatur, terdapat enam dimensi pengurusan keusahawanan iaitu budaya keusahawanan, orientasi pertumbuhan, struktur pengurusan, orientasi sumber, falsafah ganjaran, dan orientasi strategik. Manakala tiga dimensi orientasi keusahawanan iaitu inovasi, proaktif dan pengambilan risiko telah dipilih dan sebanyak 18 hipotesis langsung dan tidak langsung telah dibangunkan. Alat pengukuran yang digunakan adalah berdasarkan kepada skala yang dibangunkan sebelum ini, iaitu dalam kajian terdahulu untuk mengukur pengurusan keusahawanan, orientasi keusahawanan, etika, dan juga prestasi perniagaan. Sebanyak 207 data telah dapat dikumpulkan melalui kaedah soal selidik secara pos dan analisis regresi berganda telah digunakan untuk menganalisis data. Hasil kajian empirikal menunjukkan bahawa terdapat hubungan yang signifikan antara orientasi sumber, falsafah ganjaran, orientasi strategik, inovatif, proaktif, pengambilan risiko, dan prestasi perniagaan PKS milik wanita. Manakala etika didapati menjadi pengantara hubungan antara falsafah ganjaran, orientasi strategik, proaktif, pengambilan risiko dan prestasi perniagaan PKS milik wanita. Rangka kerja penyelidikan kajian ini menyumbang kepada badan pengetahuan keusahawanan wanita yang sedia ada dan literatur keusahawanan. Hasil kajian juga menawarkan implikasi teori dan praktikal kepada perniagaan PKS milik wanita dan juga untuk pembangunan keusahawanan wanita di negara ini. Akhir sekali, beberapa batasan turut memberi ruang dan arah kepada penyelidikan pada masa hadapan.

**Kata kunci:** Etika, pengurusan keusahawanan, orientasi keusahawanan, PKS milik wanita, prestasi perniagaan.



## ACKNOWLEDGEMENT

Alhamdulillah - all praise for Almighty Allah for providing me this opportunity and granting me the capability to proceed successfully. This thesis would not have been completed without the support and assistance of many people.

Firstly, I would like to express my sincere appreciation to my research supervisor, Prof. Dr. Rosli Mahmood, for his valuable support, motivation, opinions, criticism and immense knowledge towards completing this thesis. I could not have imagined having a better supervisor and mentor for my Ph.D study.

To my better half, Juzaimi Nasuredin, and the apple of my eyes, Muhammad Izz Qayyim and Izzumi Imanie Qaysara, who fall and rise together with me along this journey. There is nothing I can really say to tell you how much I appreciate all you have done for me. You are one of the richest blessings in my life.

To my family, without whom I would not be here, whose unconditional love and unending support brought me to this day. Ayah and Mak: Tuan Haji Rashid Arof and Puan Hajjah Maryam Ariffin. To my elder sisters and younger brother. Not to forget, my in-law. Thank you for supporting me materially and spiritually. Thank you for everything.

My sincere gratitude also extended to the Ministry of Higher Education and Universiti Tun Hussein Onn Malaysia (UTHM) for granting me the scholarship to pursuit this Ph.D Degree.

Finally, every result described in this thesis was accomplished with the help and support of my close friends, especially Masitah Zulkepli, Dr. Md. Fauzi, Azrain Nasyrah, Rusnifaezah, Yusrinadini Zahirah, Rabiatal Adawiyah and many more. Thank you very much for always being there sharing this journey of mine. Perseverance brings us closer to Allah. May Allah give you the best in return.

## TABLE OF CONTENTS

<b>PERMISSION TO USE</b>	<b>i</b>
<b>ABSTRACT</b>	<b>ii</b>
<b>ABSTRAK</b>	<b>iii</b>
<b>ACKNOWLEDGEMENT</b>	<b>iv</b>
<b>TABLE OF CONTENTS</b>	<b>v</b>
<b>LIST OF TABLES</b>	<b>xiii</b>
<b>LIST OF FIGURES</b>	<b>xvii</b>
<b>LIST OF ABBREVIATIONS</b>	<b>xviii</b>
<b>CHAPTER 1 INTRODUCTION</b>	<b>1</b>
1.1 Background	1
1.2 Statement of Problem	13
1.3 Research Questions	21
1.4 Research Objectives	21
1.5 Significance of the Study	22
1.6 Scope of the Study	25
1.7 Definition of Concept	26
1.7.1 Women-owned SMEs	26
1.7.2 Business Performance	26
1.7.3 Entrepreneurial Management (EM)	27
1.7.3.1 Entrepreneurial Culture	27
1.7.3.2 Growth Orientation	27
1.7.3.3 Management Structure	28
1.7.3.4 Resource Orientation	28
1.7.3.5 Reward Philosophy	28

1.7.3.6 Strategic Orientation	29
1.7.4 Entrepreneurial Orientation (EO)	29
1.7.4.1 Innovativeness	29
1.7.4.2 Proactiveness	30
1.7.4.3 Risk Taking	30
1.7.5 Ethics	30
1.8 Organization of the Thesis	31
<b>CHAPTER 2 LITERATURE REVIEW</b>	<b>33</b>
2.1 Introduction	33
2.2 Definitions of Entrepreneur	34
2.3 Definitions of Women Entrepreneurs	40
2.4 Definitions of SMEs	46
2.5 Overview of Women-owned SMEs	49
2.6 Women-owned SMEs in Malaysia	66
2.6.1 Support Programmes for Women Entrepreneurs in Malaysia	74
2.7 Women-owned SMEs Business Performance	80
2.8 Concept of Entrepreneurial Management (EM)	89
2.8.1 Definitions of Entrepreneurial Management (EM)	92
2.8.2 Dimensions of Entrepreneurial Management (EM)	94
2.8.2.1 Entrepreneurial Culture	95
2.8.2.2 Growth Orientation	95
2.8.2.3 Management Structure	95
2.8.2.4 Resource Orientation	96
2.8.2.5 Reward Philosophy	96
2.8.2.6 Strategic Orientation	97

2.8.3 Entrepreneurial Management (EM) among Women Entrepreneurs	98
2.9 Concept of Entrepreneurial Orientation (EO)	99
2.9.1 Definitions of Entrepreneurial Orientation (EO)	102
2.9.2 Dimensions of Entrepreneurial Orientation (EO)	105
2.9.2.1 Innovativeness	106
2.9.2.2 Proactiveness	107
2.9.2.3 Risk Taking	108
2.9.3 Entrepreneurial Orientation (EO) among Women Entrepreneurs	109
2.10 Concept of Ethics	111
2.10.1 Definitions of Ethics	118
2.10.2 Ethics among Women Entrepreneurs	121
2.11 Underpinning Theory	125
2.11.1 Resource-Based View (RBV)	125
2.12 Hypothesis Development	130
2.12.1 Entrepreneurial Management (EM) and Women-owned SMEs Business Performance	130
2.12.2 Entrepreneurial Orientation (EO) and Women-owned SMEs Business Performance	134
2.12.3 Ethics as Mediator	137
2.13 Research Framework	141
2.14 Summary	143
<b>CHAPTER 3 RESEARCH METHODOLOGY</b>	<b>146</b>
3.1 Introduction	146
3.2 Research Design	147
3.2.1 Quantitative Study	149
3.2.2 Survey Method	151

3.3 Respondent	153
3.3.1 Population	153
3.3.2 Sample	157
3.4 Instrumentation	160
3.5 Unidimensional and Multidimensional	161
3.6 Measurement of Variables	162
3.6.1 Business Performance	166
3.6.2 Entrepreneurial Management (EM)	168
3.6.3 Entrepreneurial Orientation (EO)	170
3.6.4 Ethics	171
3.6.5 Demographic and Company Information	174
3.7 Validity and Reliability	174
3.7.1 Validity	174
3.7.2 Reliability	177
3.7.2.1 Cronbach's Alpha for Entrepreneurial Management (EM)	180
3.7.2.2 Cronbach's Alpha for Entrepreneurial Orientation (EO)	181
3.7.2.3 Cronbach's Alpha for Ethics	183
3.7.2.4 Cronbach's Alpha for Business Performance	183
3.8 Pilot Test	184
3.9 Data Collection	187
3.10 Analysis of Data	188
3.10.1 Descriptive Analysis	188
3.10.2 Regression Analysis	190
3.11 Summary	194
<b>CHAPTER 4 ANALYSIS AND FINDINGS</b>	<b>195</b>

4.1 Introduction	195
4.2 Data Collection Process and Survey Response	196
4.3 Non-Response Bias	199
4.4 Data Cleaning	201
4.4.1 Detection of Missing Data	202
4.4.2 Outliers	202
4.5 Descriptive Analysis	203
4.5.1 Sample Background Analysis	204
4.5.1.1 Profile of the Respondents	204
4.5.1.2 Profile of the Firms	211
4.5.2 Construct Analysis	215
4.5.2.1 Entrepreneurial Culture	216
4.5.2.2 Growth Orientation	217
4.5.2.3 Management Structure	218
4.5.2.4 Resource Orientation	219
4.5.2.5 Reward Philosophy	220
4.5.2.6 Strategic Orientation	221
4.5.2.7 Innovativeness	222
4.5.2.8 Proactiveness	223
4.5.2.9 Risk Taking	224
4.5.2.10 Ethics	224
4.5.2.11 Business Performance	226
4.6 Data Analysis	227
4.6.1 Factor Analysis	227
4.6.1.1 KMO and Sphericity Test	228

4.6.1.2 Principal Component Analysis (PCA)	229
4.6.1.3 Factor Analysis for Entrepreneurial Management (EM)	231
4.6.1.4 Factor Analysis for Entrepreneurial Orientation (EO)	235
4.6.1.5 Factor Analysis for Ethics	237
4.6.1.6 Factor Analysis for Business Performance	238
4.7 Assumptions of Multiple Regressions	240
4.7.1 Normality	240
4.7.2 Linearity	243
4.7.3 Homoscedasticity	244
4.7.4 Multicollinearity	245
4.8 Correlation Analysis	246
4.8.1 The Correlations between Entrepreneurial Management (Entrepreneurial Culture, Growth Orientation, Management Structure, Resource Orientation, Reward Philosophy, Strategic Orientation) and Women-owned SMEs Business Performance	248
4.8.2 The Correlations between Entrepreneurial Orientation (Innovativeness, Proactiveness, Risk Taking) and Women-owned SMEs Business Performance	249
4.8.3 The Correlation between Ethics and Performance of the Women- owned SMEs Business Performance	250
4.9 Multiple Regressions	251
4.9.1 The Relationships between Entrepreneurial Management (Entrepreneurial Culture, Growth Orientation, Management Structure, Resource Orientation, Reward Philosophy, Strategic Orientation) and Women-owned SMEs Business Performance	252
4.9.2 The Relationships between Entrepreneurial Orientation (Innovativeness, Proactiveness, Risk Taking) and Women-owned SMEs Business Performance	254
4.9.3 The Mediated Relationships between Entrepreneurial Management (Entrepreneurial Culture, Growth Orientation, Management Structure, Resource Orientation, Reward Philosophy, Strategic	

Orientation), Ethics and Women-owned SMEs Business Performance	256
4.9.4 The Mediated Relationships between Entrepreneurial Orientation (Innovativeness, Proactiveness, Risk Taking), Ethics and Women-owned SMEs Business Performance	262
4.10 Summary of the Hypotheses Testing	266
4.11 Summary	268
<b>CHAPTER 5 DISCUSSIONS AND CONCLUSIONS</b>	<b>270</b>
5.1 Introduction	270
5.2 Discussions on Sample Background Analysis Results	270
5.2.1 Profile of the Respondents	271
5.2.1.1 Current Age	271
5.2.1.2 Age When Started Owning/Managing Business	272
5.2.1.3 Marital Status	272
5.2.1.4 Race	274
5.2.1.5 Educational Background	275
5.2.1.6 Number of Children	277
5.2.1.7 Location by State	277
5.2.1.8 Total Working Experience	278
5.2.1.9 Years of Experience with the Firm	279
5.2.2 Profile of the Firms	280
5.2.2.1 Ways of Owning the Firm	280
5.2.2.2 Firm Age	281
5.2.2.3 Structure of Ownership	281
5.2.2.4 Firm Involvement	282
5.2.2.5 Number of Employees	282
5.2.2.6 Industry	283



5.2.2.7 Sub-sector of the Industry	284
5.3 Discussions on the Main Findings	285
5.3.1 To Determine the Significant Relationship between Entrepreneurial Management (EM) and Women-owned SMEs Business Performance	286
5.3.2 To Determine the Significant Relationship between Entrepreneurial Orientation (EO) and Women-owned SMEs Business Performance	290
5.3.3 To Determine Whether Ethics Mediates the Relationship between Entrepreneurial Management (EM) and Women-owned SMEs Business Performance	293
5.3.4 To Determine Whether Ethics Mediates the Relationship between Entrepreneurial Orientation (EO) and Women-owned SMEs Business Performance	299
5.4 Implications of the Study	303
5.4.1 Theoretical Implications	303
5.4.2 Practical Implications	309
5.5 Limitations and Recommendations for Future Research	313
5.5.1 Limitations	313
5.5.2 Suggestions for Future Research	317
5.6 Conclusions	321
<b>REFERENCES</b>	<b>323</b>
<b>APPENDICES</b>	<b>364</b>

## LIST OF TABLES

Table 1.1 United States' Number And Economic Clout of Women-Owned Firms Continue To Grow	2
Table 1.2 Business Establishments of Women Entrepreneurs in Malaysia	3
Table 2.1 Definitions of Entrepreneurs	38
Table 2.2 Definitions of Women Entrepreneurs	44
Table 2.3 Definitions of SMEs in Malaysia	49
Table 2.4 Research Focus on Women Entrepreneurs in Overall	62
Table 2.5 Definitions of Business Success/Performance for Women Entrepreneurs	87
Table 2.6 Definitions of Ethics	119
Table 2.7 List of the Hypotheses	145
Table 3.1 Quantitative and Qualitative Approaches	150
Table 3.2 Sections in Questionnaire	160
Table 3.3 Survey Format	165
Table 3.4 Business Performance Questions	168
Table 3.5 Questions of Entrepreneurial Management (EM)	169
Table 3.6 Questions of Entrepreneurial Orientation (EO)	171
Table 3.7 Questions of Ethics	173
Table 3.8 Rules of Thumb about Cronbach's Alpha Coefficient Size	179
Table 3.9 Cronbach's Alpha for Entrepreneurial Management (EM)'s Dimensions	180
Table 3.10 Cronbach's Alpha for Entrepreneurial Orientation (EO)'s Dimensions	182
Table 3.11 Cronbach's Alpha for Business Performance	184
Table 3.12 Reliability Coefficient for Each Item in the Instrument	186
Table 4.1 Non-Response Bias	201
Table 4.2 Current Age	205
Table 4.3 Age When Started Owning/Managing Business	205
Table 4.4 Marital Status	206

Table 4.6 Educational Background	207
Table 4.7 Number of Children	208
Table 4.8 State	209
Table 4.9 Total Working Experience	210
Table 4.10 Years of Experience with the Firm	210
Table 4.11 Ways of Owning the Firm	211
Table 4.12 Firm Age	212
Table 4.13 Structure of Ownership	212
Table 4.14 Firm Involvement	213
Table 4.15 Number of Employees	213
Table 4.16 Industry	214
Table 4.17 Sub-sector of the Industry	215
Table 4.18 Means and Standard Deviations (SD) for Entrepreneurial Culture	217
Table 4.19 Means and Standard Deviations (SD) for Growth Orientation	218
Table 4.20 Means and Standard Deviations (SD) for Management Structure	219
Table 4.21 Means and Standard Deviations (SD) for Resource Orientation	220
Table 4.22 Means and Standard Deviations (SD) for Reward Philosophy	221
Table 4.23 Means and Standard Deviations (SD) for Strategic Orientation	222
Table 4.24 Means and Standard Deviations (SD) for Innovativeness	223
Table 4.25 Means and Standard Deviations (SD) for Proactiveness	223
Table 4.26 Means and Standard Deviations (SD) for Risk Taking	224
Table 4.27 Means and Standard Deviations (SD) for Ethics	225
Table 4.28 Means and Standard Deviations (SD) for Business Performance	227
Table 4.29 Interpretation of the Kaiser-Meyer-Olkin (KMO) Value	228
Table 4.30 Measures of Appropriateness of Factor Analysis	229
Table 4.31 Factor Analysis for Entrepreneurial Management (EM)	234

Table 4.32 Factor Analysis for Entrepreneurial Orientation (EO)	236
Table 4.33 Factor Analysis for Ethics	238
Table 4.34 Factor Analysis for Business Performance	239
Table 4.35 Normality Test for the Variables	241
Table 4.36 Test of Multicollinearity	246
Table 4.37 Rules of Thumb about Correlation Coefficient Size*	248
Table 4.38 The Correlations between Entrepreneurial Culture, Growth Orientation, Management Structure, Resource Orientation, Reward Philosophy and Strategic Orientation, and Women-owned SMEs Business Performance.	249
Table 4.39 The Correlations between Innovativeness, Proactiveness, Risk Taking and Women-owned SMEs Business Performance	250
Table 4.40 The Correlation between Ethics and Women-owned SMEs Business Performance.	250
Table 4.41 The Regressions of Entrepreneurial Culture, Growth Orientation, Management Structure, Resource Orientation, Reward Philosophy and Strategic Orientation, On Women-owned SMEs Business Performance.	253
Table 4.42 The Regressions of Innovativeness, Proactiveness and Risk Taking On Women-owned SMEs Business Performance.	255
Table 4.43 The Regressions of Resource Orientation, Reward Philosophy and Strategic Orientation On Women-owned SMEs Business Performance (Step 1)	258
Table 4.44 The Regressions of Resource Orientation, Reward Philosophy and Strategic Orientation on Ethics (Step 2)	259
Table 4.45 The Regression of Ethics On Women-owned SMEs Business Performance (Step 3)	259
Table 4.46 The Mediating Effects of Ethics on the Relationships between Reward Philosophy and Strategic Orientation, and Women-owned SMEs Business Performance (Step 4)	261
Table 4.47 The Regressions of Innovativeness, Proactiveness and Risk Taking on Women-owned SMEs Business Performance (Step 1)	263
Table 4.48 The Regressions of Innovativeness, Proactiveness and Risk Taking on Ethics (Step 2)	263
Table 4.49 The Regression of Ethics on Women-owned SMEs Business Performance (Step 3)	264

Table 4.50 The Mediating Effects of Ethics on the Relationships between Innovativeness, Proactiveness and Risk Taking, and Women-owned SMEs Business Performance (Step 4) 265

Table 4.51 Summary of the Hypotheses 267



## LIST OF FIGURES

Figure 2.1 The Relationships between Entrepreneurial Management (EM), Entrepreneurial Orientation (EO), Ethics and Women-owned SMEs Business Performance	142
Figure 3.1 The Process of Mediation	192
Figure 4.1 Normal Probability Plot of Business Performance	242
Figure 4.2 Normal Probability Plot of Regression Standardized Residual For Business Performance	242
Figure 4.3 Scatterplots of Standardized Residuals against the Predicted Values	244
Figure 5.1 The Existence of Ethics in the Relationships between EM (Reward Philosophy and Strategic Orientation) and Women-owned SMEs Business Performance	307
Figure 5.2 The Existence of Ethics in the Relationships between EO (Proactiveness and Risk Taking) and Women-owned SMEs Business Performance	308



## LIST OF ABBREVIATIONS

AIM	:	Amanah Ikhtiar Malaysia (Endeavour Trust of Malaysia)
BEIM	:	Business Ethics Institute of Malaysia (BEIM)
CA	:	Competitive Advantage
CEO	:	Chief Executive Officer
CGC	:	Credit Guarantee Corporation Malaysia Berhad
ECT	:	Ethical Climate Theory
EFA	:	Explanatory Factor Analysis
EM	:	Entrepreneurial Management
EO	:	Entrepreneurial Orientation
EWC	:	Ethical Work Climate
DOA	:	Department of Agriculture
DOSM	:	Department of Statistics Malaysia
DV	:	Dependent Variable
DWD	:	Department of Women's Development
ECT	:	Earnings per Share
EU	:	European Union
FEM	:	Federation of Women Entrepreneurs Association Malaysia
GDP	:	Gross Domestic Product

GEM	:	Global Entrepreneurship Monitor
GTP	:	Government Transformation Programme
HDC	:	Halal Industry Development Corporation
HRM	:	Human Resource Management
ICD	:	Innovation Creed
ICN	:	Innovation Conviction
ICT	:	Information and Communication Technology
IEO	:	International Entrepreneurial Orientation
I-KeuNITA	:	Inkubator Keusahawanan Wanita
I-KIT	:	Intensive Skill Training for Single Mother
IMT	:	Innovation Mindset
IV	:	Independent Variable
IWE	:	Islamic Work Ethic
KEMAS	:	Kemajuan Masyarakat (Department of Community Development)
KMO	:	Kaiser-Meyer-Olkin
LIH NKRA	:	Low-Income Households National Key Results Area
LO	:	Learning Orientation
MAREF	:	Malaysian Accountancy research and Education Foundation
MATRADE	:	Malaysia External Trade Development Corporation



MID	:	Ministry of Industrial Development
MIDA	:	Malaysian Industrial Development Authority
MIDF	:	Malaysian Industrial Development Finance
MITI	:	Ministry of International Trade and Industry
MO	:	Marketing Orientation
MOA	:	Ministry of Agriculture
MOF	:	Ministry of Finance
MPC	:	Malaysia Productivity Corporation
MSA	:	Measure of Sampling Adequacy
MSMEs	:	Micro, Small, and Medium Enterprises
MWFCD	:	Ministry of Women, Family and Community Development
NACH	:	Need for Achievement
NAWEM	:	National Association of Women Entrepreneurs of Malaysia
OCED	:	The Organisation for Economic Co-operation and Development
1AZAM	:	Akhiri Zaman Miskin (Poverty Eradiction)
OP	:	Organizational Performance
PCA	:	Principal Component Analysis
PENIAGA-WATI	:	Persatuan Wanita Bumiputra Dalam Perniagaan Profesion Malaysia
PWE	:	Protestant Work Ethic

RBV	:	Resource-Based View
RMK10	:	Rancangan Malaysia Ke 10 (Tenth Malaysia Plan)
SBM	:	School of Business Management
SD	:	Standard Deviation
SEM	:	Structural Equation Modeling
SME Corp	:	Small and Medium Enterprise Corporation
SMEDAN	:	Small and Medium Enterprises Development Agency of Nigeria
SMEs	:	Small and Medium Enterprises
SMIDEC	:	Small and Medium Industries Development Corporation
TO	:	Technology Orientation
UAE	:	United Arab Emirates
UK	:	United Kingdom
UNDP	:	United Nation Development Programme
US	:	United States
USAHANITA	:	Persatuan Usahawan Wanita Bumiputera
UUM	:	Universiti Utara Malaysia
VIF	:	Variance Inflation Factor
WAWASA-NITA	:	Persatuan Usahawan Wawasan Wanita Malaysia
WEDP	:	Women Exporters Development Programme

# CHAPTER 1 INTRODUCTION

## 1.1 Background

Entrepreneurship is a fascinating journey consists of hurdles and constraints in the middle path, and success or failure at its final destination. From only just a thought or an idea, entrepreneurs will start on new businesses either by selling products or services (Gartner, 1985; Scarborough, 2011). These businesses are acknowledged as small and medium enterprises (SMEs) based on the standard definitions according to countries (Lukács, 2005).

Nowadays, entrepreneurship is encouraged throughout the economy (Dess, Lumpkin, & Covin, 1997) as it has been recognized as one of the key components of economic development (L. Klapper, Amit, Guillen, & Quesada, 2007). In addition, entrepreneurship is also crucial in modernizing and transforming not only the economies, but also the societies (Smallbone & Welter, 2001), neither in the advanced nor less developed countries. Thus, many managers are looking for ways to make their organizations more entrepreneurial (Brown, Davidsson, & Wiklund, 2001), including women who were found to be a part of the major contributors in the economic growth (Ahl, 2006; N. H. Ahmad & Seet, 2010; Piperopoulos, 2012; Raman, Anantharaman, & Ramanathan, 2013; Grine, Fares, & Meguellati, 2015) in the number of small businesses (Still & Timms, 2000).

According to Fairlie (2009) in the Kauffman Index of Entrepreneurial Activity (1996–2009) Report 2010, every month more than 550,000 new businesses were

launched by the entrepreneurs in the United States. In 2007 itself, women owned 7.8 million businesses and accounted for 28.7 per cent of all businesses nationwide (U.S. Census Bureau, 2010). More so, a survey done by American Express OPEN (2012), based on data from the United States Census Bureau, Survey of Business Owners, reported that between 1997 and 2015, the number of women entrepreneurs in the United States increased by 51 per cent with the number of women-owned firms increased by 74 per cent, employment growth up 12 per cent, and accumulating up to 79 per cent in revenues over the years (American Express OPEN, 2012). Table 1.1 shows the United States' Number And Economic Clout of Women-Owned Firms.

Table 1.1  
*United States' Number And Economic Clout of Women-Owned Firms Continue To Grow*

Year	Total Women-Owned Firms (Million)	Total Employment (Million People)	Total Revenues (Billion USD)
1997	5.4	7.1	\$819
2002	6.5	7.1	\$941
2007	7.8	7.6	\$1,202
2015	9.4	7.9	\$1,500

*Source:* The State of Women-Owned Businesses (2015)

According to the Census of Establishments and Enterprises by the Department of Statistics Malaysia (DOSM) in 2005, a total of 82,911 business establishments were

owned by women (DOSM, 2005). From the figure, service sector represented 89.5 per cent, while manufacturing and agriculture represented 7.5 per cent and 3 per cent respectively. This figure increased in 2011 when the Economic Census Report by DOSM (2011) showed a total of 645,136 active business organizations operating in the country until end of 2010, and generated the output value of goods and services amounted to RM507,089 million. Of the total business establishments, 19.7 per cent or 126,910 were owned by women with the highest number was in the service sector (91.7 per cent), followed by manufacturing sector with 7 per cent (DOSM, 2011b). However, there were fewer women-owned businesses in the other sectors of construction, agriculture, mining and quarrying where the percentage was less than 1.0 per cent (DOSM, 2011b). Table 1.2 reflects the business establishments of the women-owned SMEs in Malaysia in the year 2005 and 2011.

Table 1.2  
*Business Establishments of Women Entrepreneurs in Malaysia*

Year	Women Entrepreneurs	Service	Manufacturing	Agriculture	Construction, Agriculture, Mining and Quarrying
2005	82,911	89.5%	7.5%	3%	-
2011	126,910	91.7%	7%	-	Less than 1%

*Source:* Department of Statistics Malaysia (2005, 2011)

However, irrespective of the distribution of women-owned SMEs by industries in Malaysia, interestingly they were in contrast with those in the United States

excluding service sector. This is parallel with the overall Malaysian SMEs which are divided into five main sectors, namely services that make up the largest category with 90.05 per cent, followed by manufacturing sector (5.8 per cent), construction (2.99 per cent), agriculture (1.04 per cent) and finally, mining and quarrying (0.05 per cent) (DOSM, 2011b).

Meanwhile, in the United States, between 1997 and 2015, women entrepreneurs put their highest concentration in health care and social assistance (53 per cent), educational services (45 per cent), other services (42 per cent), and administrative and waste management services (37 per cent). Meanwhile, the lowest concentrations of women-owned firms were found in finance and insurance (20 per cent), wholesale trade (19 per cent), transportation and warehousing (11 per cent), and finally construction (7 per cent) (American Express OPEN, 2015). This phenomenon is on par with the American SMEs' non-agricultural trends in whole as well (Hammer, Jabara, Bloodgood, & Groosman, 2010).

The above scenarios showed that year by year, women participations in the businesses around the world were increasing, regardless of the declining number of female labour participation rate due to higher school-retention rate and better transition to post-secondary education, and the growing issues of poverty among women due to the increasing number of female-headed households who had greater odds of being poor than male-headed households (Moghadam, 2005; UNDP, 2010a, 2010b). And even more, regardless of numerous obligations assigned to them

including reproductive chores such as childcare and doing house work (Alam, Mohd Jani, & Omar, 2011).

Therefore, entrepreneurship had been characterized as one of the major forces for job creation, further contributed to the economic growth (Fuad & Bohari, 2011), and their contribution was mainly depended on their performance (Azmi, Basir, Che Hashim, & Al-Banna, 2014; Azmi, Basir, Mukhazir, Che Hashim, & Al-Banna, 2014). That is to say, by nurturing entrepreneurship among women, not only their participation and performance could contribute to the Malaysia's gross domestic product (GDP), but also enhance another important role of SMEs to the nation including the poverty reduction among women through job creation (Moghadam, 2005; UNDP, 2010a, 2010b; Al-Sadi, Belwal, & Al-Badi, 2011), which could further stimulate the achievement of socio-economic objectives (Al-Sadi et al., 2011).

Moreover, conforming to the Tenth Malaysia Plan (PMO, 2010), SME Annual Report 2014/2015 (National SME Development Council, 2015) stated in 2014, more than 60 programmes were developed under the Ministry of Women, Family and Community Development (MWFCD), and the Ministry of Industrial Development (MID) Sarawak for human capital development, and under the plan of Malaysia External Trade Development Corporation (MATRADE) for the marketing access which had benefited approximately 100,000 recipients including women entrepreneurs (National SME Development Council, 2015). Hence, the abovementioned Tenth Malaysia Plan (PMO, 2010) and SME Annual Report

2014/2015 (National SME Development Council, 2015) provided the evidence explaining Rozy (2009) that there was a need to bring more women to the economy despite of many barriers to become successful since they made up 50 per cent of the population, as well as the work force, regardless of only 15 per cent of them own business enterprises (Rozy, 2009).

However, although various facilities and support were given in the form of finance and equipment, the number of women entrepreneurs who failed in business were still high (Roddin, Sultan Sidi, Yusof, Mohamed, & Abdul Razzaq, 2000; Md Ali, Md Som, Bujang, & Abu Bakar, 2004). In short, upon all the efforts made by the Malaysian policy makers to address the need for the country's women entrepreneurs to develop and take advantage of the resources, the sector remained underperformed compared to its counterparts.

The above scenarios were explained by Ahl (2006) and Ahl and Nelson (2015) in their studies that the policies and programs for women entrepreneurs were usually evaluated for the design and effectiveness, but not for its impact on the overall position of women in the context of life and equality of opportunity (Ahl, 2006; Ahl & Nelson, 2015). For instance, excluding family responsibilities from the discourse positioned women as incompetent achievers within the economic participation (Ahl, 2006; Ahl & Nelson, 2015). Thus, this caused doubts to arise about the government's competence and effectiveness in supporting new and growing firms (Teoh & Chong, 2007). Moreover, the measuring of women's performance and the designing of



special programs for women as individuals also ignored the fact that entrepreneurship was most often a team undertaking rather than something accomplished by one person (Ahl & Nelson, 2015).

Also, it is not surprising that other studies supported the above fact that besides the crucial role of women entrepreneurs in the economic development, women made less sales profit compared to their counterparts, and had low survival rates in all countries and economic levels due to low initial capital (Pines, Lerner, & Schwartz, 2010), and were less efficient and less growth-oriented (R. T. Harrison & Mason, 2007; Ekpe, 2011a). In addition, despite the increasing number of women-owned firms that exceeds the national average and their economic clout continued to strengthen, they remained smaller than the average firm (American Express OPEN, 2012, 2015). This was for the reason that although women-owned firms now accounted for 30 per cent of all enterprises, and were growing faster in number and employment than most other firms, they employed only 6 per cent of the country's workforce and contributed just under 4 per cent of business revenues, which was roughly the same share they contributed in 1997 (American Express OPEN, 2012, 2015).

Otherwise, women-owned firms were also found to experience the growth pains when their businesses achieving \$250,000–\$499,999 revenue mark, or were likely closely related to those with 5 to 9 employee size class firms, meaning that those were the points at which firms were more likely to struggle as they put more

management systems in place and transitioned from owner/operator to Chief Executive Officer (CEO) (American Express OPEN, 2012).

In Malaysia, notwithstanding the increased in the female enrolment in higher education, the participation of women involved in entrepreneurial jobs were still considered small compared to men (Alam et al., 2011; Abdul Mutalib, Arshad, Ismail, & Ahmad, 2015). This circumstances indirectly reflected the population in Malaysia who were less interested in participating in the field of entrepreneurship and more likely to work in government or private sector (DOSM, 2011a) in the interest of the gross income of women employees that doubled the figure of those women own-account workers (UNDP, 2010b). Therefore, as a consequence, compared to their male counterparts, the involvement of Malaysian women in entrepreneurship, or to be specific, in small and medium enterprises (SMEs) was still very low (DOSM, 2011b), despite of playing a very important role in the economic development and stabilized the economy in periods of recession (Ndubisi & Kahraman, 2005).

Indeed, it was common to see that males dominated the business world (Menziez, Diochon, & Gasse, 2004). Recently, many researches on entrepreneurs were based largely on men who had started businesses (Menziez et al., 2004), while women entrepreneurs were found to be under researched or insufficiently researched (Ahl, 2006), although the number of their participation in business as the owner or manager was increasing (Aziz & Mahmood, 2011). However, the facts that people

had started accepting that women entrepreneurs contributed significantly to the economy (Alam et al., 2011) and the fact that women led their companies and managed at the same time (Alam et al., 2011) could not be denied. In conjunction with this, this study attempts to examine the factors that relate to the success of the women entrepreneurs which could further added to the body of research on the unique challenges faced, as suggested by Reaves (2008).

There were also many factors that contributed neither to the success of the women-owned businesses, nor to their business failures. Thus, the studies on successes and failures of women-owned businesses captured additional attention across many disciplines from psychology to networking to enhance the study in entrepreneurship (Brush, 1992; S. L. Carter & Shaw, 2008).

According to Rao, Venkatachalm, and Joshi (2013), while some firm growth is motivated by external opportunities, namely economic environment and government intervention, other firms are encouraged by internal inducements such as the characteristics of resources, the features of the firm itself as well as the firm's business strategies. In addition, although both factors function as obstacles in growth, compared to the external factors that account for the additional determinants in effecting the firms' growth, the internal factors determine the success of the firm in the market structure that is obviously contributing more to the success of one firm (Rao et al., 2013).

This study intends to fill the gaps on the inconsistent results that existed among the women-owned SMEs performance. For instance, while some studies on gender differences in entrepreneurship had revealed that women-owned firms were found underperformed compared to men-owned firms (Rosa, Carter, & Hamilton, 1996; Rietz & Henrekson, 2000; Roddin et al., 2000; R. T. Harrison & Mason, 2007; R. . R. W. Fairlie, Robb, & Robb, 2009; DOSM, 2011a, 2011b; Ekpe, 2011a; L. F. Klapper & Parker, 2011), studies by Robb and Watson (2012) and Zolin, Stuetzer and Watson (2013) reported contradict results.

In Malaysia, women-owned SMEs underperformed is most probably due to lack of intangible resources: different behaviour or characteristics of women entrepreneurs compared to their male counterparts (Teoh & Chong, 2007). The authors found that five factors, namely individual characteristics, management practices, goals and motivations, networking and finally entrepreneurial orientation (EO), were found to influence the performance of Malaysian women entrepreneurs (Teoh & Chong, 2007). In other study, Knotts, Jones, and LaPreze (2004) revealed that women business owners were less successful, had lower profits, and engaged in weaker management practices than their male counterparts, which further suggested the unique challenges for women entrepreneur.

The above studies indeed provided clear point of views about some of the intangible resources that contributed to the underperformed of the women-owned businesses, thus, creating the gaps between the gender and its counterpart. For instance, the

management practice or “entrepreneurial management” (EM) (Stevenson & Gumpert, 1985), and the strategic orientation that refers to the general pattern of various means employed to achieve the business (Venkatraman, 1989), such as the entrepreneurial orientation (EO), market orientation (MO), learning orientation (LO), and technology orientation (TO) (Ibrahim & Mohd Shariff, 2015). To date, past studies had evidenced EM, supported with EO led to success, either in terms of business performance or firm growth (Gürbüz & Aykol, 2009; Hortovanyi, 2010; Abdul Majid, Ismail, & Cooper, 2011; Hameed & Ali, 2011). Yet, again, they neglected the research among women entrepreneurs.

Besides that, not only because one of the main factors contributed to the failure of women entrepreneur was lack of management skills which was related to EM (Teoh & Chong, 2007), it was also suggested to the researchers to use both EM and EO instruments in order to get a complete assessment (Brown et al., 2001). Further added, these two different dimensions of entrepreneurship were also rarely used in the same study (Gürbüz & Aykol, 2009), although they were positively related, with only partly overlapping and gauged different and distinct aspects of entrepreneurship (Brown et al., 2001). Therefore, this study makes use of this overlying and considers how the variables of EM and EO influence business performance independently within the scope of women-owned SMEs in Malaysia.

Apart from the above findings, besides the issues of EM and EO that contributed to the underperformed of women-owned SMEs, studies on gender differences in

entrepreneurship had largely discovered that women were generally more ethical than men (Marta, Singhapakdi, & Kraft, 2008; N. H. Ahmad & Seet, 2010). Table 1.2 shows that 91.7 per cent of 126,910 women-owned SMEs in Malaysia involved in the service sector (DOSM, 2011b), a sector where the goods sold are intangible, thus, marketing services hold the element of trust, the most important asset in selling services, which is an ethical part (Carliner, 2003). More importantly, ethics have been hypothesized as an interrelated mechanisms between firm's resources and its performance (Victor & Cullen, 1988; Christie, Kwon, Stoeberl, & Baumhart, 2003), which is closely related with the Resource-Based View (RBV) theory (Barney, 1991; Grant, 1991).

However, despite all the existence of empirical issues that contributed to the success or performance of the firms owned by women entrepreneurs, no study yet have been conducted to investigate the role of ethics on boosting the influences of firm's intangible resources, namely EM and EO, on the business performance of women-owned SMEs particularly in the Malaysian context, although recent studies revealed that ethics in the organization matters to the performance of the firm (Victor & Cullen, 1988), furthermore contributed to the country's economic development (Congleton, 1991). That is to say, ethical environment within an organisation was concluded as an important element shaping employees' ethical behaviour (Arnaud, 2010) that influence the firm's profitability (Christie et al., 2003). Additionally, lack of studies between ethics and business performance in Malaysia, (Furnham & Muhiudeen, 1984; Zabid & Alsagoff, 1993; J. L. Gupta & Sulaiman, 1996;

Khademfar, Idris, Omar, Ismail, & Arabamiry, 2013), especially in the area of women entrepreneurship made it interesting to investigate the role of ethics in enhancing the effects of firms' intangible resources namely EM and EO, on the business performance of women-owned SMEs in Malaysia.

To summarize, the insufficient results between EM, EO and women-owned SMEs business performance, mediated by ethics, in the developing countries, particularly in Malaysia, make it interesting to conduct this study which will focus on the direct and indirect relationships between the variables and the above literatures have shown that there are relationships between them.

## **1.2 Statement of Problem**

Notwithstanding the above finding, it cannot be denied that performance of women-owned businesses were lower than their male counterparts, and therefore must be subject to further investigation (Brush, 1992; Fischer, 1992; Rosa et al., 1996; Rietz & Henrekson, 2000; Menzies et al., 2004; Ahl, 2006; R. T. Harrison & Mason, 2007; L. F. Klapper & Parker, 2011).

Despite the studies that have been conducted to investigate the factors that influenced women-owned SMEs performance in Malaysia (Md Ali et al., 2004; Teoh & Chong, 2007; Abdul Karim & Azmi, 2008; Gadar & Yunus, 2009; Idris, 2009; Mohd Yusof, 2011; Alam et al., 2011; Alam, Che Senik, & Mohd Jani, 2012; Fuad & Bohari, 2011; Mahajar & Mohd Yunus, 2012; Chee et al., 2012; Cheng, Md. Isa,

& Hashim, 2012; K. H. Hassan, Abdullah, & Yusof, 2014; Zulkurnain, Khairushalimi, Azizan, & Ahmad, 2014; Azmi, Basir, Mukhazir, et al., 2014; F. Hassan, Ramli, & Mat Desa, 2014; Abdul Bari, 2015; Mat Rashid, Che Ngah, Mohamed, & Mansor, 2015; Doi, 2015; Yusuff, Bakar, & Ahmad, 2016), there still exist some integrations issues that must be resolved.

Some findings suggested that there were several factors perceived to be associated with the business success and failure, namely psychological factors (Mansor & Che Mat, 2010; Mohd. Nordin et al., 2011; Javadian & Singh, 2012; Azmi, Basir, Mukhazir, et al., 2014; Wahjono, Abdul Hamid, Mohd Din, & Saleh, 2014; Mat Rashid, Che Ngah, et al., 2015; Mat Rashid, Mohamad, & Mansor, 2015), environmental factors (Mansor & Che Mat, 2010; Mohd Yusof, 2011; Mohd. Nordin et al., 2011; Uchenna, Loveline, & Karubi, 2014; Mat Rashid, Che Ngah, et al., 2015; Mat Rashid, Mohamad, et al., 2015), networking factors (Hossain, Naser, Zaman, & Nuseibeh, 2009; Mohd. Nordin et al., 2011; Azmi, Basir, Mukhazir, et al., 2014), and others.

Above all, psychological factors were found to contribute most to neither success nor failures or underperformed of the women-owned businesses (Mansor & Che Mat, 2010; Chee et al., 2012; Mat Rashid, Che Ngah, et al., 2015). As cited by Chandler and Jansen (1992), entrepreneurial, managerial and technical-functional were the three essential competencies for superior performance.



In this study, EM, featuring one of the clusters of behaviours in the psychological factors or firm's intangible resources, were found as one of the most important factors that contributed to the success of neither men nor women-owned businesses (Eliasson & Davidsson, 2003; Gürbüz & Aykol, 2009; Hortovanyi, 2010; Abdul Majid et al., 2011; Bradley, Wiklund, & Shepherd, 2011). Yet, the results were reported among men-owned businesses which had therefore proven that the study on EM among women is still lacking although women were identified to be weaker compared to their male counterparts in terms of performance, including profits and management practices (Knotts et al., 2004), which further suggested the unique challenges for women entrepreneur. In addition, regardless of the room for improvement in the area of EM among women-owned businesses' studies, a study by Kuhn, Sassmannshausen, and Zollin (2010) found no significant influence of EM on firm performance.

The above inconsistency results made it interesting to study about EM though a number of studies were undertaken to examine the influence of EM, towards firm growth (Gürbüz & Aykol, 2009; Hortovanyi, 2010; Kuhn et al., 2010; Abdul Majid et al., 2011; Bradley et al., 2011; Hameed & Ali, 2011). Further added, although it is widely used as a concept, the use of EM in the empirical studies is rare (Gürbüz & Aykol, 2009). In fact, a study by Stevenson (1983) stressed out on the importance of facilitating the empirical study of the EM since it is being predicted as critical to the long term vitality of the country's economy (Stevenson, 1983).

There is also limited knowledge about the relationship between EM and firm performance (Gürbüz & Aykol, 2009). Despite of a number of studies that had been undertaken to examine the influence of EM towards firm growth, a limited number of studies have been carried out to investigate the influence of EM towards women-owned SMEs business performance in Malaysia. Also, regardless of the numerous studies across the world, again, the relationship between EM and women-owned SMEs business performance, particularly in the developing countries, had not been adequately addressed in the literature, and therefore, this variable cannot be ignored. Thus, EM is considered one of the factors to look upon and this study attempts to fulfil the needs to examine the relationship between EM's dimensions, namely entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, and strategic orientation (Brown et al., 2001) and the business performance of women-owned SMEs.

Apart from EM, the other variable which will be focused in this study is entrepreneurial orientation (EO). Previous studies had evidenced not only good EM itself, but entrepreneurial management supported with EO were found as another integrating factors that led to success, either in terms of business performance or firm growth (Dafna, 2008; Gürbüz & Aykol, 2009; Hortovanyi, 2010; Abdul Majid et al., 2011; Hameed & Ali, 2011). However, again, these researches were not conducted solely among women-owned businesses.

Besides that, not only because one of the main factors contributed to the failure of women entrepreneur was lack of management skills which was related to EM, it was also suggested to the researchers to use both EM and EO instruments in order to get a complete assessment (Brown et al., 2001). In addition, if the instrument on the EM represents a valid indicator of opportunity seeking behaviour and/or value creation outcomes, then EO is also an incomplete assessment of firm-level entrepreneurship (Brown et al., 2001). In fact, these two different dimensions of entrepreneurship were also seldom employed in the same study (Gürbüz & Aykol, 2009). In connection to this, Hortovanyi (2010) conducted a study among the Hungarian SMEs by testing the variable of EM be based on the five measures of EO, namely autonomy, innovation, proactiveness, risk-taking, and growth orientation. That is to say, in Hortovanyi's (2010) study, entrepreneurial managers are identified on the level of their EO.

EO which was identified by Miller (1983), had been noted as the essential dimensions of entrepreneurship and being considered to give a great impact in firm's growth (D. Miller, 1987; Lumpkin & Dess, 1996). To date, the examination on the relationship between EO and business performance has also been conducted intensively although the available empirical findings are mixed. Some studies supported the facts that EO impact performance positively (Wiklund & Shepherd, 2005; Walter, Auer, & Ritter, 2006; Wang, 2008; Rauch, Wiklund, Lumpkin, & Frese, 2009; Justin L. Davis, Bell, Payne, & Kreiser, 2010; Kraus, Rigtering, Hughes, & Hosman, 2011; Al-Swidi & Mahmood, 2012; B. S. Anderson & Eshima,

2013), while others confirmed that the two variables were not correlated at all (Andersén, 2010; Messersmith & Wales, 2011). In other cases, some even found that the dimensions of EO supported performance partially (Ambad & Abdul Wahab, 2013; Kreiser, Marino, Kuratko, & Weaver, 2013; Musa, Ghani, & Ahmad, 2014). Therefore, the inconclusiveness and divergent arguments about the relationship between EO and business performance can be concluded as rather complex and needs to be examined by considering all possible related variables or factors that interact with organizational performance (Rauch et al., 2009).

From the above literatures, although studies had proven that the combination of EM and EO had led to success, either in terms of business performance or firm growth (Dafna, 2008; Gürbüz & Aykol, 2009; Hortovanyi, 2010; Abdul Majid et al., 2011; Hameed & Ali, 2011), to understand the complex relationships among EM, EO and business performance, it may be useful to consider ethics as a mediating variable, which contribute to the existing knowledge base on this topic.

Besides the issues of the underperformed of women-owned SMEs compared to their male counterparts, studies on gender differences in entrepreneurship had largely discovered that women were generally more ethical than men (Marta et al., 2008; N. H. Ahmad & Seet, 2010), higher sensitivity in terms of their ethical judgment (Oumlil & Balloun, 2009), and also envisioned a larger role for business in society, particularly in terms of social responsibilities than do male managers (Riddle & Ayyagari, 2011). Moreover, Victor and Cullen (1988) also revealed that ethics in the

organization matters to the performance of the firm, thus contribute to the country's economic development (Congleton, 1991). That is to say, ethical environment within an organisation was concluded as an important element shaping employees' ethical behaviour (Wan Hussin, 2005; Arnaud, 2010) that influence the firm's profitability (Christie et al., 2003).

Concurrently, although ethics have been theorized as an interconnected mechanisms between firm's resources and its performance (Victor & Cullen, 1988; Christie et al., 2003), limited studies were found on the mediating effect of ethics towards performance, especially among the women-owned SMEs business performance. This is due to the lack of studies on entrepreneurial ethics (Longenecker, Mckinney, & Moore, 1996; Baucus & Cochran, 2009) among SMEs, despite the fact that this variable is vital among the SMEs owner-managers since they are the decision makers (J. S. Harrison & Freeman, 1999) in the firms that will improve the other entrepreneurial behaviours such as EM and EO, thereupon contribute to the firm performance. Therefore, there is need for further study on ethics as a mediator on the women-owned SMEs business performance.

To date, studies regarding the role of ethics towards entrepreneurial success, venture creation, corporation's financial and organizational performance, had been done by Verschoor (1998), Wu (2002) and Makhbul and Hasun (2011), and the results were all directly and positively. However, very few studies on the relationship between ethics and business performance had been carried out in Malaysia, especially in the

area of women entrepreneurship (Furnham & Muhiudeen, 1984; Zabid & Alsagoff, 1993; J. L. Gupta & Sulaiman, 1996; Makhbul & Hasun, 2011). Thus, the third variable that had been focused in this study, besides EM and EO, was ethics.

Apart from that, the studies on women entrepreneur mostly applied qualitative studies as their methodology (Reaves, 2008; Washington, 2008; Vázquez-Carrasco, López-Pérez, & Centeno, 2011); however, this study employed quantitative approach to extend the data larger. Therefore, this study aimed to fill this gap; supported by the above suggestions from the literature of the need to study the join relationship between EM dimensions such as entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, and strategic orientation, and EO (innovativeness, proactiveness, risk taking), and other literatures that confirmed the positive relationship between EM, EO, and firm performance; that point to the needs to further study between the variables and women-owned SMEs business performance.

The examination of the mediating effect of ethics was also concerned in this study. On the same note, this study also intended to fill the gaps in identifying the general characteristics of entrepreneurs that contributed to the performance of the firms that had been much conducted from a trait-based rather than from a behavioural perspective (Sadler-Smith, Hampson, Chaston, & Badger, 2003). Thus, to achieve the above target, the following questions need to be asked.

### **1.3 Research Questions**

In order to examine the relationships between entrepreneurial management (EM), namely entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy and strategic orientation, entrepreneurial orientation (EO), namely innovativeness, proactiveness and risk taking, ethics and women-owned SMEs business performance, this study attempts to answer the following questions.

- 1) Is there a significant relationship between entrepreneurial management (EM) and women-owned SMEs business performance?
- 2) Is there a significant relationship between entrepreneurial orientation (EO) and women-owned SMEs business performance?
- 3) Does ethics mediate the relationship between entrepreneurial management (EM) and women-owned SMEs business performance?
- 4) Does ethics mediate the relationship between entrepreneurial orientation (EO) and women-owned SMEs business performance?

### **1.4 Research Objectives**

The specific objectives of this study, derived from the identified research gaps in the literature, are stated as follows:

- 1) To determine the significant relationship between entrepreneurial management (EM) and women-owned SMEs business performance.
- 2) To determine the significant relationship between entrepreneurial orientation (EO) and women-owned SMEs business performance.
- 3) To determine whether ethics mediates the relationship between entrepreneurial management (EM) and women-owned SMEs business performance.
- 4) To determine whether ethics mediates the relationship between entrepreneurial orientation (EO) and women-owned SMEs business performance.

### **1.5 Significance of the Study**

This study proposed to fill in the gaps that had been identified in the previous research and thus, contribute significantly to both in theory and practical.

In line with theoretical contribution, research contribution can be divided into three sections namely; empirical, conceptual and methodological. Firstly, this study contributes to the women entrepreneurship literature by offering an empirical analysis of the women participation in entrepreneurship and their performance through EM and EO, where ethics acts as the mediating factor. There were insufficient studies that bridged between EM, EO, ethics and women-owned SMEs business performance, particularly in the developing countries, which lead to the need



of conducting a study in this area. This is because EM and EO, for instance, are essential to make sure that woman entrepreneurs are equipped with good management skills and motivation factors to survive in the business world and furthermore, compete globally with their male counterparts. Meanwhile, ethics is crucial to all the entrepreneurs in general, as their guidance in conducting businesses properly and wisely.

Secondly, the introduction of the merely combined independent variables of EM and EO, and mediating variable of ethics this study contributes to the body of knowledge as a new conceptual model. The independent variables (IV) strengthen the existing theories on entrepreneurship and also towards the dependent variable (DV). Meanwhile, ethics that measure the indirect relationships between EM and EO, and women-owned SMEs business performance, contribute to the uniqueness of the study.

Thirdly, while there are studies of women entrepreneurs in different national and international contexts, the area of research is less carried out among the women-owned SMEs in Malaysia. Additionally, this study helps the women entrepreneur to improve their quality of lives and furthermore, reduce the issue of poverty among them by providing the better understanding on how EM and EO, supported by ethics, could contribute to their business performance.

In terms of methodological contribution, this study employs quantitative compared to previous studies on women entrepreneur which mostly applied qualitative studies as their methodology (Washington, 2008; Reaves, 2008; Hossain et al., 2009; Vázquez-Carrasco et al., 2011; Ekpe, Mat, & Razak, 2011; Cheng et al., 2012; Khan, 2014; Liem, Melinda, & Aji, 2014; Subramaniam & Islam, 2014; Uchenna et al., 2014; Biswas & Soni, 2015; Mat Rashid, Mohamad, et al., 2015) .

Meanwhile, with regard to the practical contribution, the findings from this study could provide a clear point of view of the current women entrepreneurial situation and help to pursues this mission by working with the stewards of women's entrepreneurship around the world – policy makers, multi-lateral organizations, corporate decision makers, entrepreneurial support organizations and the women's business community – to evaluate, implement and improve policies and programs to support women's enterprise development (American Express OPEN, 2012), in conjunction with the needs of women entrepreneur which will finally lead to the increase of the SME gross domestic product (GDP) contribution to 41 per cent in year 2020, later support the SME Eight-year Masterplan (2012-2020). Furthermore, the result from this study would give guidelines to women entrepreneurs on the importance of conducting business in ethical ways, later on adapt with the challenging world of business which might lead them to compete globally.

## 1.6 Scope of the Study

This study concerns specifically on women entrepreneurs who act as the owner-managers of the firms in Malaysia since their views often represent the views of the entire firms (H. Abu Bakar, Mahmood, & Ismail, 2015). Concentrations were put on the relationships between EM, EO, and women-owned SMEs business performance, mediated by ethics. EM and EO are the IVs; women-owned SMEs business performance is the DV, while ethics is the mediating variable.

This study also focuses on women entrepreneurs who have at least three years business experience because three years of business experience is sufficient to assess an entrepreneurial success (A. C. Cooper & Artz, 1995; Kuzilwa, 2005; S. Carter & Shaw, 2006; Aziz & Mahmood, 2011; Ekpe, 2011a; Fuad & Bohari, 2011; Makhbul & Hasun, 2011; Rao et al., 2013). Furthermore, Vesper (1989) reveals that only about 10 per cent of small businesses survive three years of operation.

The scope of this study also concerns with only 9,000 women respondents who are active and identified through the websites of Persatuan Wanita Bumiputra Dalam Perniagaan Profesional Malaysia (Peniagawati, 2012) and Persatuan Usahawan Wanita Bumiputera (Usahanita, 2012) that provided free complete listing directories of the owners, their companies, phone numbers, correspondence e-mails and addresses, making them the most appropriate database to be used in this study.

## **1.7 Definition of Concept**

For clearer understanding of some of the concepts that are being used in this study, the meanings of women-owned SMEs, business performance, EM, EO and ethics are explained as follows:

### **1.7.1 Women-owned SMEs**

Women-owned SMEs in this study is defined as a female who is an owner-manager of a business (McKay, 2001; Subramaniam & Islam, 2014), or a woman or a group of women, who initiate, organize and operate a business enterprise (Jahanshahi, Kachardas, & Nawaser, 2010; Thayammal, 2011). That is to say, owner-managers become the subject because they are the key informants of the business and usually they are involved in the overall running of the firms (H. Abu Bakar, Mahmood, & Ismail, 2015; H. Abu Bakar, Mahmood, & Nik Ismail, 2015).

### **1.7.2 Business Performance**

Business performance in this study is considered as success from an economic point of view, parallel with the suggestion from Buttner and Moore (1997) that business performance is usually measured from the economic perspectives of growth in sales or employees; and/or by the increase in profits. Davidsson (1991) also added that firm growth is the sign for continued entrepreneurship.

### **1.7.3 Entrepreneurial Management (EM)**

The action of how entrepreneurs act in the entrepreneurship process (Stevenson & Gumpert, 1985) is regarded as management practice or “entrepreneurial management” (Stevenson, 1983; Stevenson & Gumpert, 1985; Stevenson & Jarillo, 1990), that can help firms remain vital and contribute to firm and societal level value creation (Stevenson, 1983).

EM in this study is seen as six empirically isolated distinct dimensions: (1) entrepreneurial culture; (2) growth orientation; (3) management structure; (4) resource orientation; (5) reward philosophy; and (6) strategic orientation.

#### **1.7.3.1 Entrepreneurial Culture**

In a firm, entrepreneurs encourage a broad range of ideas, experimentation and creativity, that are related to the controlled resources in the firm, thus developing an entrepreneurial culture in which new ideas are valued and sought out (Stevenson & Gumpert, 1985; Stevenson & Jarillo, 1990).

#### **1.7.3.2 Growth Orientation**

As regard to growth, it is assumed that the entrepreneurs desire rapid growth and that EM will help create it (Stevenson & Gumpert, 1985; Stevenson & Jarillo, 1990).

### **1.7.3.3 Management Structure**

Management structure is the extent to which the firm has a flat and organic structure (Brown et al., 2001). In other words, entrepreneurial firms are made of multiple informal networks and therefore, the entrepreneurs' organizations are designed to coordinate key non-controlled resources, to be flexible and to create an environment where employees are free to create and seek opportunity (Stevenson, 1983).

### **1.7.3.4 Resource Orientation**

Commitments to opportunity and resources which emphasizes the firms' willingness and ability to pursue opportunities in the market, and describes a firm's commitment level to resources when exploiting opportunities, have been combined under resource orientation dimension. In line with this, control of the resources explains the extent of ownership or employment of resources (Brown et al., 2001).

### **1.7.3.5 Reward Philosophy**

Entrepreneurs are interested in creating and harvesting wealth (value), and the entrepreneurially managed firms tend to base compensation on how individuals contribute to value creation (Stevenson, 1983). The organization's structure is conducive to this evaluation because it is designed for independent action and accountability (Stevenson, 1983).

### **1.7.3.6 Strategic Orientation**

Strategic orientation describes what factors drive the creation of strategy. The entrepreneur's strategy is driven by the opportunities that exist in the environment and not the resources that may be required to exploit them (Stevenson, 1983). And as any form of opportunities drive strategy which is relevant to the firm are identified, resources to exploit it needed to be marshalled (Stevenson, 1983).

### **1.7.4 Entrepreneurial Orientation (EO)**

A strategic posture of a firm which indicates a firm's overall competitive orientation is known as entrepreneurial orientation (EO) as defined by Covin and Slevin (1986, 1991). The dimensions of EO were acknowledged by three-dimensions conceptualization, namely innovativeness, proactiveness and risk taking (D. Miller, 1983), the dominant dimensions that are being focused by most of the EO relevant studies to explain the variance in the construct, and being considered to give a great impact in firm's growth (D. Miller, 1987; Lumpkin & Dess, 1996).

#### **1.7.4.1 Innovativeness**

Innovativeness refers to a willingness to support creativity and experimentation in introducing new products/services, and novelty, technological leadership and research and development (R&D) in developing new processes (Lumpkin & Dess, 2001).

#### **1.7.4.2 Proactiveness**

Proactiveness is an opportunity-seeking, forward-looking perspective involving introducing new products or services ahead of the competition and acting in anticipation of future demand to create change and shape the environment (Lumpkin & Dess, 2001).

#### **1.7.4.3 Risk Taking**

Risk taking means a tendency to take bold actions such as venturing into unknown new markets, committing a large portion of resources to ventures with uncertain outcomes, and/or borrowing heavily (Lumpkin & Dess, 2001). That is to say, risk taking is the degree to which managers are willing to make large and risky resource commitments (D. Miller & Friesen, 1982).

#### **1.7.5 Ethics**

Ethics in this study is considered as the ethical climate of an organization refers to the behaviours that are perceived to be ethically correct and how issues regarding deviations away from those expected behaviours are handled in the organization (Victor & Cullen, 1988). This is due to the critical determinant of ethical climate is the leader's ethical behaviour (Dickson, Smith, Grojean, & Ehrhart, 2001) that effects the employee behaviour (Victor & Cullen, 1988) which will then lead to business profitability (Christie et al., 2003).



## **1.8 Organization of the Thesis**

This study is organized in five main chapters. The first chapter generally discusses about the importance of women-owned SMEs business performance that initiates this study to be conducted. Specifically, this chapter discussed about the background of the study, problem statements, research questions, research objectives, scope of the study, significance of the study, definitions of concepts, and lastly the organization of this thesis.

The next chapter, Chapter Two presents the relevant literature review regarding the independent variables, mediating variable, as well as the literature on firm performance. Basically, apart from the introduction of the chapter, the concepts of entrepreneur, women entrepreneur, and also the concept of women entrepreneur in Malaysia, the concept of business performance, followed by the concept of the independent variables: EM and EO, and the concept of mediating variable: ethics, together with the development of hypotheses for all the variables involved. Others include the underpinning theory, and finally the summary of the chapter.

Chapter Three mainly illustrates the methodology employed in this study. The first section presents the introduction of this chapter, followed by the research design, population and sample, instrumentation, unidimensional and multidimensional, the measurement of all the variables, validity and reliability, pilot test, data collection and finally the analysis of data. This chapter is then closed by its summary.

Chapter Four presents the analysis of the data and findings. Similar with the previous chapters, the main sections in this chapter include the introduction, data collection process, non-response bias, data cleaning, descriptive analysis, data analysis, the assumptions of multiple regressions, followed by the correlation analysis, multiple regressions, summary of the hypothesis, and finally the chapter summary.

Last but not least, chapter five illustrates the discussions from the previous chapters, as well as the implications of the study, the limitations and recommendations, and finally the section that conclude the chapter.



## **CHAPTER 2 LITERATURE REVIEW**

### **2.1 Introduction**

Prior to examining the consequences associated with the business performance of women-owned SMEs, it is necessary to determine the factors that prompt women to succeed in the entrepreneurial route. To date, there has been much research done to determine the factors that effect the business performance of women-owned SMEs. Although the literature covers a wide variety of studies, this study will focus on three variables which are found lagging throughout the literature reviewed and obviously, still have some rooms for improvement. The variables are: entrepreneurial management (EM), entrepreneurial orientation (EO) and ethics, as vital components to the business performance of women-owned SMEs.

As such, although the literature presents the variables; EM, EO, and ethics, in a variety of contexts, this study tends to focus primarily on their effects the business performance of women-owned SMEs. Besides, following the current situational perspective, ethics will be included in the analysis as mediating factor respectively. These factors form the research framework and further, the hypotheses of the study are described in this section.

Therefore, the first part of this chapter will be discussing on the definitions of the sector and variables that will be applied in this study. Here, the phenomena of the study will be explained and predicted. The next part followed by the discussion of

the theoretical framework which states the interrelationships among the variables in the model development of the testable hypotheses. In this part, the variables that are capable of observation; the dimensions of independent variables, namely EM, and EO, and also the mediating variable of ethics that have been reviewed in the previous chapters and their effect towards women-owned SMEs business performance will be discussed.

Despite the fact that the relationships between EM, EO, ethics and women-owned SMEs business performance will be discussed in the literature review, however, in order to clarify and reinforce the connection and relevancy of these variables theoretically, underpinning theories will be put forward in the last part of this chapter.

## **2.2 Definitions of Entrepreneur**

Ever since the word “entrepreneur” which was derived from the French “entreprendre”, indicating the “entrepreneur” as literally an “undertaker”, has been discovered by Richard Cantillon in *Essai sur la Nature du Commerce en Général* in 1755 (Aspromourgos, 2012b), many scholars have made an effort to define the word “entrepreneur” from various perspectives.

In keeping with Cantillon who defined the term entrepreneur as a risk-taker or a person who pays a certain price for a product and resells it at an uncertain price: making decisions about obtaining and using the resources while consequently

admitting the risk of enterprise (Aspromourgos, 2012b), another person who is believed to coin the term of entrepreneur in 1803, the French economist Jean-Baptiste Say, considered the entrepreneur a “planner” or a person endowed with the qualities of judgment, perseverance and knowledge of the world as well as of business (Say, 1971).

The famous economist, Adam Smith (1910) in Michael (2007) claimed entrepreneurship as the study of human actions that lead to changes in the division of labor, and furthermore treated the entrepreneur as an employer, master, merchant and undertaker but explicitly identified him with a capitalist (Michael, 2007).

Yet, another famous economist and political scientist – Joseph Alois Schumpeter (1934) in his research came out to a conclusion that, the entrepreneurial function, as the prime force in economic development, is to innovate in five dimensions: new goods (product innovations); new production methods (process innovations); new markets for demands (for the outputs of enterprises); new markets for supplies (of inputs to production); new industrial organisation (Schumpeter, 1934). In addition, the entrepreneur is not a risk-bearer, this being a function of the capitalist who lends funds to the entrepreneur (Casson, 1987) since Schumpeter’s definition of entrepreneur has a managerial, or decision-making role (Casson, 1987). Also, leadership is the key characteristic of the Schumpeterian entrepreneurial manager (Aspromourgos, 2012b). Following Schumpeter (1934) putting aside risk-bearing was Knight (1933) (Aspromourgos, 2012a) who interpret entrepreneur as the owners

of businesses engaged in genuinely uncertain ventures, insofar as they cannot price and trade the uncertainties, and must thus bear the outcomes of those ventures, are the entrepreneurs, not the salaried managers that make day-to-day decisions (F. H. Knight, 1964).

Consequently, David McClelland (1961) revealed that entrepreneur is a people with a high need for achievement (nACH), strong self-confidence, independent problem-solving skills who prefer situations characterized by moderate risk (McClelland, 1961). Therefore, an entrepreneur is, frequently, considered as an innovative and creative person, suitable to manage a firm which emphasises innovation (McClelland, 1961; Davidsson, 1991). As a result, successful entrepreneurs are endowed with an unusual creativeness, enriched by high property, and a strong need for achievement (McClelland, 1961).

In other cases, while Brockhaus (1980) in his study described entrepreneur as a major owner and manager of a business venture who is not employed elsewhere, Casson (1982, 1987, 1998) found an entrepreneur as someone who specialises in identifying new opportunities and judgemental on the information for coordination.

In relation to the definition of entrepreneur as well, as Drucker (1985) considered entrepreneurs to be innovators, and recommends that companies find sources and indices that demonstrate innovation success and learn and apply the principles that enable innovations to succeed, entrepreneur also is seen as a set of activities involved in organization creation, while in trait approaches, an entrepreneur is a set of

personality traits and characteristics (Gartner, 1988). In the same year, Cromie and Hayes (1988) then added that entrepreneurs as individuals who start new businesses which they own and control. According to D. P. Moore (1990), an entrepreneur is the one who takes an active role in decision-making and risk of a business in which he or she owns majority ownership. Meanwhile, Stevenson and Jarillo (1990) believed that entrepreneurs are the individuals who – either on their own or inside the organizations – pursue opportunities without regard to the resources they currently control.

As the decades passed, the definition of entrepreneur has also been developed. Entrepreneur as defined by S. A. Shane (2003) is an individual who discovers, evaluates and exploits the opportunities to introduce new goods and services, organizes markets, processes and raw materials through organizing efforts that previously had not existed, and their major consideration for the reward of the risk undertaken in the business is getting profit (S. A. Shane, 2003). Meanwhile, an entrepreneur is also seen as one who owns, launches, manages, and assumes the risks of an economic venture (Greve & Salaff, 2003), and a people whom organize, manage, and assume the risk of starting a business, in which he or she owns majority ownership Madura (2007).

According to Scarborough, Wilson, and Zimmerer (2010) in their study, entrepreneurial process is defined as a consistent behaviour management to exploit the opportunity to deliver results beyond their own capabilities. In essence, the

entrepreneur is an individual who has a talent for business, take risks, to identify business opportunities, correct errors effectively, and to seize opportunities (Scarborough et al., 2010). Entrepreneurs also assume financial, psychic, and social risks, and receive the resulting rewards of monetary and personal satisfaction and independence (Hisrich, Peters, & Shepherd, 2010). Table 2.1 summarized a selection of definitions of entrepreneurs, from the most influential writers and scholars in the subject of entrepreneurship.

Table 2.1  
*Definitions of Entrepreneurs*

Author (Year)	Definition
Richard Cantillon (1755)	A risk-taker or a person who pays a certain price for a product and resells it at an uncertain price: "making decisions about obtaining and using the resources while consequently admitting the risk of enterprise".
Jean-Baptiste Say (1803)	A "planner" or a person endowed with the qualities of judgment, perseverance and knowledge of the world as well as of business.
Adam Smith (1910)	An employer, master, merchant and undertaker but explicitly identified him with a capitalist
Frank Knight (1933)	Entrepreneurs are the owners of businesses engaged in genuinely uncertain ventures, insofar as they cannot price and trade the uncertainties, and must thus bear the outcomes of those ventures, <u>not</u> the salaried managers that make day-to-day decisions'.
Joseph Alois Schumpeter (1934)	A person who carries out new combinations (innovations) – new goods (products/services), new methods of productions, opening of a new market, new sources of supply of raw materials, carrying out of new organization.
David C. McClelland (1961); Per Davidsson (1991)	An innovative and creative person, suitable to manage a firm which emphasises innovation



---

Robert H. Brockhaus (1980)	A major owner and manager of a business venture who is not employed elsewhere
Mark C. Casson (1982)	Someone who specialises in identifying new opportunities and judgemental on the information for coordination, not a risk-bearer.
Peter Drucker (1985)	Entrepreneurs are innovators, and companies find sources and indices that demonstrate innovation success and learn and apply the principles that enable innovations to succeed.
William B. Gartner (1988)	Entrepreneur also is seen as a set of activities involved in organization creation, while in trait approaches, an entrepreneur is a set of personality traits and characteristics
Stanley Cromie and John Hayes (1988)	Individuals who start new businesses which they own and control.
Dorothy P. Moore (1990); John Madura (2007)	People whom organize, manage, and assume the risk of starting a business, in which he or she owns majority ownership.
Howard H. Stevenson & J. Carlos Jarillo (1990)	The individuals who – either on their own or inside the organizations – pursue opportunities without regard to the resources they currently control
Scott A. Shane (2003)	An individual who discovers, evaluates and exploits the opportunities to introduce new goods and services, organizes markets, processes and raw materials through organizing efforts that previously had not existed, and their major consideration for the reward of the risk undertaken in the business is getting profit
Arent Greve & Janet W. Salaff (2003)	One who owns, launches, manages, and assumes the risks of an economic venture
Norman M. Scarborough, Doug Wilson & Thomas W. Zimmerer (2010)	Individual who has a talent for business, take risks, to identify business opportunities, correct errors effectively, and to seize opportunities.
Robert D. Hisrich, Michael P. Peters & Dean A. Shepherd (2010)	Individuals who develop something new and they are risk-takers who expect wealth creation from such ventures.

---

As a conclusion, some theorists have narrowly defined entrepreneur as innovators (Schumpeter, 1934; McClelland, 1961; Drucker, 1985; Davidsson, 1991), capitalist

(as cited by Adam Smith (1910) in Michael (2007)), risk-takers (as cited by Cantillon (1755) in Aspromourgos (2012b); Knight, 1964; D. P. Moore, 1990; Madura, 2007; Hisrich et al., 2010; Scarborough et al., 2010), planner (Say, 1971), new venture creators (Cromie & Hayes, 1988; Gartner, 1988), and owners and managers (Brockhaus, 1980; Greve & Salaff, 2003). Not to forget, other theorists who have connected entrepreneurship to exploiting opportunities (Casson, 1987; Stevenson & Jarillo, 1990; S. A. Shane, 2003).

However, despite all the above discussions on the definitions of entrepreneurs, the term itself is still debatable due to the operational definition that tends to vary according to the research interest and focus, compared to the book definition that may be consistent and supports each other (Mansor & Che Mat, 2010). But after all, they contribute to the theory base on culture and circumstances, to making entrepreneurship feasible (McKay, 2001). And until today, the efforts are still sustaining.

### **2.3 Definitions of Women Entrepreneurs**

Despite of the numerous definitions of entrepreneurs, it is interesting to see many scholars who showed their endeavours in explaining the meaning of women or female entrepreneurs – when referring to the gender entrepreneurship (Alias, 2004).

Woman entrepreneur as defined by Lavoie (1985) is the female head of a business who has taken the initiative of launching a new venture, who is accepting the

associated risks and the financial, administrative and social responsibilities and who is effectively in-charge of its day-to-day management. A female entrepreneur as viewed by Starr and Yudkin (1996) is a woman who has the inner-drive and self-initiative attitude to begin her own business, and they are often classified into self-entrepreneurship, inheritance entrepreneurship and partner entrepreneurship.

Buttner and Moore (1997) identified women entrepreneurs in their study as those having initiated the business, being the owner of at least fifty per cent of the business and playing a major managerial role in the business. Meanwhile, Chu (2000) defined women entrepreneurs as female owned manager who has business ownership through their own creation, inheritance or jointly established with family members or friends and being a director and involve in the business process.

According to McKay (2001), women entrepreneurs are the owners of small, medium and large firms (or being said in this study as women-owned SMEs), and they are motivated to develop their own businesses (McKay, 2001). The term “women entrepreneurs” therefore includes self-employed women who work alone in incorporated or unincorporated businesses, as well as business owners who work and employ others in an incorporated or unincorporated business (I. E. Allen, Langowitz, & Minniti, 2006).

On the other hand, women entrepreneur is a person who accepts challenging role to meet her personal needs and become economically independent, and also a strong desire to do something positive is an inbuilt quality of entrepreneurial women, who

is capable of contributing values in both family and social life (Thamaraiselvi, 2007). They are also doing innovative and risky entrepreneurship under certain social values and sex role regulations, and also the organizer of resource relocation, the decision-maker and the risk-taker (X. Zhang & Qian, 2007).

Woman entrepreneur can be regarded as a woman who accepts or taking a challenging role in any business venture to become economically strong by making suitable adjustments in both family and social life (Balamurugan, 2008). They can also be defined as a process where a woman launches new ventures that contribute to personal and economic growth. A female entrepreneur is a creative and practical person who recognizes the right opportunities and uses them for introducing, growing and diversifying commercial ventures (Dzisi, 2008a).

Women entrepreneurs' definition also refers to women who are the principal entrepreneurs of a business. These entrepreneurs are in control of the decision making and assume the risks (Washington, 2008). Besides that, they are viewed as the women or a group of women who initiate, organize and operate a business enterprise (Jahanshahi et al., 2010). And not to forget, they also participate in total entrepreneurial activities, and take the risks involved in combining resources in a unique way to take opportunity identified in their immediate environment through production of goods and services (Okafor & Mordi, 2010), and thus, play a significant role in fostering economic and social development, particularly in the small business sector (S. Z. Ahmad, 2011).

On the other hand, the definition varies from one country to another (Roy, 2014). While the US Census Bureau (U.S. Census Bureau, 2010) defines female-owned business as the one that in which the principal owner or the majority of shareholders are female, in UK it is defined as the one that is either wholly or majority owned by one or two women (McAdam, 2013). Meanwhile, the definition offered by OCED (The Organisation for Economic Co-operation and Development) (OECD, 2012) is —entrepreneurs are persons that have a direct control over the activities of an enterprise, by owning the totality or a significant share of the business. Employer entrepreneurs are those entrepreneurs who employs at least one other person” (p. 24). In this context, OCED further states that businesses that have a sole-proprietor female can be defined as female-owned businesses (OECD, 2012, p. 24).

According to Revathi and Krishnan (2012), the government of India has defined women entrepreneurs as —an enterprise owned and controlled by women having a minimum financial interest of 51 per cent of the capital and giving at least 51 per cent of the employment generated in the enterprise to women” (p. 78). While women entrepreneurs in Malaysia is seen within the concept of 51 per cent and above of the equity held by women or the Managing Director or Chief Executive Officer (CEO) or a woman that owns at least 10 per cent of the equity (DOSM, 2011a). Table 2.2 summarized some of the definitions of the entrepreneurs that have been mentioned.

Table 2.2  
*Definitions of Women Entrepreneurs*

Author (Year)	Definition
Dina Lavoie (1985)	A female head of a business who has taken the initiative of launching a new venture, who is accepting the associated risks and the financial, administrative and social responsibilities and who is effectively in-charge of its day-to-day management.
Jennifer Starr & Marcia Yudkin (1996)	A female entrepreneur is a woman who has the inner-drive and self-initiative attitude to begin her own business, and they are often classified into self-entrepreneurship, inheritance entrepreneurship and partner entrepreneurship.
Holly E. Buttner & Dorothy P. Moore (1997)	A person who initiated the business, being the owner of at least fifty per cent of the business and playing a major managerial role in the business.
Priscilla Chu (2000)	A female owned manager who has business ownership through their own creation, inheritance or jointly established with family members or friends and being a director and involve in the business process.
Ruth McKay (2001)	The owners of small, medium and large firms, and they are motivated to develop their own businesses.
Elaine I. Allen, Nan Langowitz, Maria D.B.A Minniti (2006)	A self-employed woman who work alone in incorporated or unincorporated businesses, as well as business owners who work and employ others in an incorporated or unincorporated business.
Thamaraiselvi (2007)	A person who accepts challenging role to meet her personal needs and become economically independent, and also a strong desire to do something positive is an inbuilt quality of entrepreneurial women, who is capable of contributing values in both family and social life.
Zhang Xiao Ling & Qian Hui (2007)	Female entrepreneurs are doing innovative and risky entrepreneurship under certain social values and sex role regulations, and also the organizer of resource relocation, the decision-maker and the risk-taker.
P Balamurugan (2008)	A woman who accepts or taking a challenging role in any business venture to become economically strong by making suitable adjustments in both family and social life.

---

Smile Dzisi (2008)	A female entrepreneur is a creative and practical person who recognizes the right opportunities and uses them for introducing, growing and diversifying commercial ventures.
Vanessa M. Washington (2008)	Women who are the principal entrepreneurs of a business. These entrepreneurs are in control of the decision making and assume the risks.
Asghar Afshar Jahanshahi, Bairagi Kachardas, Khaled Nawaser (2010), Prem Rose I. Thayammal (2011)	Women or a group of women who initiate, organize and operate a business enterprise.
Chinonye Okafor, Chima Mordi (2010)	A woman who participate in total entrepreneurial activities, and take the risks involved in combining resources in a unique way to take opportunity identified in their immediate environment through production of goods and services.
Syed Zamberi Ahmad (2011)	A woman who can play a significant role in fostering economic and social development, particularly in the small business sector.
U.S. Census Bureau (2010)	The one that in which the principal owner or the majority of shareholders.
DOSM (2011)	51 per cent and above of the equity held by women or the Managing Director or Chief Executive Officer (CEO) or a woman that owns at least 10 per cent of the equity.
OECD (2012)	Businesses that have a sole-proprietor female.
Shanti Revathi & Jayasree Krishnan (2012)	An enterprise owned and controlled by women having a minimum financial interest of 51 per cent of the capital and giving at least 51 per cent of the employment generated in the enterprise to women.
Maura McAdam (2013)	The one that is either wholly or majority owned by one or two women.
Prema Subramaniam & Jesmin Islam (2014)	A female who is an owner-manager of a business

---

The list of the definitions above appears to be covering a few important criteria of the women entrepreneurs to be considered. These critical points include the ownership of the firms which belong to women entrepreneurs, the unity of command and controlling, and the organisational structure of women-owned and operated businesses that tends to be micro, small and medium in terms of enterprise size (SMEs) (S. Z. Ahmad, 2011). Hence, women-owned SMEs in this study is referring to females who are the owner-managers of businesses (McKay, 2001; Subramaniam & Islam, 2014), or women or a group of women, who initiate, organize and operate business enterprises (Jahanshahi et al., 2010; Thayammal, 2011). That is to say, owner-managers become the subject because they are the key informants of the business and usually they are involved in the overall running of the firms (H. Abu Bakar, Mahmood, & Ismail, 2015; H. Abu Bakar, Mahmood, & Nik Ismail, 2015).

However, to date female entrepreneurship is difficult to define, as agreed definition of this term does not exist (Roy, 2014). In addition, despite various definition on the women entrepreneurs, any women who want to become entrepreneurs choose the wrong type of venture for themselves (Washington, 2008). They choose a venture that they are not suited to owning and managing or one that by definition will not produce the profits needed to be successful (Stanley, 2004).

#### **2.4 Definitions of SMEs**

The definition of SMEs varies widely among different countries. According to the European Commission, the main factors determining whether an enterprise is small,



medium or micro are based on the staff headcount and, either turnover or balance sheet total (Commission, 2005). Thus, SMEs as defined by the European Commission are the enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding €50 million Euro, and/or an annual balance sheet total not exceeding €43 million Euro (Commission, 2005). However, European Union (EU) member states have also had their individual definitions of what constitutes an SME (Wikipedia, n.d.-b). For example, the definition in Germany had a limit of 255 employees, while in Belgium it could have been 100 (Wikipedia, n.d.-b). In the United States (US), the Small Business Administration sets small business criteria based on industry, ownership structure, revenue and number of employees (which in some circumstances may be as high as 1500, although the cap is typically 500) (United States Small Business Administration, n.d.). Both the US and the EU generally use the same threshold of fewer than 10 employees for small offices (Wikipedia, n.d.-b).

In Nigeria, SMEs as defined by the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) in the National Policy on MSMEs 2015 (SMEDAN, 2015) is a sector that comprises micro, small, and medium enterprises (MSMEs), which is distinguished as distinctive sector apart of the large firms. Thus, MSMEs are then described as any enterprise with less than 200 employees and not more than ₦1 billion Nigerian Naira, excluding land and buildings (SMEDAN, 2015). Details are as follows; 1) micro enterprises are defined as firms with total employment of less than 10 people, and assets (excluding land and buildings) of less than ₦10

million Naira; 2) small enterprises are defined as firms with total employment between 10 to 49 people, and assets (excluding land and buildings) of above ₦10 million Naira but not more than ₦100 million Naira; and finally 3) medium enterprises are defined as firms with total employment between 50 to 199 people, and assets (excluding land and buildings) of above ₦100 million Naira but not more than ₦1 billion Naira (SMEDAN, 2015).

While in Taiwan, the Small Medium Enterprise Administration (2009) has defined SMEs according to sectors be based on the paid-up capital (manufacturing, construction, mining and quarrying), and annual sales (industry, agriculture, forestry and fisheries, water, electricity and gas, trade, transport, warehousing and communications, finance, insurance and real estate, industrial services and commercial or industrial, social and personal services).

However, in Malaysia, SMEs are defined according to the two criteria: number of full-time employees and the annual sales turnover, with the “OR” basis as follows: 1) For the manufacturing sector, SMEs are defined as firms with sales turnover not exceeding RM50 million OR number of full-time employees not exceeding 200, 2) For the services and other sectors, SMEs are defined as firms with sales turnover not exceeding RM20 million OR number of full-time employees not exceeding 75. Table 2.3 shows the definitions of Malaysian SMEs based on the number of employees and the annual sales turnover for micro, small and medium enterprises.

Table 2.3  
*Definitions of SMEs in Malaysia*

	Manufacturing	Services and Other Sectors
Micro Enterprise	Sales turnover of less than RM300,000 OR full-time employees fewer than 5	Sales turnover of less than RM300,000 OR full-time employees fewer than 5
Small Enterprise	Sales turnover between RM300,000 and less than RM15 million OR full-time employees between 5 and 75	Sales turnover between RM300,000 and less than RM3 million OR full-time employees between 5 and 30
Medium Enterprise	Sales turnover between RM15 million and RM50 million OR full-time employees between 70 and 200	Sales turnover between RM3 million and RM20 million OR full-time employees between 30 and 75

*Source:* SME Corp. (2014)

Despite the above definitions of SMEs in Malaysia and a few other countries, new economic development has brought new opportunities and interests, especially in the area of women-owned SMEs. This is because, women are playing more active and multi-faceted roles in society, by starting their own businesses and gradually gaining influence through participation in various economics and social activities (Fuad & Bohari, 2011).

## 2.5 Overview of Women-owned SMEs

Regardless of the various definitions of “entrepreneurs” and “women entrepreneurs” by a number of researchers, UNDP-Malaysia (2008) reported that, in the world today, there are still nearly one billion people living on less than US\$1 a day, an

estimated 70 per cent of whom are girls and women (UNDP, 2008). This concluded that women are overrepresented amongst the poorest of the poor, suffering the twin oppressions of poverty and gender inequality (UNDP, 2008).

Cohoon et al. (2010) claimed that the top factors motivating both men and women to become entrepreneurs are specifically; the desire to build wealth, the wish to capitalize on business ideas they had, the appeal of start-up culture, a long-standing desire to own their own company, and working for someone else did not appeal to them. Nguyen (2005) then noted that most women start their own business to provide additional flexibility and life balance in managing their traditional responsibilities as wife and primary caretaker of children, even though lead to the implementation of less aggressive and less growth-oriented business strategies (Salleh & Mohd Osman, 2007).

The general mind-set had changed so much that women who juggled family with careers were looked upon as capable and competent to handle business independently. Therefore, it was no longer strange to have business dealings with a female (Alam et al., 2011). Moreover, besides their enthusiasm in business and entrepreneurship, studies revealed that primary intention of women for being entrepreneurs was to support the family income (Salleh & Mohd Osman, 2007), or in other respects, being the head of household for many reasons regardless of low education level, lack of sufficient skills and age factor (Idris, 2008b). Accordingly, women-owned SMEs are particularly important in transitioning the nations for some

additional reasons such as: reducing the discrimination rate amongst women by employing them regularly in the labour force, thus reducing women unemployment (Welter, Smallbone, Isakova, Aculai, & Schakirova, 2004), and finally, becoming role models to the younger generation in showing new opportunities for employment (Welter et al., 2004).

Thus far, studies on women entrepreneurs or women-owned SMEs had been carried out broadly across the nations. For instance, a study by Sappleton (2009) among women entrepreneurs in 30 European nations found that women who operated firms in traditionally female sectors had the highest levels of social capital, which was measured in terms of trust, community engagement and social networks.

In England, Roomi, Harrison, and Beaumont-Kerridge (2009) confirmed that women who are growth-oriented appear to be inhibited due to lack of access to, and control over such resources as, capital, business premises, information and technology, production inputs, appropriate childcare, qualifications, experience, training facilities and appropriate assistance from business development agencies. While in Wales, female entrepreneurs highly valued personal and relationship, and human relations competencies compared to their male counterparts (Mitchelmore & Rowley, 2013). In France, the reasons for women to enter into entrepreneurship were merely due to push and pull factors, and the environmental influence (Orhan & Scott, 2001).

In the US, a qualitative study of the characteristics of successful women entrepreneurs through home-based businesses revealed that family status, family

environment, frustration, enjoyable work/glass ceiling, flexibility, location of work, educational skills, respect, and empowerment factors were the main reasons why they decided to become entrepreneurs (Washington, 2008). Furthermore, organization, understanding and communication (e.g., proper enunciation) with the customer/client, presentation of self, educational skills and tools, excellent time management, reliability, accountability, responsibility, integrity, determination, being a people person, networking, working in the community, devotion, and Christian morals along with outstanding principles were the main reasons why they were or were not successful (Washington, 2008).

Meanwhile, a study by Gundry and Welsch (2001) on the high growth strategies of women-owned enterprises in the US confirmed that entrepreneurs in high-growth firms; will exhibit greater strategic growth and expansion intentions, utilize more organic organization structures, perceive strategic success factors to be of greater importance to their organization, are more likely to utilize a greater variety of financing resources at start-up and growth, and had significantly fewer years of industry experience in business overall, than do entrepreneurs in low-growth firm (Gundry & Welsch, 2001).

In Canada, motivation and success factors among women entrepreneurs were explored and it was clear that motivations could be divided into “classic”, “work-family” and “forced”, and they had statistically significant relationships to income, even when controlling for many of the socio-demographic and business related

factors (Hughes, 2006). Kariv (2011) in his study among the Canadian entrepreneurs found that the genders' differential interpretations of push/pull factors into necessity/opportunity orientations effect their perceived level of business success. A study among the Mexican women-owned SMEs then suggested that entrepreneurial orientation reinforced the effects of two capabilities; market orientation and learning orientation, on the firm performance (Gutiérrez, Fuentes, & Ariza, 2014).

A systematic literature review of forces influencing the performance of African countries' (Nigeria, Ghana, South Africa, Botswana and Ethiopia) female entrepreneurs by Ewoh (2014) compiled that social cultural, environmental and economic factors have greater influence on the performance of women entrepreneurs across Africa. He also suggested that an entrepreneurs personal values such as risk taking abilities, personal motivations, management abilities, family values, responsibilities, and self-confidence, education and experience, may all have influence on the entrepreneur's performance (Ewoh, 2014). Ugandan women entrepreneurs as evidenced by Mulira, Dawa, and Namatovu (2010) stated that majority of Ugandan women entrepreneurs fall in the 18-34 age brackets, earn below USD360 per year, have little or no education and live in rural areas; the factors that made them driven more by necessity than opportunity which is not the case for most of the other developing economies where the reverse holds (Mulira et al., 2010).

On the other hand, Ekpe (2011) explained that motivation, foresight and achievement were also vital characteristics for success. The results of his study then

concluded that women entrepreneurs in Nigeria possessed the necessary characteristics for entrepreneurial success, which confirmed that most of the failed enterprises belong to the men (Ekpe, 2011b).

Singh, Simpson, Mordi, and Okafor (2011) then conducted a study on the motivation to become entrepreneur among Nigerian women's decisions and findings suggested the significance of educational and family capital, an internal orientation to social recognition as well as an external environment characterised by deregulation of the economy. Additionally, they were also generally confident and resourceful and that they enjoyed the challenge of entrepreneurial activity despite of the difficulties relating to family commitments and accessed to finance (Mordi, Simpson, Singh, & Okafor, 2010). In a study by Ogunrinola (2011), social capital as well as neighbourhood effect variables were found to contribute to earnings in the usual Mincer's parlance model. And later on women-owned business study in Nigeria, it had been discovered that they are facing many challenges such as lack of capital, low education, socio-cultural and environmental restrictions, lack of technological advancement problem with financing, lack of ability to take calculated risks, lack of information, government's attitude towards entrepreneurship, lack of infrastructural facilities, lack of information among others where more than 60% of the respondents supported the assertion (Temitope, 2015).

Through mixed-mode studies by Dzisi (2008a, 2008b), indigenous Ghanaian women were found to exhibit many similarities with their counterparts in other countries in



terms of their personality traits, although differed in other aspects such as their educational backgrounds and modes of entrepreneurial skills acquisition (Dzisi, 2008a). In addition, with the determination and a high need for achievement, coupled with hard work, they have proved themselves capable of doing equally well what their male counterparts can do (Dzisi, 2008b). In Tanzania, Tundui and Tundui (2013) conducted an empirical analysis of social capital and women-owned business performance and from the results, it was clear that social capital played a significant role in the performance of women owned businesses (Tundui & Tundui, 2013a). In Somalia, the effects of entrepreneurial orientation's dimensions (innovation, risk taking; pro-activeness) were tested against women-owned business performance (A. Y. S. Ali & Ali, 2013, 2014) and it was revealed in the earlier study that all the mentioned dimensions were found to have statistically significant and positive effect on firm performance (A. Y. S. Ali & Ali, 2013). However, in the next study, innovation and risk taking were found to have statistically significant and positive effect on firm performance, while pro-activeness has no influence on firm performance (A. Y. S. Ali & Ali, 2014).

Besides the abovementioned European, North American and African countries, studies among women-owned SMEs had also been conducted in Australia. For instance, Walker and Webster (2006) determined the management competencies of women business owners and revealed that irrespective of gender, most small business owner-managers perceive themselves to be managerially competent and that their competencies increased over time, although women are still owning and

operating younger and smaller businesses than men (Walker & Webster, 2006). In other cases, Zolin, Stuetzer, and Watson (2013) conducted a study challenging the female underperformance hypothesis and the results indicated that female-owned firms do not underperform male-owned firms.

Studies on women entrepreneurs had also been carried out in the context of West Asia countries. In Bahrain, Al Arrayed (2010) explored the main problems of small businesses and their support measures. For instance, managerial training will be provided for those with lack of managerial skills, financial assistance to those who found difficulties in raising finance, information services for those who are lack of accessibility to information, and finally the counselling services will be the guidance for women entrepreneurs who found that they are lacking of specific programs (Al Arrayed, 2010). Quantitative studies were carried out in Jordan where Al-Alak and Al-Haddad (2010) found that there is a positive relationship between the marital status of business owners and success in business and that being a female or single is not an obstacle facing Jordanian women in business. Additionally, Hattab (2010) claimed that there is a significant impact of the dimensions of technological environment on the growth of female entrepreneurial projects.

In the Kingdom of Saudi Arabia (KSA), the organisational structures of women-owned and operated businesses were found to be micro, small and medium in terms of enterprise size due to difficulty in getting financing, bank loans or other forms of capital investment to expand their business operations (S. Z. Ahmad, 2011). Another

perspective holds in the Sultanate of Oman where the studies on women managers and leaders were focused on the perspectives towards them (Al-Lamky, 2007; Al-Mahrouqi, 2010), and their roles and contributions (Goveas & Aslam, 2011). Equally important, Goveas and Aslam (2011) also claimed that the obstacles hindering women's progress are traditional mind-set of Arab men, self-image of women, human resource policies and strategies towards women, lack of professional women's network, and finally work family conflict. However, in Iran, although Arasti and Kanani (2011) stated that women perceived access to external financing to be more difficult due to the higher collateral as well as the process was more rigid for them, these so called challenges caused by the negative stereotypes and traditions of Iranian society were found as the barriers successful Iranian women entrepreneurs had to overcome, and here the possession of personal internal factors such as high levels of self-efficacy and risk taking positively impacted these women's success (Javadian & Singh, 2012).

On the other hand, despite of experiencing no conflicts between their entrepreneurial life and their personal, family, social, leisure, and friendship lives, women entrepreneurs in the United Arab Emirates (UAE) seemed to face some barriers at the start-up of their venture, emanating mainly from the lack of support, society and traditions, and personal and family reasons (Itani, Sidani, & Baalbaki, 2011). The study by Omair (2009) then revealed that contradiction was found in the identity as a woman and as a manager among women in UAE, the normative dimensions of

identity formation such as being a Muslim and an Emirati serve as enhancing for women's gendered managerial identity.

In a mean time, Weeks (2009) has conducted a study on women business owners in five countries in the Middle East and North Africa; namely Bahrain, Jordan, Lebanon, Tunisia and the United Arab Emirates (UAE), where the findings discovered that women were trading internationally, growth-oriented, and operating across a range of business sectors such as service sector, retail trade, or in non-durable manufacturing (Weeks, 2009). In addition, most of the women surveyed are married with children, between the ages of 35 and 54, and well-educated; about 91 per cent of the women business owners surveyed in Bahrain have some level of post-secondary education, as do 79 per cent in Tunisia and the UAE, 76 per cent in Jordan, and 40 per cent in Lebanon (Weeks, 2009).

Finally, in Asia, studies among women-owned businesses had been conducted extensively in the countries such as India, Pakistan, Bangladesh, Hong Kong, Singapore, Thailand, Indonesia and also Malaysia that will be explained in the next subchapter. Rao, Venkatachalm, and Joshi (2013) conducted a study on the entrepreneurial characteristics and success of women entrepreneurs operating fashion and apparel business in India. The analysis of the entrepreneurial characteristics in terms of human capital revealed that education, training in the specific sector and the prior experience helped in operating the enterprise successfully, while the study on the entrepreneurial intensity suggested that the successful entrepreneurs ran a

considerable amount of risk in operating and expanding the enterprise (Rao et al., 2013). In other study, Revathi and Krishnan (2012) determined the problems and opportunities of Indian women entrepreneurs faced in the globalized economy.

Pakistani entrepreneurial women were then identified as working on a very small level due to little or no knowledge and lack of resources (Rajput & Ali, 2009). In addition, the perspectives most helpful in explaining performance in Pakistani female entrepreneurship are motivations and goals, which are very different from other countries due to the socio-economic and cultural context of Pakistan, besides economic necessity and achieving a high quality of life (Khan, 2014). In order to enhance the performance of women entrepreneurs in this country, the barriers perceived by women entrepreneurs in Islamic Pakistan can be alleviated through women-only training that allows participants to develop capital and competences (Roomi & Harrison, 2010).

Meanwhile, in Bangladesh although there is no significant relation found among the age differential of women entrepreneur and the factors of success, Sarker and Palit (2014) reported that there are 8 factors contributed to success; namely access to technology, interpersonal skill, business feature, training and motivation, social security and freedom, assistance and easy regulation, family support and quality assurance, and risk encountering. In particular, Hossain, Naser, Zaman, and Nuseibeh (2009) in their study revealed that participation in women associations, advocacy, and decision making (self-fulfilment) and knowledge are the main factors

that effect women's decision to develop their business, and the results indicated that religion does not influence women's entrepreneurship development (Hossain et al., 2009).

In Hong Kong, another perspective holds for the reasons of female entrepreneurs to start-up their businesses, which is family related and they look into entrepreneurship as life strategy, compared to male which is more on business purpose and business strategy (Chu, 2000). Nevertheless, Singaporean women entrepreneurs are motivated by a moderately high need for achievement and a slightly high need for dominance (Lee, 1997). They are also very innovative and also open to adopting new ideas and technology to improve and grow their business, and they believe that the success and performance of their businesses are largely due to their management and leadership qualities which are prime movers of innovativeness (Subramaniam & Islam, 2014).

A study on Thai women entrepreneurs then explained that risk-taking has a positive and significant relationship with business performance (Tantasuntisakul, 2015). This is because, compared to other countries' women entrepreneurs, they do not experience any family conflict; hence they are capable of balancing their work and family matters, and furthermore, they also do not face serious problems related to management, marketing, financial and operational competencies which caused them ignore the existence of risks, and in most cases they are able to resolve their business issues competently (Tantasuntisakul, 2015).

In Surabaya, Indonesia, women entrepreneurs needed a strong motivation in order to start-up their micro business, and cost structure, value proposition, customer segments and key resources have been determined as factors that contribute to success (Liem et al., 2014). Finally, studies by T. Tambunan (2009) and T. T. H. Tambunan (2011) on Indonesian women entrepreneurs came to some conclusions that; 1) SMEs are of overwhelming importance in the region (T. Tambunan, 2009) and have been the main player in domestic economic activities in the country (T. T. H. Tambunan, 2011); 2) the key for SME constraints include lack of finance and marketing difficulties (T. T. H. Tambunan, 2011); 3) SME innovation capability is low for several key reasons (T. T. H. Tambunan, 2011); 4) representation of women entrepreneurs is still relatively low and can be attributed to low level of education and cultural/religious constraints (T. Tambunan, 2009; T. T. H. Tambunan, 2011); and 5) most of women entrepreneurs in SMEs are from the category of “forced” entrepreneurs seeking for better family incomes (T. Tambunan, 2009).

From the above literatures, not only studies on women entrepreneurs had been carried out widely in the Asian developing countries (Sachayansrisakul, 2008; T. Tambunan, 2009) due to the increasing prominence, but researchers in the other Islamic countries are also focusing on women entrepreneurs. In other words, women entrepreneurship among the Muslim cultures is encouraged, despite of their low levels of involvement in Islamic countries and communities (Cooney, Manning, Arisha, & Smyth, 2011).

For instance, research on women entrepreneurs in the abovementioned Islamic countries such as Bahrain (Al Arrayed, 2010), Jordan (Al-Alak & Al-Haddad, 2010; Hattab, 2010), Kingdom of Saudi Arabia (KSA) (S. Z. Ahmad, 2011), Omani (Al-Lamky, 2007; Al-Mahrouqi, 2010; Goveas & Aslam, 2011), United Arab Emirates (Omair, 2009; Itani et al., 2011), Nigeria (Mordi et al., 2010; Ekpe, 2011b; Ogunrinola, 2011; Singh et al., 2011; Temitope, 2015), Uganda (Mulira et al., 2010), Iran (Arasti & Kanani, 2011; Javadian & Singh, 2012), Pakistan (Rajput & Ali, 2009; Roomi & Harrison, 2010; Khan, 2014), Bangladesh (Hossain et al., 2009; Sarker & Palit, 2014), Indonesia (T. T. H. Tambunan, 2011; Liem et al., 2014), and Malaysia (T. Abu Bakar, Md Ali, Omar, Md Som, & Muktar, 2007; Idris, 2008a; Alam et al., 2011, 2012; Fuad & Bohari, 2011; Mohd. Nordin et al., 2011; Mat Rashid, Che Ngah, et al., 2015) that will be explained in the next subsection. The above literatures are summarized in Table 2.4.

Table 2.4  
*Research Focus on Women Entrepreneurs in Overall*

Country	Author (Year)	Research Focus	Method
European Countries	Sapleton (2009)	Gender-related Differences	Quantitative
East England	Roomi, Harrison & Beaumont-Kerridge (2009)	Firm Growth	Mixed Method
Wales	Mitchelmore & Rowley (2013)	Gender-related differences	Quantitative
France	Orhan & Scott (2001)	Reasons/Motivations Into Entering Entrepreneurship	Qualitative
USA	Washington (2008)	Reasons/Motivations Into Entering Entrepreneurship	Qualitative
USA	Gundry & Welsch (2001)	Firm Growth	Quantitative



Canada	Hughes (2006)	Business Success	Quantitative
Canada	Kariv (2011)	Business Success	Quantitative
Mexico	Gutiérrez, Fuentes, & Ariza (2014)	Firm Performance	Quantitative
African countries (Nigeria, Ghana, South Africa, Botswana & Ethiopia)	Ewoh (2014)	Performance	Systematic Literature Review
Uganda	Mulira, Dawa, & Namatovu (2010)	Reasons/Motivations Into Entering Entrepreneurship	Qualitative
Nigeria	Ekpe (2011)	Women Entrepreneurial Success	Quantitative
Nigeria	Singh, Simpson, Mordi, & Okafor (2011)	Reasons/Motivations Into Entering Entrepreneurship	Quantitative
Nigeria	Mordi, Simpson, Singh, & Okafor (2010)	Challenges Faced by Female Entrepreneurs	Quantitative
Nigeria	Ogunrinola (2011)	Earnings Distribution Among Female Micro-Entrepreneurs	Quantitative
Nigeria	Temitope (2015)	Challenges Faced by Women Entrepreneurs	Quantitative
Ghana	Dzisi (2008a, 2008b)	Characteristics of Women Entrepreneurs	Mixed Method
Tanzania	Tundui and Tundui (2013)	Business Performance	Quantitative
Somalia	Ali & Ali (2013, 2014)	Business Performance	Quantitative
Australia	Walker and Webster (2006)	Management Competencies	Quantitative
Australia	Zolin, Stuetzer, & Watson (2013)	Firm Performance	Quantitative

Bahrain	Al Arrayed (2010)	Business Success	Qualitative
Jordan	Al-Alak & Al-Haddad (2010)	Business Success	Quantitative
Jordan	Hattab (2010)	Projects Growth	Quantitative
Kingdom of Saudi Arabia (KSA)	Ahmad (2011)	Characteristics of Women Entrepreneurs	Qualitative
Sultanate of Oman	Al-Lamky (2007)	Perspectives of Female Leaders	Qualitative
Sultanate of Oman	Al-Mahrouqi (2010)	Attitudes Towards and Perceptions of Women Managers	Mixed Method
Sultanate of Oman	Goveas & Aslam (2011)	Role and Contributions of Women	Qualitative
Iran	Arasti & Kanani (2011)	Barriers to Business Financing	Quantitative
Iran	Javadian & Singh (2012)	Women's Success	Qualitative
United Arab Emirates (UAE)	Itani, Sidani, & Baalbaki (2011)	Motivations and Frustrations	Qualitative
United Arab Emirates (UAE)	Omair (2009)	Women Managers and Identity Formation	Qualitative
Middle East & North Africa (Bahrain, Jordan, Lebanon, Tunisia & UAE)	Weeks (2009)	Characteristics of Women Business Owners	Qualitative
India	Revathi & Krishnan (2012)	Problems and Opportunities of Women Entrepreneurs	Qualitative
India	Rao, Venkatachalm, & Joshi (2013)	Characteristics and Success of Women Entrepreneurs	Quantitative
Pakistan	Rajput & Ali (2009)	Characteristics of Women Entrepreneurs	Quantitative

Pakistan	Roomi & Harrison (2010)	Women Entrepreneurs Performance	Qualitative
Pakistan	Khan (2014)	Firm Performance	Qualitative
Bangladesh	Sarker & Palit (2014)	Women's Success	Quantitative
Bangladesh	Hossain, Naser, Zaman, & Nuseibeh (2009)	Women's Entrepreneurship Development	Quantitative
Hong Kong	Chu (2000)	Reasons/Motivations Into Entering Entrepreneurship	Mixed Method
Singapore	Lee (1997)	Motivations of Women Entrepreneurs	Quantitative
Singapore	Subramaniam & Islam (2014)	Innovation and The Impact of Technology	Qualitative
Thailand	Tantasuntisakul (2015)	Business Performance	Mixed Method
Indonesia	T. Tambunan (2009) & T. T. H. Tambunan (2011)	Development and Main Constraints of Women Entrepreneurs	Quantitative
Indonesia	Liem, Melinda, & Aji (2014)	Women's Success	Qualitative

From the above, it could be concluded that obviously studies on women entrepreneurs or women-owned SMEs in overall are generally focusing on the same directions; 1) factors that contribute to their business growth, success or performance; 2) their reasons or motivations into entering entrepreneurship; 3) the characteristics of women entrepreneurs; 4) women entrepreneurship development and constraints or barriers; 5) gender-related differences; 6) attitudes towards and perceptions of women managers; and 7) role and contributions of women. Moreover,

up to researcher's knowledge, not only the research objectives that varies, but also the methodologies as shown in Table 2.4.

Therefore, due to the above conflicting results and findings, there is still a room for improvement that requires a need to further study on women-owned SMEs. Therefore, this study tends to fill the gaps and extends the study on the variables that contribute to the women-owned SMEs business performance particularly in Malaysia, which is believed through continuous struggles and battles, there have been many stories of the success of most women entrepreneurs who make it big in the business world.

## **2.6 Women-owned SMEs in Malaysia**

In Malaysia, the earlier participation of Malaysian women in entrepreneurial activities was encouraged as a mean to supplement family income (Salleh & Mohd Osman, 2007), particularly those who became single mothers or head of household (Roddin et al., 2000), or their obligation as family member in providing extra income (Abdul Karim & Azmi, 2008).

Women become a head of household for many reasons such as divorcee, widow, abandoned by husband, helpless husband who is unemployed, imprisoned or migrate (Haji Idris, 2008). Haji Idris (2008) then added in Roddin et al. (2000) that poverty occurs because of many factors such as low income job, large number of self-employment, unemployed, low education level, lack of sufficient skills and age

factor, and thus entrepreneurship is an important element as a way to get out of poverty (Roddin et al., 2000). In fact, there is a growing evidence suggested that there is a significant causal relationship between entrepreneurship, economic growth and poverty reduction (S. Z. Ahmad & Xavier, 2012).

Recently, studies on women-owned SMEs in Malaysia are increasing parallel with the growing number of women entrepreneurs in this country. In this subchapter, past studies on the women-owned SMEs will be zoomed in starting from the huge view of Malaysian perspectives in overall, followed by the results of the studies from women in Peninsular Malaysia, regions, and finally the states in Malaysia.

To begin with, from the theoretical aspects, studies by Teoh and Chong (2007) hypothesized that women's individual characteristics, parental influence, their business management and business strategies, goals and motives, networking and entrepreneurial orientation influenced the performance of women entrepreneurs in Malaysia, while Abdul Karim and Azmi (2008) postulated that successful women entrepreneurs have personal qualities factors and skills for instance communication skills, web thinking and consensus building.

From the empirical aspects, Fuad and Bohari (2011) have conducted a study on Malay women entrepreneurs in the small and medium sized ICT-related business who are listed in the websites of Usahanita (Persatuan Usahawan Wanita Bumiputera), Peniagawati (Persatuan Wanita Bumiputera Dalam Perniagaan Dan Profesyen Malaysia), Wawasanita (Persatuan Usahawan Wawasan Wanita

Malaysia), and Wanita Niaga Dot Com, and confirmed that there was a significant positive correlation between variables need for achievement and entrepreneurial success. Mohd. Nordin et al. (2011) then revealed that financial capital and business expenses have significant effects towards Malaysian women entrepreneurs' business profitability.

In one hand, Hanafi and Mahmood (2013) carried out a study on the effects of entrepreneurial orientation (EO) as the independent variable (IV) and competitive advantage (CA) as the mediator on the business performance of women-owned SMEs. The findings showed that EO was positively and significantly related to performance, and upon testing the mediating effect of competitive advantage (CA) on the relationship between EO and performance based on a regression procedure specified by Baron and Kenny (1986), partial mediation was registered because the effect of EO on performance was reduced to a significant level. On the other hand, Jafri, Ismail, Khurram, and Soehod (2014) then tested the impacts of social capital as the independent variable and firms' innovative capability as the mediating variable on sustainable growth of women owned technoprises (SMEs) in Malaysia. The results indicated a significant direct relationship of social capital and innovative capability with firms' sustainable growth, and nevertheless, strong mediating role of innovative capability was also proved (Jafri et al., 2014).

Structural Equation Modeling (SEM) was then applied by Zulkurnain, Khairushalimi, Azizan, and Ahmad (2014) to investigate the factors that influenced

business performance among women entrepreneurs in SMEs and the results implied that only social factor significantly influenced business performance of women entrepreneurs in SMEs. While economic factor and legal/administrative factor were not significantly influenced business performance of women entrepreneurs in SMEs at 5 per cent level of significance (Zulkurnain et al., 2014). Consequently, a study by Abdul Bari (2015) on the factors influencing women entrepreneurs business success of SMEs in Malaysia discovered that financial capital, motivation and goal, social networking, government support, improvisation and adoption of information and communication technology collectively have positive influence on women business success. However, if it indicates individually, motivation and goal and government support factors have no significance influence to women business success (Abdul Bari, 2015).

Most recently, studies on women entrepreneurs in Malaysia were conducted by Yusuff, Abu Bakar, and Ahmad (2016), Al Mamun (2016) and Al Mamun et al. (2016). Results indicated that there was significant relationship between microfinance and business performance and social capital played the partial mediating role in the relationship between microfinance and business women entrepreneurs performance (Yusuff, Abu Bakar, et al., 2016), women micro-entrepreneurs' level of education, entrepreneurial competencies and total amount of economic credit received had a significant positive effect on microenterprise performance (Al Mamun, 2016), and finally, there was a positive effect of social capital on entrepreneurial competencies (Al Mamun et al., 2016). However, despite

all the external factors that influenced the business performance of the women entrepreneurs in Malaysia, studies on their characteristics and skills are crucial as the growing numbers of self-employed women in Malaysia and their performance are highly depending on the internal factors (Al Mamun, 2016).

Qualitative studies measuring the success of women entrepreneurs in Malaysia had also been conducted extensively by the researchers. Cheng and Md. Isa (2011), Md Isa et al. (2011), Chee et al. (2012) and Cheng, Md. Isa, and Hashim (2012) in their studies found a few factors that contributed to the success of women entrepreneurs in Malaysia. For instance, leadership styles, management styles and personality traits (Cheng & Md. Isa, 2011), individual (interpersonal), organizational (internal) and environmental factors (Md Isa et al., 2011; Chee et al., 2012); in addition, the element of interest and a strong sense of passion towards their entrepreneurial career, their bravery in undertaking risk, self-confidence and positive attitude were the most important factors that had played an important influence on the success of women entrepreneurs (Chee et al., 2012), and finally the innovativeness, strategies and leadership styles of the successful women entrepreneurs in Malaysia (Cheng et al., 2012).

Furthermore, not only studies among Malaysian women entrepreneurs had been extended on their characteristics (Salleh & Mohd Osman, 2007; Shafie et al., 2011; Mohd Rhouse, 2013) that was found to be one of the crucial factors that contributed to the performance of the women entrepreneurs (Al Mamun, 2016), but other factors



such as motivations (Raman, Anantharaman, & Jayasingam, 2008; Raman et al., 2013; Gadar & Yunus, 2009; Azmi, Basir, Mukhazir, et al., 2014), challenges (Mason & Ibrahim, 2012; Azmi, Basir, Che Hashim, et al., 2014; Omar, Nazri, & Che Wel, 2014), and problems, barriers or issues (Mohd Salleh et al., 2006; Teoh & Chong, 2014) of the women entrepreneurs in Malaysia were also proven to be essential and therefore cannot be ignored.

Equally important are the studies on the support (Roddin et al., 2000; Mohamed Isa & Jusoff, 2009) and programs (Abdul Mutalib et al., 2015) initiated by the Malaysian government for the women entrepreneurs. Similarly, studies on women entrepreneurs had also being conducted merely in Peninsular Malaysia on the issues of the above mentioned characteristics (Idris, 2008a, 2008b; Nor, Mohd Noor, & Mohd Nor, 2011), motivations (Osman et al., 2010), and challenges (Idris, 2009; Mohamad, Nor, & Subramaniam, 2010).

Other than that, F. Hassan, Ramli, and Mat Desa (2014) and Doi (2015) in their studies on the success of women entrepreneurs in the Northern Region of Malaysia revealed that confidence and determination, and vision (F. Hassan et al., 2014), and market and network, family support and self-motivational have positive influences on the women entrepreneur business success (Doi, 2015). In other states, Jamaluddin (2010), Che Ismail, Mohd. Shamsudin, and Chowdhury (2012), Franck (2012), and K. H. Hassan, Abdullah, and Yusof (2014) conducted their studies in the state of

Perlis (motivations and problems), Kedah (motivations), Penang (motivations), and Kedah and Penang (limitations faced by rural women entrepreneurs) respectively.

However, surprisingly in Klang Valley, Xavier, Ahmad, Perumal, Mohd Nor, and Mohan (2011) carried out a study on the transition of women entrepreneurs from corporate careers to business ownership and found that the challenges/problems faced by the respondents are shortage of professional staffs, shortage of staffs, issues of development and growth, financial constraint due to heavy overheads and less consultation help from experts (Xavier et al., 2011).

The research on the business performance or success factors related to the women entrepreneurs then resumed in Negeri Sembilan (Buang & Agil, 2011) and the results showed that level of management skills of the Malay women entrepreneurs was high and there was a positive and strong relationship between organizing skills and business performance, besides showing significant difference between organizing, leading & controlling based on level of education (Buang & Agil, 2011).

In Southern Region, Alam, Mohd Jani, et al. (2011) claimed that family support, social ties and internal motivation effected positively and significantly to the success of women entrepreneurs in the small business, and that women entrepreneurs having problem when they entered into the business (Alam et al., 2011). Meanwhile, in Malacca and Johore, ICN (Innovation Conviction), ICD (Innovation Creed) and IMT (Innovation Mindset) were positively correlated with the need for achievement among female entrepreneurs (Alam et al., 2012), and majority of women

entrepreneurs had high level of knowledge, skills and experiences, and leadership, and moderate level of business networking and resources (Redzuan, Abd Rahman, & Muhamad Nasharudin, 2012). Kasim, Abd Hamid, and Abdullah (2010) then found that among the greatest challenges faced by the respondents of this study is lack of financial planning experience. The studies on the important factors that enhance the performance of women-owned SMEs in Malacca and Johore were then resulted to goals and motivation, individual factor, and networking (Wahjono et al., 2014), and their attention to business, ambition and independence (T. Abu Bakar et al., 2007) respectively.

In the East Coast Region, besides the motivational factors that encouraged women entrepreneurs into entering entrepreneurship (Z. Ismail, 2004; Mansor & Che Mat, 2010; Wan Mustapha, Abd. Muin, & Nik Muhammad, 2011; Mahajar & Mohd Yunus, 2012), the key determinants of women entrepreneurs success factors were identified as environmental dimensions and personal attributes (Mat Rashid, Che Ngah, et al., 2015; Mat Rashid, Mohamad, et al., 2015).

Finally, not to forget the qualitative studies on women entrepreneurship in Sabah (Mohammed, Guliling, & Henry, 2009) and Sarawak (Uchenna et al., 2014) to determine the information, business profiles and get a true picture of the trend of women entrepreneurs on financial issues (Mohammed et al., 2009), and the strategies used by respondents in the retail and service sectors (Uchenna et al., 2014).

From the above literatures, it is clear that some of the directions of the studies are in line with the findings on the overall studies of the women-owned SMEs in the former section that generally focused on; 1) factors that contribute to business growth, success or performance; 2) motivations into entering entrepreneurship; 3) characteristics of women entrepreneurs; 4) women entrepreneurship development and challenges, constraints or barriers; 5) role and contributions of women; and finally 6) women entrepreneurship programs in Malaysia.

However, this time, not only the research objectives and methodologies that varies, but also the regions and states as shown in Table 2.4. In fact, the studies on women-owned SMEs are often regionalized and thus, still lacking in presenting the whole picture of the women entrepreneurs' population. Furthermore, studies in examining the factors that contributes to women-owned SMEs performance are also insufficient, which is in the idea of the researcher, very essential for the country's economic growth.

### **2.6.1 Support Programmes for Women Entrepreneurs in Malaysia**

According to Salleh and Mohd Osman (2007), in the early days of Malaysian women involvement in entrepreneurship, their businesses or enterprises were small and most of them were concentrating on serving the local market. Most activities were also spearheaded by government agencies such as the Department of Community Development (KEMAS) and Department of Agriculture (DOA) (Salleh & Mohd Osman, 2007). Yet, despite of the slower supports from the government prior to

1990s, the scenario had changed significantly during the Eight Malaysia Plan in which women participation in business had been integrated as an agenda in the plan (Salleh & Mohd Osman, 2007).

A report by UNDP (2008) on Malaysia stated that gender as a development focus was first mentioned in the Third Malaysia Plan (1976–1980), which encouraged the active participation of women in development and their contribution to the economy. In conjunction with this, the Malaysian government had provided grants and funds to encourage the participation of women in the economy through many of its agencies such as the Special Assistance Schemes through the Small and Medium Industries Development Corporation (SMIDEC) (Teoh & Chong, 2007), and introduced new economic policy and vision 2020 towards developing successful women entrepreneurs (Buang & Idayu, 2011).

Credit Guarantee Corporation Malaysia Berhad (CGC) remains as the main institution to provide guarantees for SMEs which may have otherwise not succeeded in getting financing from financial institutions (National SME Development Council, 2016). Under this scheme, BizWanita-I was developed for the women-owned businesses which aim at reducing the accessibility gap for women (National SME Development Council, 2016).

Apart from the micro-credit assistance and skills development programmes, many other parties are also involved in encouraging the participation of women in development and contribution to the economy for instance the women entrepreneur

association such as Federation of Women Entrepreneurs Association Malaysia (FEM), National Association of Women Entrepreneurs of Malaysia (NAWEM), Persatuan Usahawan Wanita Bumiputera (Usahanita), Persatuan Wanita Bumiputera Dalam Perniagaan Dan Profesyen Malaysia (Peniagawati), the Women's Wing of Malay Chamber of Commerce Malaysia and so forth. These agencies play important roles in promoting and encouraging more Malaysian women to become entrepreneurs besides creating a platform for networking among them (Teoh & Chong, 2007). Furthermore, they also provide skill training programmes to equip women entrepreneurs with entrepreneurial intention, the necessary pathway, knowledge and competencies in establishing and running their businesses (Peniagawati, 2012; Usahanita, 2012).

Parallel with the role of women entrepreneurship that has recently become an important pool of resources for Malaysia's economic growth and personal prosperity (Teoh & Chong, 2007), more attention on gender development programmes was put under the Tenth Malaysia Plan (RMK10) (PMO, 2010). Under this Plan, several steps were taken to increase the participation of women at all levels in both public and private sectors, including entrepreneurial ventures, which could be seen as an opportunity for more women to come forth and explore businesses as a way of earning additional family income and more importantly as a career choice (PMO, 2010).

Under the Tenth Plan as well, the Government Transformation Programme (GTP), under the Raising Living Standards of Low-Income Households National Key Results Area (LIH NKRA) with its flagship project, the Akhiri Zaman Miskin (1AZAM), along with the support of all other existing economic empowerment and social welfare programs which aimed to help the less fortunate brethren, had done an excellent job in eradicating almost all instances of hard-core poverty in this country in which by the end of GTP 1.0 in 2012, incidences of poverty in Malaysia fell from 3.8 per cent in 2009 to 1.7 per cent in 2012 (PMO, 2013).

According to Abdul Mutalib et al. (2015), the Department of Women's Development (DWD) under the Ministry for Women, Family and Community Development (MWFCDD) is one of the significant players in establishing women entrepreneurs in Malaysia by establishing cooperation with Amanah Ikhtiar Malaysia (AIM) to train and develop the entrepreneurs under 1AZAM (PMO, 2010). Interestingly, 60 per cent from the entrepreneurs under this programme managed to earn RM3500 or more income for three consecutive months (Abdul Mutalib et al., 2015). In addition, of those 106,967 participants in 1AZAM, a total of 21,061 (20 per cent) of the women entrepreneurs were on micro-financing through AIM (Abdul Mutalib et al., 2015).

Therefore, in 2013, GTP 2.0 was launched specifically to monitor the performance of the 1AZAM's participants during GTP 1.0 in order to create real change in terms of the financial habits of its participants, and to help remove obstacles that stand in the way of economic empowerment (PMO, 2013). Inspiringly, not only 1AZAM

programme in the GTP 2.0 targeted the indigenous groups such as the Penan people in East Malaysia and Orang Asli groups, which are located in both Peninsular and East Malaysia, but also the specific vulnerable groups and communities, namely ex-drug addicts, released convicts and women (PMO, 2013). The enhancement of the 1AZAM programme also calls for better maintenance of the eKasih database, a database system which was established in 2007 that to improve the effectiveness of poverty eradication implementation programme (ICU PMO, 2012), who have yet to receive assistance due to their location in remote areas and the high cost and difficulty in getting to these participants have resulted in pockets of registrants not receiving help (PMO, 2013).

Therefore, conforming to Tenth Plan as well, SME Annual Report 2014/2015 (National SME Development Council, 2015) had reported that a total of 35 programmes for human capital development amounting to RM73.9 million were implemented in 2014 which had benefited more than 65,120 recipients including women entrepreneurs. For example, the Inkubator Keusahawanan Wanita (I-KeuNITA) programme under the Ministry of Women, Family and Community Development (MWFCD), and the Entrepreneurship Development Programme by the Ministry of Industrial Development (MID) Sarawak to up-skill and reskill the women entrepreneurs to survive in an increasingly competitive business environment (National SME Development Council, 2015).



Additionally, since single mothers were also included in the women entrepreneurs group and played role as backbones for the manpower supply (Roddin et al., 2000), the Intensive Skill Training for Single Mother (I-KIT) entrepreneurship and skills program has been introduced since 2009 as a way to help single mothers who are interested to venture business activities, like managing nursery, craft, beauty and health and other related business (Abdul Mutalib et al., 2015).

In terms of market liberalisation and globalisation, the Government had implemented 33 programmes which were related to market access amounting to RM79.5 million that benefiting more than 31,000 recipients (National SME Development Council, 2015). This included the Women Exporters Development Programme (WEDP) by the MATRADE to assist 36 women entrepreneurs in securing export sales valued at RM110.38 million, which was being expanded from the plan of the MATRADE under the Tenth Malaysia Plan (PMO, 2010). After all, these programmes were developed to allocate more funds to boost the contribution from these entrepreneurs towards the exports (Kamarudin, 2011).

To sum up, being led by Ministry of International Trade and Industry (MITI), then followed by Ministry of Finance (MOF) and Ministry of Agriculture (MOA), there are more than 200 entrepreneurship programs being developed by the government to provide support for all entrepreneurs (Abdul Mutalib et al., 2015). Abdul Mutalib et al. (2015) then further described that the important agencies under MITI which are responsible to provide entrepreneurship programs are such as SME Corporation

Malaysia, MATRADE, Malaysian Industrial Development Authority (MIDA), Malaysia Productivity Corporation (MPC), Small And Medium Enterprise Bank (SME Bank), Malaysian Industrial Development Finance (MIDF), and Halal Industry Development Corporation (HDC).

From the above literatures, it could be concluded that since 1980s, women entrepreneurship development had been focused to enhance their participation in the economy and further contribute to the country's gross domestic product (GDP). However, despite the programmes initiated to support the women entrepreneurs, the sector remained underperformed compared to its counterparts due to the policies that excluded women from their responsibilities to the families (Ahl, 2006; Ahl & Nelson, 2015), and thus, disputed the government's ability and efficiency in assisting nascent and developing firms (Teoh & Chong, 2007).

## **2.7 Women-owned SMEs Business Performance**

To date, research on small and medium enterprises (SMEs) does not adequately address the success of socially embedded subsistence businesses (Paige & Littrell, 2002; Shivani, Mukherjee, & Sharan, 2006). More importantly, again, due to the smaller size and slower in growth of the firms owned by women entrepreneurs (Hanson, 2009), people might not view a majority of women-owned businesses as successful since most people commonly consider money and profits as the best way to measure individual and business success (Sabarwal & Terrell, 2008; Alam et al., 2011). Therefore, there are essential problems with measuring enterprise

performance and success in pure economic outcome terms (Franck, 2012). Thus, entrepreneurial success was viewed as complex and difficult to measure which explained the lag of research in this particular area (S. Shane & Venkataraman, 2000).

The SMEs approach views business success as related to objective measurements such as financial growth (e.g., number of employees, sales turnover), organizational structure, and exports (Masuo, Fong, Yanagida, & Cabal, 2001; R. . R. W. Fairlie et al., 2009). Instead, non-financial measure of performance represents the operational measures (Murphy, Trailer, & Hill, 1996) and being claimed to be complicated (Campbell, 2007) since it includes the entrepreneurial satisfaction (Knotts et al., 2004; Itani et al., 2011).

In addition, Campbell (2007) also highlighted that non-financial measure of performance seems to determining the firm's overall performance and success. Indeed, another perspective holds that scholars can also use both financial and non-financial criteria to measure business success (Paige & Littrell, 2002; Tregear, 2005; Lewis, 2008; M. K. Hashim, 2008; Reijonen, 2008). However, despite the objective measurements as described, it is also believed that measures of business performance could be divided into parameters such as physical growth and financial growth parameters, stakeholder-based parameters, and market based parameters (stock price, EPS and others) (Sethi & Saxena, 2013).

However, being generic and extensively used within small firms and entrepreneurship development, financial is the most appropriate standard of measurement for performance (Murphy et al., 1996). Financial measure of performance includes profits, income, sales turnover, number of employees (Buttner & Moore, 1997; Paige & Littrell, 2002), also profitability that encompasses the targets of the firms, including small firms in general (Minai, Olusegun, & Lucky, 2011), new customers, enterprise expansion, export market share (Masuo et al., 2001; R. . R. W. Fairlie et al., 2009), and economic ambitions (Reijonen, 2008). Nevertheless, not all enterprises respond to the same measures of business success (Toledo-López, Díaz-Pichardo, Jiménez-Castañeda, & Sánchez-Medina, 2012).

According to Toledo-López et al. (2012), the definition of success for subsistence businesses or the micro entrepreneurs has not yet been well established in SMEs literature, in which success is related to financial measures (Toledo-López et al., 2012). Practically, the subsistence businesses owners play important roles in developing economies by forming small businesses that represent a way of life, providing employment at the base of the pyramid and contributing to the alleviation of poverty (Toledo-López et al., 2012). This is in link with the motivation for women in the developing countries to become entrepreneurs where the monetary return and the need to stabilize the family financially (Raman et al., 2008).

The small business owners or can also be identified as SMEs owners, are the groups of necessity-driven entrepreneurs who are more common in the low-income countries

(Reynolds, Bygrave, Autio, Cox, & Hay, 2002), and they measure success with indicators primarily based on sales and profits, though turnover volume, number of employment opportunities generated, and production volume may not be considered (Toledo-López et al., 2012). This is in contrast with Lewis (2008) and Tregear (2005) who reported that small business owners who conceptualize their businesses as a lifestyle reject growth, are not motivated by monetary gains, and rarely have business success objectives or forms of measuring this success.

Although some researchers assumed that the outcome for business performance is business success, or in other words, performance is similar to success (Davidsson, 1991; Masuo et al., 2001; Lucky, 2011), Robinson (2002) argued that the most powerful driver for success is the goal, and it is supported by three intrinsic themes; excitement, inner conviction and autonomy, and one extrinsic; external recognition of success. Paige and Littrell (2002) also supported that success is defined by intrinsic criteria include freedom and independence, controlling a person's own future, and being one's own boss; whilst extrinsic outcomes are, among others, increased financial returns, personal income, and wealth.

On one hand, entrepreneurs may also defined themselves as successful when they perceived that their effort and the resources dedicated to their businesses enabled them to achieve their desired business goals which depend on the personality, motivations, attitudes, and perceptions of the entrepreneurs, and could be the result of interaction with external factors, such as social, cultural and economic contexts

(Shivani et al., 2006). On the other hand, often, the creation of enterprises especially small ones, is not necessarily related to acquiring economic power and large profits, but rather to support a way of life and/or an opportunity for economic survival, self-employment, or to take advantage of what the environment has to offer (Paige & Littrell, 2002; Tregear, 2005; Shivani et al., 2006; Lewis, 2008; Reijonen, 2008).

Tregear (2003) suggested that the values of an entrepreneur are related to key sources of satisfaction, as well as the perceptions of the intentions of the entrepreneur, such as his or her goals and desired results, and these values influence the amount of effort and resources that an entrepreneur will assign to certain business activities in order to achieve success (Tregear, 2003). Itani et al. (2011) then claimed that women entrepreneurs' success mostly related to inner factors: their determination and hard work, their personal qualities (persistence and confidence), and their good management.

Business success for women business owners also may be viewed as one's ability to achieve a necessary balance between all parts of their lives, including achieving balance in all areas of their life, helping others to achieve goals, and a sense of self-fulfilment (Knotts et al., 2004). At the same time, Ehigie and Umoren (2013) believed that based on various definitions on entrepreneur, it can be assumed that entrepreneurial success may be determined by psychological factors such as self-concept, managerial competence, work stress, and business commitment (Ehigie & Umoren, 2013).

The meaning of success to the Ghanaian women entrepreneurs relate to a cluster of attributes including self-fulfilment and accomplishment (95 per cent), financial success and family security (92 per cent) as well as contributions to their communities (80 per cent) (Dzisi, 2008a). In short, most of the women entrepreneurs agreed that they had achieved self-fulfilment and emotional well-being through entrepreneurship (Dzisi, 2008a). This definition is in consonance with Buttner and Moore (1997) in their study that while profits were important to the modern female entrepreneurs, self-fulfilment and goal achievement was their most important measure of success. Likewise, success seemed to be measured internally in terms of personal growth, professional development, and improving one's skills, rather than measured externally in profits or business growth (Buttner & Moore, 1997).

Besides that, Alam, Mohd Jani, et al. (2011) then found that besides numerous obligations assigned to women including reproductive chores, such as childcare and doing house work, women can find success through their own businesses. Reaves (2008) added that the important core themes for success are; family support and relationships, relationships as resources and collaboration (networking), interpersonal and listening skills, attention to customers, a different measure of success, and passion.

In other cases, Justo, Cruz, Castro, and Coduras (2006) explored on gender difference in terms of the definition of performance that based on measures of motivation for start-up. As a result, it seemed that some women defined business

success from an economic viewpoint, although researchers have come up to inconsistent conclusions regarding the way men and women entrepreneurs define and perceive success (Justo, Cruz, de Castro, & Coduras, 2006). A handful of women entrepreneurs also measure success as and when they can see that they are an economically valuable resource (Dhaliwal, 2000). This is to say that once they feel they are generating an income and contributing to the family, only then do they feel that they have attained some measure of success (Alam et al., 2011).

According to Buttner and Moore (1997), business performance is usually measured from the economic perspectives of growth in sales or employees; and/or by the increase in profits, parallel with the study by Davidsson (1991) that firm growth is the sign for continued entrepreneurship. Masuo et al. (2001) then added that business success is commonly defined in terms of economic or financial measures which include return on assets, sales, profits, employees and survival rates; and non-pecuniary measures, such as customer satisfaction, personal development and personal achievement.

Meanwhile, Dafna (2008) suggested that longevity, turnover from sale and increase in size as measured by the number of employees for measuring the success of the business. Although it was also revealed in some studies that as most people generally equated money and profits as the best way to measure individual and business success (Buttner & Moore, 1997; Masuo et al., 2001), many might not view a majority of women-owned businesses as successful due to their smaller in size and



slower in growth (Sabarwal & Terrell, 2008). Table 2.5 shows the summarization of business success or performance as defined by women entrepreneurs.

Table 2.5  
*Definitions of Business Success/Performance for Women Entrepreneurs*

Author (Year)	Definition
Buttner & Moore (1997)	While profits were important to the modern female entrepreneurs, self-fulfilment and goal achievement was their most important measure of success.
Dhaliwal (2000)	As and when they can see that they are an economically valuable resource: once they feel they are generating an income and contributing to the family.
Masuo et al. (2001)	Business success is commonly defined in terms of economic or financial measures which include return on assets, sales, profits, employees and survival rates; and non-pecuniary measures, such as customer satisfaction, personal development and personal achievement.
Knotts, Jones & LaPreze (2004)	Business success for women business owners also may be viewed as one's ability to achieve a necessary balance between all parts of their lives, including achieving balance in all areas of their life, helping others to achieve goals, and a sense of self-fulfilment.
Justo, Cruz, de Castro, & Coduras (2006)	Women defined business success from an economic viewpoint, although researchers have come up to inconsistent conclusions regarding the way men and women entrepreneurs define and perceive success
Dzisi (2008a)	The meaning of success to the Ghanaian women entrepreneurs relate to a cluster of attributes including self-fulfilment and accomplishment (95 per cent), financial success and family security (92 per cent) as well as contributions to their communities (80 per cent).
Reaves (2008)	The important core themes for success are; family support and relationships, relationships as resources and collaboration (networking), interpersonal and listening skills, attention to customers, a different measure of success, and passion
Itani, Sidani & Baalbaki	Women entrepreneurs' success mostly related to inner

---

(2011)	factors: their determination and hard work, their personal qualities (persistence and confidence), and their good management.
Alam, Jani & Omar (2011)	Women can find success through their own businesses, besides numerous obligations assigned to women including reproductive chores, such as childcare and doing house work.
Ehigie & Umoren (2013)	Success for women entrepreneurs also relies on a high self-concept regarding their role in business, commitment to business and reduction of a conflict between home responsibilities and business.

---

From the above literatures, it is clear that the definitions of performance or success for women entrepreneurs are inconsistent between extrinsic and intrinsic definitions, or financial or non-financial definitions of performance. However, it could be concluded that generally in the business field, performance indicator helps to ascertain the current situation of a business, besides revealing the financial capacity of individual's business, firm or organization, which shows their success or failure at a particular point of view (Lucky, 2011). What is more, even though performance is a measurement to evaluate or assess the strengths and weaknesses of individuals, group, firm and organizations, Lucky (2011) further assumed that all performances; entrepreneurial performance, firm performance, organizational performance and business performance/success, fall into business performance (Lucky, 2011).

Through the above arguments as well, it could be concluded that in measuring the performance, the adoption of financial measurement is the most applicable standard of measurement for performance (Murphy et al., 1996; Minai et al., 2011). Yet, it is also important to highlight that financial data is criticized for being unreliable and

subject to inconsistent accounting practices by firms or even to managerial manipulation for different reasons such as avoiding payment of high corporate income taxes or personal income taxes (Dess & Robinson, 1984).

Therefore, this study will be considering business performance as success from an economic point of view, parallel with the suggestion by Buttner and Moore (1997) that business performance is usually measured from the economic perspectives of growth in sales or employees; and/or by the increase in profits. Furthermore, subjective measures of financial data will be adopted as specified by Dess and Robinson (1984) that managers may be neither hesitant nor unwilling to disclose their actual performance data if they consider it commercially sensitive or confidential.

## **2.8 Concept of Entrepreneurial Management (EM)**

Emphasizes on opportunity seeking behaviour and considers entrepreneurship as a management approach, Stevenson defines entrepreneurship as “the process by which individuals – either on their own or inside organizations- pursue opportunities without regard to the resources they currently control” (Stevenson & Jarillo, 1990). This definition of entrepreneurship and its approach explains “how” entrepreneurs act (Stevenson & Gumpert, 1985) is regarded as management practice or “entrepreneurial management”. Stevenson (1983) then holds that entrepreneurial

management (EM) practices can help firms remain vital and contribute to firm and societal level value creation.

Basically, EM as proposed by Stevenson (1983) assumes that entrepreneurial firms are driven and motivated by the opportunity, seize it regardless of the resources they have and if necessary, prefer to rent these resources (Kuhn et al., 2010). In order to achieve these, they develop supporting mechanisms like structure, culture and people. The six dimensions of EM that will be used in this study are entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, and strategic management, as created by Brown, Davidsson, and Wiklund (2001) for Stevenson (1983), Stevenson and Jarrillo-Mossi (1986), and Stevenson and Jarillo's (1990). In summary, Stevenson's view of EM puts opportunity-based behaviour at the centre (Brown et al., 2001) since these behaviours may be "critical to the long term vitality of our economy" (Stevenson, 1983) and thus, it is important to facilitate the empirical study of them.

Studies on the EM have been conducted in various contexts and perceptions (Eliasson & Davidsson, 2003; Lin, Li, & Chen, 2006; Barrett, Balloun, & Weinstein, 2007; Gürbüz & Aykol, 2009; Hortovanyi, 2010; Kuhn et al., 2010; Abdul Majid et al., 2011; Bradley et al., 2011). For instance, the studies on EM by Barrett et al. (2007) and Hortovanyi (2010) in United States and Hungary respectively were based on the perceptions of Covin and Slevin (1989b)'s entrepreneurial orientation (EO). While the former examined the organizational management ratings of their

implementations of several variables including EM, the latter investigated the intersection of individual and process by focusing on the EM practices.

In Turkey, Gürbüz and Aykol (2009) combined the two variables (EM and EO) in the same model where EM as developed by Brown et al. (2001) was found to mediate the relationship between EO and firm growth. Similarly, Bradley et al. (2011) also examined the EM variable as the mediator on the relationship between resource slack and Swedish firms' growth and the results were partially supported. Here, the relationships between six dimensions of EM were tested towards the firm growth and results showed that three dimensions of EM: reward philosophy, growth orientation and entrepreneurial culture had positive effects on firm growth, yet, the remaining three dimensions: strategic orientation, resource orientation and management structure had not (Bradley et al., 2011). However, earlier on small and medium Swedish firms, a study was conducted by Eliasson & Davidsson (2003) on the effects of EM, corporate venturing, and financial performance and results revealed that EM as in unidimensional constructs, influenced corporate venturing activities positively (Eliasson & Davidsson, 2003).

In others cases, Kuhn et al. (2010) further tested Brown et al. (2001)'s six dimensions of EM towards the organizational performance of Australian companies where their explorative study failed to show any significant influence of EM on the firm performance (Kuhn et al., 2010). Abdul Majid et al. (2011) then conducted a study to explore on the issue of as to what extent the EM approach was being

adopted by the technology-based firms in Malaysia, and mixed results were revealed (Abdul Majid et al., 2011). Similarly, Lin et al. (2006) used the six Stevenson's entrepreneurial strategies in testing their effects on the performance of Taiwanese high-tech new ventures which had been set up within past five years. The findings revealed that resource orientation, growth orientation and entrepreneurial culture was significantly effected new venture performance, while strategic orientation, management structure and reward philosophy was not (Lin et al., 2006).

From the above, it is clear that despite the fact that the concept of EM has been explored since long ago, there is still room for improvement since the empirical study of the phenomenon is still in its early stages (Sexton & Landström, 2000) or rather rare (Gürbüz & Aykol, 2009), and the understanding of why some entrepreneurs succeed in exploiting opportunities despite severe obstacles has remained a major challenge for the entrepreneurship research community today (Aldrich & Martinez, 2001). Thus, this study tends to fill the existing gaps identified in the literature a through empirically gauging the practices of entrepreneurial managers and testing them on a sample of women-owned SMEs in various sectors in Malaysia.

### **2.8.1 Definitions of Entrepreneurial Management (EM)**

This definition of entrepreneurship by Stevenson and Gumpert (1985) - ~~the process~~ by which individuals – either on their own or inside organizations- pursue

opportunities without regard to the resources they currently control”, and its approach explains ~~how~~” entrepreneurs act is regarded as management practice or ~~entrepreneurial management~~”. Basically, EM as proposed by Stevenson (1983) assumes that entrepreneurial firms are driven and motivated by the opportunity, seize it regardless of the resources they have and if necessary, prefer to rent these resources (Kuhn et al., 2010). Stevenson (1983) then holds that EM practices can help firms remain vital and contribute to firm and societal level value creation.

From the above literatures, it can be concluded that contemporary definitions of EM tend to centre around the pursuit of an opportunity (Stevenson, 1983; Stevenson & Gumpert, 1985; S. Shane & Venkataraman, 2000); their common characteristics are that they define EM as a ~~mode of management~~” that is proactive, opportunity-driven, and action-oriented. In this regard, EM style is evidenced by the firm’s strategic decisions and operating management philosophies (Hortovanyi, 2010). Additionally, the EM tries to establish and balance the innovation abilities of the organization with the efficient and effective use of resources that can both initiate changes and react to changes quickly and flexibly (Hortovanyi, 2010).

Thus, the management practice or ~~entrepreneurial management~~” (EM) (Stevenson, 1983; Stevenson & Gumpert, 1985; Stevenson & Jarillo, 1990) in this study is seen as the action of how entrepreneurs act in the entrepreneurship process (Stevenson & Gumpert, 1985), that can help firms remain vital and contribute to firm and societal level value creation (Stevenson, 1983). The variables are six empirically isolated

distinct dimensions, namely entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy and strategic orientation.

### **2.8.2 Dimensions of Entrepreneurial Management (EM)**

The six dimensions of EM according to Stevenson (1983) in his first model include strategic orientation, commitment to opportunity, commitment of resources, control of resources, management structure, and reward philosophy. Later on, two other dimensions are found important and being added to his conceptualization of entrepreneurship: growth orientation (Stevenson & Jarrillo-Mossi, 1986) and entrepreneurial culture (Stevenson & Jarillo, 1990). Brown, Davidsson, and Wiklund (2001) then took the challenge to create a measurement for Stevenson (1983), Stevenson and Jarrillo-Mossi (1986), and Stevenson and Jarillo's (1990) definition of EM, and managed to isolate six empirically distinct dimensions, namely entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, and strategic orientation. Unfortunately, commitment to opportunity has been found to overlap with strategic orientation or commitment of resources, while commitment of resources and control of resources merged into one factor that is resource orientation (Kuhn et al., 2010).

From the above arguments, it can be concluded that this study will also be employing the six dimensions of EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, and strategic



orientation) that have been finalized by Brown et al. (2001) without any overlying issues between the dimensions.

### **2.8.2.1 Entrepreneurial Culture**

The encouragement of innovation and creativity within the organization upon aiming for the opportunities exploitation leads to creation of new ideas that are essential for opportunity recognition (Brown et al., 2001). The ideas are easily developed in an entrepreneurial organizational culture which is another dimension of EM (Stevenson & Gumpert, 1985; Stevenson & Jarillo, 1990). In an entrepreneurial culture, ideas are more important than the resources and such firms usually have more ideas than their resources (Brown et al., 2001).

### **2.8.2.2 Growth Orientation**

Growth orientation of the entrepreneurial firm focuses on rapid growth rather than slow and steady growth. This growth objective has to be known and understood by all the employees throughout the firm (Brown et al., 2001), and that EM will help create it (Stevenson & Gumpert, 1985; Stevenson & Jarillo, 1990).

### **2.8.2.3 Management Structure**

Entrepreneurial firms are made of multiple informal networks and therefore, the entrepreneurs' organizations are designed to coordinate key non-controlled

resources, to be flexible and to create an environment where employees are free to create and seek opportunity (Stevenson, 1983). In short, management structure is the extent to which the firm has a flat and organic structure (Brown et al., 2001).

#### **2.8.2.4 Resource Orientation**

According to Stevenson (1983) and Stevenson and Gumpert (1985), an opportunistic resource orientation consists of commitment of resources and control of resources. The first component attempts to maximize value creation by exploiting opportunities while minimizing the resources required especially firm resources. While the second component further reduce the resources they own and use as much as possible (Stevenson, 1983; Stevenson & Gumpert, 1985). Commitment of resources and control of resources were then merged into one factor, which was labelled as resource orientation (Brown et al., 2001).

#### **2.8.2.5 Reward Philosophy**

In line with entrepreneurial management, rewarding system of the employees is merely important. According to Sethi and Saxena (2013), the personal rewards (intrinsic and extrinsic rewards) of entrepreneurship extend beyond business performance. Intrinsic rewards, the rewards those are inherent in the activity such as pleasure for instance forgo other commonly perceived physical and financial parameters of performance, while extrinsic rewards such as a prize or an award may

also be source of career continuity for family members apart from income and wealth that business ownership may bring forth (Sethi & Saxena, 2013).

In the entrepreneurial firms, the employees are rewarded for their contributions to the organization, or when they add value to the firm (Brown et al., 2001). However, besides being one of the most critical issues for competitive advantage (CA) of the firm, reward philosophy and incentive system are the most under-researched area in human resource, especially in the context of small business (Pratono & Mahmood, 2015).

#### **2.8.2.6 Strategic Orientation**

According to Brown et al., (2001), strategic orientation is an organization's orientation in strategy creation, and is concerned with the decisions that businesses make to achieve superior performance (Slater, Olson, & Hult, 2006). Moreover, strategic orientation defines the broad outlines for the firm's strategy while leaving the details of strategy content and strategy implementation to be completed (Slater et al., 2006). In short, to achieve superior performance, managers must take strategic orientation into account when developing strategy formation or implementation capabilities (Slater et al., 2006).

### **2.8.3 Entrepreneurial Management (EM) among Women Entrepreneurs**

From the previous subchapter, although EM have been conducted in various contexts and countries such as Unites States (Barrett et al., 2007), Hungary (Hortovanyi, 2010), Sweden (Eliasson & Davidsson, 2003; Bradley et al., 2011), Australia (Kuhn et al., 2010), Turkey (Gürbüz & Aykol, 2009), and Malaysia (Abdul Majid et al., 2011), lack of studies were found among women-owned SMEs.

To date and up to the researcher's knowledge, studies among women-owned SMEs on the EM as in Brown et al. (2001) were scarcely found but in the contexts of their management styles (Buttner, 2001; Idris, 2009; Morrison, 2010; Cheng & Md. Isa, 2011), management competencies (Walker & Webster, 2004), leadership styles (Kuppusamy, Ganesan, & Rosada, 2010; Cheng & Md. Isa, 2011; D. P. Moore, Moore, & Moore, 2011), and management practices (Buang & Agil, 2011).

In Malaysia, despite of the growing number of women entrepreneurs and the vital effect of EM on their business success, the study on this variable is still far behind. Therefore, based on the above literatures, apparently there still exist some serious integration issues that must be resolved on the relationship between EM and the business performance of women-owned SMEs in Malaysia, which this study seeks to accomplish.

## 2.9 Concept of Entrepreneurial Orientation (EO)

In firm level entrepreneurship literature, entrepreneurial orientation (EO) is one of the most common concepts and has been taken as a strategic dimension. According to Covin and Slevin (1991), "entrepreneurship is described as dimension of strategic posture represented by a firm's risk taking propensity, tendency to act in competitively aggressive, proactive manners, and reliance on frequent and extensive product innovation" (p. 7).

Accordingly, studies by Covin and Slevin (1991) and Zahra (1993) had used this EO conceptualization to focus on a firm-level combination of risk taking, innovativeness and proactiveness which was developed by Miller (1983), who argued that the firm developed an EO if it consistently exhibited product market innovations, took risks and behaved proactively (Justin L. Davis et al., 2010). Further added, Miller's (1983) arguments, and the mass literatures on EO since that time, have already been focusing on the organizational level (Justin L. Davis et al., 2010). In other cases, the popular concept which is the operationalization of the EO was found on the work of Covin and Slevin (1989a), Khandwalla (1977) and Miller and Friesen (1982).

In terms of the perspectives on EO's concept, there are two dominant views that have been retrieved from the literature. Firstly, as a composite construct; one in which EO is represented by the qualities that risk taking, innovative, and proactive behaviours have in common (D. Miller, 1983; Covin & Slevin, 1989a). Secondly, as

a multidimensional construct in which risk taking, innovativeness, proactiveness, competitive aggressiveness, and autonomy are treated as independent behavioural dimensions that define EO's conceptual space (Lumpkin & Dess, 1996). Yet, as noted by Covin and Lumpkin (2011), both views of the EO represent distinct constructs rather than competing perspectives on the same one.

As compared to the early days of EO's research by G. A. Knight (1997) who explored whether EO was manifested and could be measured similarly across firms operating in different cultures, recently, the study on EO has been brought internationally by Covin and Miller (2014). Still, it is notable that both phenomena are typically associated with EO as a composite construct; namely risk taking, proactiveness, and innovative behaviours, that have been incorporated into the well-cited definition of international entrepreneurial orientation (IEO) as proposed by McDougall and Robinson (1988) and Freeman and Cavusgil (2007). Besides, Sundqvist, Kyläheiko, Kuivalainen, and Cadogan (2012) agreed with the definition of IEO as a multidimensional construct which is consistent with the five-dimension conceptualization of EO (risk taking, innovativeness, proactiveness, competitive aggressiveness, and autonomy) that was originally proposed by Lumpkin and Dess (1996).

Since EO is being said as an organizational system elements that correlate with the entrepreneurial behaviour among larger, established, and also smaller firms (Covin & Slevin, 1991), to date, the empirical studies on EO's constructs have been

acknowledged globally and widely being tested towards business performance or firm growth not only in the United States (Justin L. Davis et al., 2010; Messersmith & Wales, 2011; Rosenbusch, Brinckmann, & Bausch, 2011), but also in Canada (De Clercq, Dimov, & Thongpapanl, 2010), Sweden (Andersén, 2010), Finland (Jantunen, Puumalainen, Saarenketo, & Kylaheiko, 2005), United Kingdom (Wang, 2008), Netherlands (Kraus et al., 2011), Portugal (Ferreira & Azevedo, 2007; Ferreira, Azevedo, & Ortiz, 2011), Austria (Frank, Kessler, & Fink, 2010), Iceland (Lechner & Gudmundsson, 2014), South Africa (Krauss, Frese, Friedrich, & Unger, 2005), Nigeria (Shehu & Mahmood, 2014a, 2014b; Aliyu, Rogo, & Mahmood, 2015; Aminu, 2015; Otache & Mahmood, 2015; Ajayi, 2016), Turkey (Gürbüz & Aykol, 2009), Sri Lanka (Fairoz, Takenouchi, & Tanaka, 2010), Japan (B. S. Anderson & Eshima, 2013), China (Y. Zhang & Zhang, 2012; Jiang, Yang, Pei, & Wang, 2014), and Philippines (Lindsay, Ashill, Roxas, & Victorio, 2014).

Studies on the effects of EO on the SMEs and firm performance have also been conducted by Kreiser, Marino, Kuratko, and Weaver (2013) and Engelen, Gupta, Strenger, and Brettel (2015) among 1,668 firms in nine countries, namely Australia, Costa Rica, Finland, Greece, Indonesia, Mexico, the Netherlands, Norway, and Sweden, and 790 firms in six countries: the United States, Germany, Austria, Switzerland, Thailand, and Singapore respectively. In addition, not only EO has been tested towards the firm performance, but also in the context of quality performance as being done by Ndubisi and Agarwal (2014) on their study on the direct and

indirect effects of service innovation and EO on the quality performance of the IT-based small enterprises in Pakistan.

Meanwhile, in Malaysia, empirical studies on the effects of EO on the performance of the SMEs have been studied extensively by several researchers (Idar & Mahmood, 2011; Ambad & Abdul Wahab, 2013; S. Ahmad & Abdul Ghani, 2013; A. A. A. S. Arshad et al., 2014; Abdul Aziz, Mahmood, Tajudin, & Abdullah, 2014; Musa et al., 2014; H. Abu Bakar, Mahmood, & Nik Ismail, 2015). Also, this variable is famous among women entrepreneurs in Malaysia and thus, have been tested towards the performance or success of their businesses (P. L. Kim, Nathan, Khong, & Boon, 2010; Hanafi & Mahmood, 2013; Abdul Mutalib et al., 2015), and this study will further add to the literature by testing them on a sample of women-owned SMEs in various sectors in Malaysia.

### **2.9.1 Definitions of Entrepreneurial Orientation (EO)**

EO is mainly defined as strategic posture of a firm which indicates a firm's overall competitive orientation (Covin & Slevin, 1989b, 1990) that can be a continuum from conservative to EO (Covin & Slevin, 1989b). Furthermore, firms at the entrepreneurial edge take risks, innovate and act proactively (Covin & Slevin, 1988, 1989b, 1990).

Surprisingly, despite of the wide acceptance of the EO construct in the field, there have been inconsistencies in defining it (B. A. George & Marino, 2011). Some



researchers defined EO at a firm or organizational level (Covin & Slevin, 1986, 1988, 1990; Zahra, 1993b), while others' definitions concerned about the new business entrance (Lumpkin & Dess, 1996). For instance, EO as defined by Lumpkin and Dess (1996) refers to the processes, practices, and decision-making activities that lead to new entry. New entry explains what entrepreneurship consists of, and entrepreneurial orientation describes how new entry is undertaken. Thus, it involves the intentions and actions of key players functioning in a dynamic generative process aimed at new-venture creation. In addition, new entry as the essential act of entrepreneurship is primarily a firm-level phenomenon" (p. 136).

In addition to the above, Lumpkin and Dess (1996) defined EO as the process and decision-making activities that lead to new businesses or developments, which is in contrast to the definition proposed by Covin and Slevin (1988), which suggested that EO is a strategic posture reflecting the decisions and processes of the firm, but not explicitly limited to those that lead to new entry, but rather representative of an overall gestalt within the firm. In other cases, Miller (1983) explained EO as the construct applied to a wide of organizational processes, while Green, Covin, and Slevin (2008) described it as organizational entrepreneurial abilities.

More recently, Wiklund and Shepherd (2005) termed EO as the strategic orientation of a firm that captures specific aspects of entrepreneurial decision-making styles, methods and practices. Meanwhile, the definition of EO by Morris and Paul (1987) is the inclination of a company's top management to take calculated risks, to be

innovative, and to display proactiveness in their approach to strategic decision making. However, despite the various versions of the proposed definitions of EO, they have come to an acknowledgement on the use of constructs; either for strategy making practices, strategic orientation of the organization, or from the point of view of the decision making process (J. L. Davis, 2007).

More precisely, although EO is less consistently defined within the literature (Covin & Miller, 2014), based on the above understanding, it refers to the strategic posture of a firm which indicates a firm's overall competitive orientation is known as EO as defined by Covin and Slevin (1986, 1991). This involves the three-dimensions conceptualization, namely innovativeness, proactiveness and risk taking (D. Miller, 1983). Moreover, the presence of EO also significantly effects and influence the firm performance (Covin & Slevin, 1991).

Based on the definitions of the three dimensions in EO, it can be concluded that; after the entrepreneur got the idea or opportunity, then the personality characteristics of entrepreneurs such as risk taking and establishing networks and alliances will motivate and drive mechanisms such as innovation, market appeal and power of a valid that can bring for success (Buang, 2006). This idea is parallel with the main conceptual of EO which is critical for the overall performance since it implies the adoption of a combination of new other strategies to be able to get the full advantage of the available business opportunities (Dess et al., 1997).

## 2.9.2 Dimensions of Entrepreneurial Orientation (EO)

In this study, EO was conceptualised as consisting of the variables; 1) innovativeness - the development of new and unique products, services or processes; 2) risk taking - a will to pursue risky opportunities, taking the chance of failing; and 3) proactiveness - an emphasis in the persistence and creativity to overcome obstacles. These three dominant dimensions were being focused by most of the EO relevant studies to explain the variance in the construct, and being considered to give a great impact in firm's growth (D. Miller, 1987; Lumpkin & Dess, 1996).

This is in contrast with Lumpkin and Dess (1996) who conceptualized EO as being comprised of five dimensions: risk taking, proactiveness, innovativeness, competitive aggressiveness, and autonomy. Notwithstanding, although EO is sometimes assigned two additional dimensions as proposed by Lumpkin and Dess (1996); autonomy and competitive aggressiveness, by which autonomy is the independent action by an individual or team aimed at bringing forth a business concept or vision and carrying it through completion, while competitive aggressiveness is the intensity of a firm's efforts to outperform industry rivals, characterized by a combative posture and a forceful response to competitor's actions (Lumpkin & Dess, 2001), some researchers in the field argue that these two dimensions are already present in the risk taking, innovation and proactiveness dimensions (Covin & Slevin, 1989b, 1991).

Furthermore, the majority of the EO relevant studies focused only on innovativeness, proactiveness, and risk taking as the dominant dimensions to explain the variance in the construct (Zahra, 1993a; Morris & Sexton, 1996; B. A. George & Marino, 2011). This is in line with the study by Miller (1983) that entrepreneurship typically would encompass risk taking, innovation, and proactiveness, and that if any of these elements were missing entirely, the process might be considered less than entrepreneurial.”

Again, as the three dimensions have been noted as the essential dimensions of entrepreneurship and being considered to give a great impact in firm's growth (D. Miller, 1983; Lumpkin & Dess, 1996). Furthermore, innovative and proactive firms that manage risk in rational way will be more successful by capturing opportunities that rise in changing environment and develop new capacity to attain better performance (A. Y. S. Ali & Ali, 2013). Therefore, “risk taking”, “innovation”, and “proactiveness” are the dimensions in EO that will be used in this study as regard to most of the research in this field (D. Miller, 1983; Covin & Slevin, 1989b, 1990, 1991; Dess et al., 1997; Wiklund, 1999; Wiklund & Shepherd, 2005).

### **2.9.2.1 Innovativeness**

The importance of innovativeness for entrepreneurship is first emphasized by Schumpeter (1934) and Lumpkin and Dess (1996). According to Schumpeter (1934), innovation is the process of creatively destructing an “old order” in order to create a

“new order” as a result of new combinations (Lumpkin & Dess, 1996). For instance, new products, markets, processes, sources of raw materials, and organizations (Lumpkin & Dess, 1996; Lassen, Gertsen, & Riis, 2006). In other words, the innovative firms engage in and support new ideas, novelty, experimentation and creative processes that may result in new products, services or technological processes (Lumpkin & Dess, 1996). Entrepreneurial innovativeness is also described as a willingness to support creativity and experimentation with respect to the introduction of new products or services, technological leadership, and research and development (Lumpkin & Dess, 2001).

Therefore, the first dimension of EO that is employed in this study is innovativeness, which is proposed by Covin and Miles (1999) as a single dimension that has to be employed within all entrepreneurial firms which according to them, even in the presence of other dimensions, if innovation is not employed there is no firm level entrepreneurship (Covin & Miles, 1999).

#### **2.9.2.2 Proactiveness**

The second dimension of EO that is employed in this study is proactiveness; acting opportunistically in order to shape the environment by influencing trends and creating demand and becoming a first mover in a competitive market (Lumpkin & Dess, 1996). Proactiveness has also been defined as a response to opportunities (Lumpkin & Dess, 2001), where the proactive firms take initiative and become

leaders in the marketplace by exploiting opportunities (Lumpkin & Dess, 2001). These firms then further explore the resources, seek opportunities in the market and create new niches which require experimentation and discovery (Lumpkin & Dess, 2001). Miller (1987) then added that proactive firms act on rather than react to their environments.

Therefore, referring to the above, proactiveness in this study is defined as an opportunity-seeking, forward-looking perspective involving introducing new products or services ahead of the competition and acting in anticipation of future demand to create change and shape the environment (Lumpkin & Dess, 2001; Rauch, Wiklund, Frese, & Lumpkin, 2004).

### **2.9.2.3 Risk Taking**

The third dimension is risk taking; the degree to which managers are willing to make large and risky resource commitments, for instance those which have a reasonable chance of costly failures (D. Miller & Friesen, 1982). Risk taking orientation indicates a willingness to engage resources in strategies or projects where the outcome may be highly uncertain (Wiklund & Shepherd, 2005). It also involves the propensity of the firm's management to make decision on investment and plan strategic action on uncertain matters (D. Miller, 1983; Covin & Slevin, 1988). Therefore, risks are closely related to elements such as uncertainty, capital

opportunities as well as commitment to anticipated sources and returns (D. Miller, 1983; Lumpkin & Dess, 1996).

In this study, risk taking also known as a tendency to take bold actions such as venturing into unknown new markets, committing a large portion of resources to ventures with uncertain outcomes, and/or borrowing heavily (Lumpkin & Dess, 2001). That is to say, risk taking is the degree to which managers are willing to make large and risky resource commitments (D. Miller & Friesen, 1982).

### **2.9.3 Entrepreneurial Orientation (EO) among Women Entrepreneurs**

Being one of the most unexceptional factors that contribute to the performance of the entrepreneurs, studies on EO among women or women-owned SMEs had been carried out broadly across the nations. For instance, Kariv (2011) had conducted a study between Canadians and non-Canadians to test the effects of entrepreneurial orientations of women business founders from a push/pull perspective. The results from quantitative analysis revealed that the genders' differential interpretations of push/pull factors into necessity/opportunity orientations effect their perceived level of business success (Dafna, 2011).

In Somalia, studies on the effects of EO on the performance of women owned and managed micro and small enterprises were conducted by Ali and Ali (2013, 2014), with the response rate of 63 per cent and 74 per cent respectively. In the former study, innovation, risk taking and proactiveness were found to have statistically

significant and positive effect on firm performance (A. Y. S. Ali & Ali, 2013). However, in the latter study, innovativeness and risk taking were found to have statistically significant and positive effect on firm performance, while proactiveness has no influence on firm performance (A. Y. S. Ali & Ali, 2014). While in Southern Thailand, risk taking has found to have a positive and significant relationship with business performance among women entrepreneurs (Tantasuntisakul, 2015).

In others cases, a study on EO and performance among male and female entrepreneurs had been done among four globally operating companies headquartered in Austria with German (59 per cent), Chinese (15 per cent), Czech (23 per cent), Hungarian (3 per cent), and Slovak (1 per cent) speaking employees. The results indicated that: 1) females tend to evaluate their individual EO level similarly to their EO of the firm, 2) females have a lower individual EO compared to their male counterparts, 3) females tend to score higher on perceptions of firm EO but see the firm performance similarly to their male counterparts (Fellnhofer, Puumalainen, & Sjogren, 2016).

EO had also being tested as the mediating variable towards women-owned business performance in Mexico, besides the presence of market orientation (MO) as the independent variable and learning orientation (LO) also as mediation variable (Gutiérrez et al., 2014). The results then suggested that EO reinforced the effects of two capabilities; MO and LO, on firm performance (Gutiérrez et al., 2014).



In Malaysia, despite of the growing number of women entrepreneurs and the vital effect of EO on their success, the study on this factor is still lacking. To date, and up to researcher's knowledge, the study on the effect of EO on the business performance of women-owned small and medium enterprises in Malaysia had only been carried out by Hanafi and Mahmood (2013), where the results indicated that EO is positively and significantly related to performance (Hanafi & Mahmood, 2013). This shows that there is a need and room for improvement for the study on the effect of EO on the business performance of women-owned SMEs in Malaysia, which is expected to be fulfilled by this study.

## **2.10 Concept of Ethics**

According to Jennings (2011), the ethical components of business were a common thread in their success. Makhbul and Hasun (2011) then added that today's entrepreneurs believed that they could succeed if they run their ventures ethically. In their study, religious duty or honesty factor, which is one of the determinant factors in ethics, was perceived as the most significant factor effecting entrepreneurial performance, followed by communication skills and strong will of the entrepreneurs (Makhbul & Hasun, 2011). This finding is consistent with Kriger and Hanson's (1999) study, which proposes that good values (i.e., honesty, spiritual, and ethical aspects) can create a healthy organisation. Verschoor (1998) then observed that ethics is becoming a mainstream management issue and no longer concerned with

just compliance with laws and regulations in relation to the official guidelines and financial reporting.

However, in contrast, Kriger and Hanson (1999) argued that it is an irony of human nature that people often behave opposite to and inconsistently with their values and become hypocritical without intending to. This is particularly true when we are trying to impress others with our self-importance. This statement is supported by Mahmood (2005) that small business owners may find themselves in an ethical dilemma or ethical crises resulting from having confronting forces that effect business practices, and they sometimes condone unethical business practices for reasons of competitive survival (R. Mahmood, 2005). In other cases, Spence (2007) also argued that multitasking leave business owners less time to consider ethics in their daily business management decisions. In addition, the redundant roles and responsibilities between a business owner and a manager conflicting constitute of personal and business ethics in decision making (Vyakarnam, Bailey, Myers, & Burnett, 1997).

Other factors that may effect ethical behaviour are individual factors and situational factors (Ford & Richardson, 1994), personal values (Fritzsche, 1995), and individual values such as materialist and post materialist values (Giacalone, Jurkiewicz, & Deckop, 2008). According to Nordin (2009), Muslims must have the important features of a successful entrepreneur including the initiatives, find and benefit the opportunities, perseverance, motivation, enhancing knowledge, concern and

discipline on the quality of work, commitment to the responsibilities entrusted and others (Nordin, 2009). Therefore, in consonance with Nordin (2009), Hunt and Vitell (1986) suggested that religion have an influence on an individual's perception of ethics. They also believed that religion could effect ethical decision making in three ways: cultural environment, personal characteristic, and religion itself which is often a dominant basis for an individual's deontological norms (Hunt & Vitell, 1986). For instance, the Protestant Work Ethic (PWE) and Islamic Work Ethic (IWE). The Protestant Work Ethic (PWE) was propounded by Max Weber in 1905 (M. J. Miller, Woehr, & Hudspeth, 2002). The Protestant Work Ethic (PWE), sometimes called the Puritan Work Ethic, is a Calvinist value emphasizing the necessity of constant hard working for personal survival, and furthermore, the Catholic idea of good work was transformed into an obligation to hard work as a sign of grace (Shamsudin, Mohd Kassim, Hassan, & Johari, 2010).

However, the contradictions between Protestant Work Ethic (PWE) and Islamic Work Ethic (IWE) can be found in several researches. According to Weber in Arslan (2000), warrior ethic, Sufism, and oriental despotism were the main disadvantages for capitalism. Weber also argued that individual belief in Islam was not an obstacle for capitalism, but that the Islamic state and its inefficiency, together with Islamic Law, had hindered the development of capitalism in Islamic societies. Alternatively, Arslan (2000) confirmed that the Malaysian group showed a higher PWE (Protestant Work Ethic) level than the British group, and this proved that practising Muslims may have developed a political minority psychology which encouraged a work ethic.

Despite of the argument, Yousef (2001) found that both ethics place considerable emphasis on hard work, commitment and dedication to work, creativity, get rid of unethical ways of wealth accumulation, cooperation and competitiveness at the work place. A. J. Ali and Al-Owaihian (2008) then concluded that Muslims have to adhere to ethical standards, not only in business but also in all aspects of life, for both business and ethics are interrelated.

In Malaysia, Hj. Ismail, Mohd Zain, and Ahmed (2006) conducted a study of motivation in business start-ups among Malay entrepreneurs and found that the sense of liability that the Malay entrepreneurs owe to themselves, their family and the community; as the main factor that lead them to initiate own venture (Hj. Ismail et al., 2006). This sense of responsibility is partly created from their belief in Islam; a religion that covers everything in life, which guide them and ensure that the job also adheres to the Islamic rules and regulations (Hj. Ismail et al., 2006). In other cases, a study by Sloane (1999) demonstrated that Malaysian entrepreneurs comply their activities with factors such as morality, making money ethically, and helping everyone to benefit.

To date, research on the ethical views among the managers in Malaysia had been carried out by Zabid and Alsagoff (1993), Gupta and Sulaiman (1996), and Khademfar, Idris, Omar, Ismail, and Arabamiry (2013). Meanwhile, Furnham and Muhiudeen (1984) conducted a cross-cultural study on the Protestant Work Ethic (PWE) in Britain and Malaysia, and they examined the extensions and correlations

of Protestant Work Ethic (PWE) beliefs in different cultures. Furnham and Muhiudeen (1984) confirmed that Malaysians, regardless of ethnics, believed more in the PWE, while British had less. Zabid and Alsagoff (1993) then found that Malaysian managers have high ethical values although more than half of the respondents believed that the ethical standards during that era are lower than that of 15 years ago. Whereby Gupta and Sulaiman (1996) confirmed that managers though would like to affirm their faith in the relevance of ethical behaviours for long term success in their business endeavours, practical realities in the contemporary business scenario sometimes required them to make compromises. In addition, ethics must not only be taken organisationally, but also as individual responsibility (Gupta & Sulaiman, 1996). A study by Khademfar et al. (2013) found a high correlation and significant relationship between Ethical Work Climate (EWC) and Organizational Performance (OP) in Malaysian manufacturing firms which illustrated that the perception of managers regarding the ethical manners and ethical climate was positive.

From the review of literatures on the ethics studies in Malaysia, it could be concluded that these studies had been conducted among the Chief Executive Officers (CEOs) and middle- or low-level managers (Zabid & Alsagoff, 1993), senior level managers and junior level managers (J. L. Gupta & Sulaiman, 1996), and manufacturing firms' managers (Khademfar et al., 2013), without looking at the ethical values from the whole perspectives of the SMEs managers in Malaysia (N. H. Ahmad & Seet, 2010). This is clear that research on ethics among the SMEs in

Malaysia, particularly among the women entrepreneurs is still lacking, although a few researchers found that ethical organizations tend to be more successful than companies unconcerned about ethics (Fritz, Arnett, & Conkel, 1999; Valentine, Godkin, & Lucero, 2002; Treviño & Nelson, 2004). In addition, ethics in this study will be looked as unanimous dimension although the policies outlined by Islam are universally-accepted and in tandem with human nature, and the work ethics propagated by the Protestant are more confined towards gaining profit which is not tied to their religious teaching (Wan Hussin, 2005).

In other cases, while Verschoor (1998) stated that it had been of a broad corporate concern towards stakeholders in achieving higher profitability, research findings by Leonidou, Kvasova, Leonidou, and Chari (2012) revealed that engagement in unethical behaviour destroyed the firm's reputation among the customers that might influence its shares in the market and finally, effected the financial performance. Concurrently, Moore and Moore (2014) concluded that the culture of an organization established the values, while the climate of an organization established the ethics. Here, ethical climate studies reported that an ethical environment was needed to support organisational performance (Victor & Cullen, 1988), and the ethical behaviours of organisational members contributed to business profitability (Christie et al., 2003).

Further, ethical climate may be divided into ethical leadership (managerial level) and ethical environment (organizational level) (M. Y. Kim, Miao, & Park, 2015). In addition, while ethical leadership was characterized by two aspects, namely the

concepts of a moral person and a moral manager, ethical environment can be constructed from the consciousness, attitudes, and cultural context related to right and wrong behaviours or more specifically, the leader's ethical environment is the most essential element in ever-changing circumstances (M. Y. Kim et al., 2015). Results of the studies by Kalshoven, Den Hartog, and De Hoogh (2012) and Mitonga-Monga (2015) showed that ethical culture (environment) and ethical leadership were significantly related which means that leaders in the ethical environment tend to flourish the ethical culture and climate (Kalshoven et al., 2012).

In the opinion of Victor and Cullen (1988) and Arnaud (2010), ethical environment within an organisation was a critical factor effecting employees' ethical behaviour, which depended on the leader's ethical behaviour (Dickson et al., 2001), that effected an organization's ethical climate through role modeling, rewards, selection, and communication (Schminke, Ambrose, & Neubaum, 2005). Furthermore, Schminke et al. (2005) added that leaders had substantial power to create and maintain ethical norms and processes, and to create a particular kind of ethical climate.

From the above literatures, it is obvious that ethical work climates (EWC) have organizational bases separated from individual perceptions and evaluations (Victor & Cullen, 1988), and thus can be assumed suitable to be studied among the SMEs managers, who are more likely to view ethical values as universal rather than relativistic (Welsh & Birch, 1997).

### 2.10.1 Definitions of Ethics

Ethics as defined by Taylor (1975) in Gupta and Sulaiman (1996) is “enquiry into the nature and background of morality, where the term 'morality' is taken to mean moral judgments, standards, and rules of conduct” (p. 735). Gupta and Sulaiman (1996) then added that ethics has to be considered an inextricable part of managerial decision process, and it is essential for managers to maintain an operational and continuing concern for ethical integrity.

Ethics as described by R. T. De George (1999) is a systematic attempt to make sense of our individual and social moral experience, in such a way as to determine the rules that ought to govern human conduct, the values worth pursuing, and the character traits deserving development in life. Meanwhile, Donaldson and Dunfee (1999) termed ethical attitude as the product of personal values, experiences, and the environment in which one works and lives. Sloane (1999) then added that ethics is the process by which moral obligation to others, hard work and Islamic faith has become symbolized together in economic activities. It is also defined as a set of moral principles or values (Siu & Lam, 2009), or the principles, values, and beliefs that define right and wrong decisions and behaviour (S. P. Robbins & Coulter, 2012).

In other cases, the ethical climate or ethical environment within an organisation which is seen as a critical factor effecting employees' ethical behaviour (Victor & Cullen, 1988; Arnaud, 2010), which contribute to business profitability (Christie et



al., 2003), is defined as the prevailing perceptions of typical organizational practices and procedures that have ethical content (Victor & Cullen, 1988). Peterson (2002) then termed ethical climate as “the shared perceptions of what ethically correct behaviour is and how ethical issues should be handled in the organization” and asserts that the climates with a strong emphasis on ethical behaviour tend to encounter less workplace deviant behaviours. Table 2.6 summarized a selection of definitions of ethics from the view of the prominent authors in this area.

Table 2.6  
*Definitions of Ethics*

Author (Year)	Definition
Taylor (1975)	Ethics - Enquiry into the nature and background of morality, where the term 'morality' is taken to mean moral judgments, standards, and rules of conduct
Gupta & Sulaiman (1996)	Ethics - An inextricable part of managerial decision process and essential for managers to maintain an operational and continuing concern for ethical integrity.
De George (1999)	Ethics - A systematic attempt to make sense of our individual and social moral experience, in such a way as to determine the rules that ought to govern human conduct, the values worth pursuing, and the character traits deserving development in life.
Donaldson & Dunfee (1999)	Ethics - The product of personal values, experiences, and the environment in which one works and lives.
Sloane (1999)	Ethics - The process by which moral obligation to others, hard work and Islamic faith has become symbolized together in economic activities.
Siu & Lam (2009)	Ethics - A set of moral principles or values

---

Robbins & Coulter (2012)	Ethics - The principles, values, and beliefs that define right and wrong decisions and behaviour.
Victor & Cullen (1988)	Ethical Climate- the prevailing perceptions of typical organizational practices and procedures that have ethical content
Peterson (2002)	Ethical Climate - the shared perceptions of what ethically correct behavior is and how ethical issues should be handled in the organization” and asserts that the climates with a strong emphasis on ethical behavior tend to encounter less workplace deviant behaviors.

---

Despite of various definitions of ethics by previous researchers, in this study, the term ethics, an English word which was coined from the Greek language – *ethos*”, which means –character” (Wikipedia, n.d.-a) will adopt the definition from the view of Victor and Cullen (1988) where ethics is considered as ethical climate of an organization which refers to the behaviours that are perceived to be ethically correct and how issues regarding deviations away from those expected behaviours are handled in the organization (Victor & Cullen, 1988). This is due to the critical determinant of ethical climate is the leader’s ethical behaviour (Dickson et al., 2001) that effects the employee behaviour (Victor & Cullen, 1988) which will then lead to the success or better performance of the firm (Christie et al., 2003). That is to say, climate of an organization is what the people inside the organization say it is, rather than what people outside the organization say or think it is, or wish it would be (Dickson et al., 2001). In addition, ethics in SMEs also focused on conducts that involved the principles, norms and standards of conducts governing an individual managers that is in charge of the firm (Lovisky, Treviño, & Jacobs, 2007).

### **2.10.2 Ethics among Women Entrepreneurs**

SMEs in developing countries are seen as lack of awareness and understanding about business ethics and its importance in advancing one's business prospects (S. Mahmood, 2008). Moreover, the ethics of a small business or the effects of ethical problems is usually influenced by its owner-manager since they make many of the key decisions, or in short the control of the firm is lies with the owner (J. S. Harrison & Freeman, 1999).

While others defined ethics in all kind of manners, Still and Timms (2000) remarked that women start their own businesses with the objective of making a difference; being more client-focused than men, ethical in operations and making a social contribution in addition to pursuing economic motives. As a result, female managers were found to be more ethical in their intention (Marta et al., 2008), higher sensitivity in terms of their ethical judgment (Oumlil & Balloun, 2009), and also envisioned a larger role for business in society, particularly in terms of social responsibilities than do male managers (Riddle & Ayyagari, 2011).

According to Gill et al. (2007), entrepreneurs in the countries excluding Hong Kong, China; and Singapore, routinely identified corruption as a significant constraint to doing business in the East Asia and Pacific region. Therefore, corruption raises the costs of doing business and creates a more unpredictable business environment, and it hits women-led enterprises particularly hard for relatively poorer information that

women have about regulations and their entitlement to service standards (Ellis, Kirkwood, & Malhotra, 2010). A study by Srinivasan (2011) confirmed that much of the ethical discussions from the Anglo Saxon world focused on the role of religion, particularly in the Christianity, and its impact on individual ethics, ignoring the effect of managerial ethics in decision making contexts towards the organizations.

On the other hand, the Muslim Arab women entrepreneurs across four countries in the Arab Middle East region adhered to the Islamic work-related values of good and hard work, honesty and truthfulness, fairness and justice, and benevolence, and perceived them as instrumental to the survival and success of their enterprises (Tlaiss, 2014). This statement is in agreement to Abbasi, Rehman, and Bibi (2011) who confirmed that Islamic Work Ethic (IWE) has significant influenced on business performance of an organization. That is to say, to succeed in business, Muslims must have the important features of a successful entrepreneur including the initiatives, find and benefit the opportunities, perseverance, motivation, enhancing knowledge, concern and discipline on the quality of work, commitment to the responsibilities entrusted and others (Nordin, 2009). At the same time, Guiso, Sapienza, and Zingales (2003) also examined the role of religion (their proxy for culture) on having certain values or attitudes such as trust, thriftiness, and the role of women in society, but have not drawn a link to female entrepreneurship across countries.

In other cases, Yusof (2012) argued the importance of how women value orientation and religious beliefs as one of the contributing factors to business success, which is

in link with the statement by Rejab (1983) that Islam is an important feature of Malay life it is relevant to consider value orientations which depict the influence of religious beliefs on economic and business related behaviour. Hence, these women entrepreneurs are driven by personally held values, fundamental values which guide their actions as an entrepreneur and how they go about things in order to achieve their goals (Yusof, 2012). Moreover, they also complied their activities with factors such as morality, making money ethically, and helping everyone to benefit (Sloane, 1999) which were believed to have a strong influence on the success of the Malaysian women entrepreneurs (Chee et al., 2012).

According to Rajah (2006), a result of survey of 2,074 respondents conducted by the Business Ethics Institute of Malaysia (BEIM) reported that business community in Malaysia has been rated as second lowest with a score of 16 per cent of trust and therefore warrants a further investigation into the reasons for lack of trust on the business leadership community (Rajah, 2006). Supporting this report, Khalizani, Omar, and Khalisanni (2011) stated that according to Fraud Profiling in Malaysia conducted by the Malaysian Accountancy research and Education Foundation (MAREF) in M. M. Ismail (2007), male perpetrators committed frauds of various types compared to females.

Moreover, females are also evidenced as ethical than males as stated by Albaum and Peterson (2006), in Khalizani et al. (2011). Cheng and Md. Isa (2011) then stated that women entrepreneurs who want to be successful must have high credibility

which comes with high ethical and moral standards, and they must be role models to their employees. Besides, a study on graduate students' perceptions on business ethics and capitalism has also been conducted in Malaysian universities (Khalizani et al., 2011) and resulted in a higher or equivalent business ethical awareness among the female graduate students compared to male.

As stated in a report by DOSM (2011b), 91.7 per cent of 126,910 women-owned SMEs in Malaysia involved in the service sector, a clear evidence which showed that the most important asset in selling services is trust. That is to say, marketing services is an ethical part because the goods sold are intangible (Carliner, 2003). Besides, strong management can prevent ethical problems and managers can play a significant role in establishing and enforcing codes of ethics (Carliner, 2003), despite confronting with ethical dilemma or crises in order to survive in the business competition (R. Mahmood, 2005). Also, having to know the importance of religious motives in their business lives (Arslan, 2000; Nordin, 2009), although women had been socialized to be care givers, they were oriented towards religious values with less emphasizes on the things valued by men (Boohene, Sheridan, & Kotey, 2008).

From the above literatures, although it is understandable that women entrepreneurs are ethical in many ways compared to their male counterparts, lack of studies between ethics and business performance in Malaysia (Furnham & Muhiudeen, 1984; Zabid & Alsagoff, 1993; J. L. Gupta & Sulaiman, 1996; Khademfar et al., 2013), especially in the area of women entrepreneurship make it interesting to

investigate the role of ethics in enhancing the effects of firms' intangible resources, namely EM and EO, towards their firm performance. Therefore, this study seeks to further study on this underdeveloped area of the women-owned SMEs in Malaysia, and raises the importance of ethics in enhancing their business performance.

## **2.11 Underpinning Theory**

This section will be discussing on the theories that underpin this study. Theory is a testable formal explanation of some events, which includes the predictions on how things relate to one another (Zikmund, Babin, Carr, & Mitch, 2009). It consists of a logical set of general propositions that offer a coherent explanation of some phenomenon and the way other things correspond to this phenomenon. Meanwhile, a scientific theory as described by Borden and Abbott (2011) is one that goes beyond the level of a simple hypothesis, deals with potentially verifiable phenomena, and is highly ordered and structured. This study is built on the platform of Resource Based View (RBV) as the theoretical background for the whole model and thus underpins the relationships between the independent variables, mediating variable and the dependent variable. The aforementioned theoretical perspectives will be discussed in the next section.

### **2.11.1 Resource-Based View (RBV)**

Being one of the vital theories in management literature, Resource-Based View (RBV) was pioneered by Penrose (1959) who identified that the most significant

characteristic of the RBV is focused in the internal forces of firm (Penrose, 1959). Barney (1991) clarified that to studying a firm's internal strengths and weaknesses rests on two fundamental assumptions: firm's productive resources (Penrose, 1959) and resource immobility (Selznick, 1957; Ricardo, 1966).

According to Grant (1991), resource can be classified into six categories, namely financial, physical, human, technology, reputation and organization. And the examples of such resources include the brand name, technological knowledge, employment of skilled personnel, trade relations, machinery, efficient procedures, capital and others (Wernerfelt, 1984). Additionally, a firm's resources are also categorised according to physical, human and organisational capital resources (Barney, 1991). While physical capital includes the physical technology, plant and equipment, geographic location and access to raw materials, human capital includes training, experience, intelligence, relationships, and the abilities and attributes of individual managers and workers (Barney, 1991). Organisational capital then includes structures for reporting, formal and informal planning, and the whole organising process in the firm (Barney, 1991). Later, Barney (1995) added a new category of financial resources that includes debt, equity and retained earnings.

In other cases, Runyan, Huddleston, and Swinney (2006) clarified that resources can be divided into tangible and intangible resources where tangible resources include capital, access to capital and location such as location of the buildings, warehouse and other facilities, and intangible resources consist of knowledge, skills and



reputation and entrepreneurial orientation such as proactiveness, innovativeness and risk-seeking ability.

Although RBV theoretically foresees intangible resources as the crucial factors for firm success (Barney, 1991; Hall, 1993), a study by L. J. Abu Bakar and Ahmad (2010) revealed that recent research has shifted attention from tangible to intangible resources as it may be more important from a strategic point of view, since they bring together more frequently the requirements necessary for producing sustainable advantage: to be valuable, rare and difficult to imitate and replace by competitors (Barney, 1991; Hitt, Ireland, Camp, & Sexton, 2001). Moreover, a few authors also suggested that the outstanding performance or a sustainable competitive advantage of a company or firm depends on its ability to use and retain the intangible assets (Teece, 2000; Steenkamp & Kashyap, 2010; Ng & Daisy, 2012), including the Malaysian companies (Rachagan et al., 2013).

In general, RBV is the heterogeneity and immobility of the valuable, rareness, inimitable, and non-substitutable resources that makes it difficult to duplicate the firm's value creating strategy by competing firms are what determine performance (Barney, 1991). In connection to this, Barney (1991) and Litz (1996) further suggest several intangible resources that are deemed "socially complex" and particularly important in producing competitive advantage, for instance the ethics (Barney, 1991; Litz, 1996). Thus, in line with the RBV, the establishment of an ethical climate within the company is considered an intangible resource that has positive effects on

growth of performance (Amine, Chakor, & Alaoui, 2012). Besides, ethical climate is also considered as heterogeneous and dynamic, characterized by high levels of specificity and social complexity (Barney, 1991, 2001b), and as an intangible resource, is more likely to be a source of competitive advantage than physical resources (Manroop, Singh, & Ezzedeen, 2014).

Therefore, based on the literature and evidences from the earlier studies, RBV will be used to explain the research theoretical framework focusing on three types of intangibles resources, namely EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, and strategic orientation), EO (innovativeness, proactiveness, and risk taking), and ethics as in ethical climate as the mediator in order to gain a sustainable competitive advantage towards firm's superior performance (Ferreira & Azevedo, 2007; Ferreira et al., 2011), which is parallel with a study by I. Hassan and Mugambi (2013) that intangible resources are important ingredients in growth and expansion of women micro enterprises.

Although there are a few other theories that are synonymous with ethics for instance the stakeholder theory: a stakeholder-based performance measures that challenge the managers to examine more broadly the value their firms are creating from the perspective of the stakeholders who are involved in creating it (J. S. Harrison & Wicks, 2013), and also the Ethical Climate Theory (ECT) as one of the most influential foundations in the business conceptual ethics domain (K. D. Martin &

Cullen, 2011), this study is designed to be conducted on the platforms of RBV in determining firm superior performance (Penrose, 1959; Victor & Cullen, 1987, 1988; Barney, 1991). Moreover, this theory also argued that human capital asset creates competitive advantage and improve organizational performance through employees behaviour (Barney, 2001a, 2001b; Manroop et al., 2014), where the organizations set the ethical principles for its personnel alongside providing an atmosphere that promotes ethical behaviour, commitment, trust, capable leadership, and creates workforce value to enhance their performance (Hijal-Moghrabi, Sabharwal, & Berman, 2015). Further added, Victor and Cullen (1988) claimed that ethical context and behaviour variables influenced employees' behaviour, attitudes and actions, because they provided information about the organisation and the appropriate way in which the work should be done.

More importantly, ethics in this study is measured be based on the subjective measures of financial growth parameter (Sethi & Saxena, 2013), and not stakeholder-based parameter. According to Sethi and Saxena (2013), measures of business performance include physical growth and financial growth parameters, that have been the traditional measures of entrepreneurial performance, for instance firm longevity, sales, employee, market and investment growth and so on. Besides that, other measures of performance are such as customers' satisfaction, employee satisfaction, image, and credit rating, which are typically referred to as 'stakeholder-based' parameters. And finally the market based parameters such as stock price, earnings per share (EPS) and others (Sethi & Saxena, 2013).

## **2.12 Hypothesis Development**

Based on the reviewed related literatures and underpinning theories discussed in the previous sections, the study develops hypotheses that give tentative answers to the aforementioned research questions that were also extended on the basis of the statement of the problems, as well as the background of this study. In this sense, the study hypothesizes the relationships between the dimensions of EM, EO and women-owned SMEs performance. The study also hypothesizes the mediating role of ethics between these predictors (i.e., entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, strategic orientation, and innovativeness, proactiveness, and risk taking) and the criterion variable (i.e., women-owned SMEs performance).

### **2.12.1 Entrepreneurial Management (EM) and Women-owned SMEs Business Performance**

The contemporary definitions of EM tend to centre around the pursuit of an opportunity (Stevenson, 1983; Stevenson & Gumpert, 1985; S. Shane & Venkataraman, 2000) and their common characteristics are that they define EM as a “mode of management” that is proactive, opportunity-driven, and action-oriented. Moreover, the EM practices can help firms remain vital and contribute to firm and societal level value creation (Stevenson, 1983), later act as one of the most important factors that contributed to the success of neither men nor women-owned businesses

(Eliasson & Davidsson, 2003; Lin et al., 2006; Gürbüz & Aykol, 2009; Hortovanyi, 2010; Abdul Majid et al., 2011; Bradley et al., 2011).

Previous studies have seen EM in various contexts and countries with the inconclusive results. Studies by Eliasson and Davidsson (2003) and Hameed and Ali (2011) evidenced that EM has a positive influence on corporate venturing and directly influence the relationship towards firm performance respectively. Meanwhile, Lin et al. (2006) in their study provided evidence that resource orientation, growth orientation and entrepreneurial culture was significantly effected new venture performance, while strategic orientation, management structure and reward philosophy was not. Bradley et al., (2011) also found that EM partially supported the relationship towards firm growth where reward philosophy, growth orientation and entrepreneurial culture showed positive effects, yet, strategic orientation, resource orientation and management structure was not positively effected the firm growth.

In the contrary, Kuhn et al. (2010) revealed that there was no significant influence of EM on firm performance. However, there is relatively lack of studies that have examined the effects of EM on the relationship towards women-owned SMEs business performance although women were identified to be weaker compared to their male counterparts in terms of performance, including profits and management practices (Knotts et al., 2004).

In this study, EM is seen in six multidimensional constructs which include entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, and strategic orientation as explained by Brown et al. (2001). Entrepreneurial culture is defined by the development of new ideas in an entrepreneurial organizational culture (Stevenson & Gumpert, 1985; Stevenson & Jarillo, 1990) that are essential for opportunity recognition (Brown et al., 2001), while growth orientation is the growth objective that has to be known and understood by all the employees throughout the firm (Brown et al., 2001), and that EM will help create it (Stevenson & Gumpert, 1985; Stevenson & Jarillo, 1990). Meanwhile, management structure is the extent to which the firm has a flat and organic structure (Brown et al., 2001) where employees are free to create and seek opportunity (Stevenson, 1983). Resource orientation is the combination between commitment of resources and control of resources, and reward philosophy is the employee's rewarding system for their contributions to the organization, or when they add value to the firm (Brown et al., 2001). Finally, strategic orientation is an organization's orientation in strategy creation, and is concerned with the decisions that businesses make to achieve superior performance (Slater et al., 2006). It also defines the broad outlines for the firm's strategy while leaving the details of strategy content and strategy implementation to be completed (Slater et al., 2006).

To date, empirical studies on EM have been done by numerous researchers and results revealed the significant relationships between EM and firm growth (Eliasson & Davidsson, 2003; Hameed & Ali, 2011), and thus suggested that the firms tend to

be more entrepreneurial with regard to the EM's dimensions, namely entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, and strategic orientation. Therefore, this variable cannot be ignored in the context of women-owned SMEs to improve their business performance. Hence, based on the reported research, the following hypothesis is proposed:

H1a: There is a significant relationship between entrepreneurial culture and women-owned SMEs business performance.

H1b: There is a significant relationship between growth orientation and women-owned SMEs business performance.

H1c: There is a significant relationship between management structure and women-owned SMEs business performance.

H1d: There is a significant relationship between resource orientation and women-owned SMEs business performance.

H1e: There is a significant relationship between reward philosophy and women-owned SMEs business performance.

H1f: There is a significant relationship between strategic orientation and women-owned SMEs business performance.

### **2.12.2 Entrepreneurial Orientation (EO) and Women-owned SMEs Business Performance**

Entrepreneurial orientation (EO) is defined as strategic posture of a firm which captures specific aspects of the firm's decision-making styles, practices, and methods (Wiklund & Shepherd, 2005), or in short, indicates a firm's overall competitive orientation (Covin & Slevin, 1989b, 1990). It has also been proved as one of the determinant factors that contribute to the business success (Lumpkin & Dess, 1996). Dess et al. (1997) then further confirmed that EO is critical for the overall performance as it demonstrates the use of a combination of other new strategies to be able to get the full advantage of the available business opportunities.

Despite being noted as the essential dimensions of entrepreneurship and being considered to give a great impact in firm's growth (D. Miller, 1987; Lumpkin & Dess, 1996), to date, the examination on the relationship between EO and business performance has also been conducted intensively although the available empirical findings are mixed. Some studies supported the facts that EO impact performance positively (Wiklund & Shepherd, 2005; Walter et al., 2006; Wang, 2008; Rauch et al., 2009; Justin L. Davis et al., 2010; Kraus et al., 2011; Al-Swidi & Mahmood, 2012; B. S. Anderson & Eshima, 2013), while others confirmed that the two variables were not correlated at all (Andersén, 2010; Messersmith & Wales, 2011). In other cases, some even found that the dimensions of EO supported performance partially (Ambad & Abdul Wahab, 2013; Kreiser et al., 2013; Musa et al., 2014).



Similarly, studies on the relationships between EO and women-owned SMEs performance showed conflicting results as well. While A. Y. S. Ali and Ali (2013) found in one study that innovativeness, proactiveness and risk taking were statistically significant and positively effect on firm performance, in other case, they found that only innovativeness and risk taking were found to have statistically significant and positively effected the firm performance, while proactiveness did not (A. Y. S. Ali & Ali, 2014). Tantasuntisakul (2015) then found that only risk taking showed a positive and significant relationship with business performance among women entrepreneurs in Southern Thailand. In Malaysia, a study by Hanafi and Mahmood (2013) using unidimensional construct revealed that EO is positively and significantly related to women-owned business performance.

Therefore, the inconclusiveness and divergent arguments about the relationship between EO and business performance can be concluded as rather complex and needs to be examined by considering all possible related variables or factors that interact with organizational performance (Rauch et al., 2009). Furthermore, despite of the growing number of women entrepreneurs and the vital effect of EO on their success, nevertheless, still there is relatively little research that have examined the effects of EO on the women-owned SMEs performance in Malaysia. Therefore, conducting this study among women-owned SMEs in this country addresses this issue.

In this study, EO was conceptualised as consisting of innovativeness, proactiveness and risk taking, the three dominant dimensions that are being focused by most of the EO relevant studies to explain the variance in the construct, and being considered to give a great impact in firm's growth (D. Miller, 1987; Lumpkin & Dess, 1996).

Being described by Schumpeter (1934) as the process of creatively destructing an "old order" in order to create a "new order" as a result of new combinations, innovativeness is the first dimension of EO that has been employed in this study for its vitality in the sense that even in the presence of other dimensions, if innovation is not employed there is no firm level entrepreneurship (Covin & Miles, 1999). Proactiveness is the second dimension being employed and it is defined as an opportunity-seeking, forward-looking perspective involving introducing new products or services ahead of the competition and acting in anticipation of future demand to create change and shape the environment (Lumpkin & Dess, 2001; Rauch et al., 2004). And finally, risk taking is known as a tendency to take bold actions such as venturing into unknown new markets, committing a large portion of resources to ventures with uncertain outcomes, and/or borrowing heavily (Lumpkin & Dess, 2001). That is to say, risk taking is the degree to which managers are willing to make large and risky resource commitments (D. Miller & Friesen, 1982).

To sum, entrepreneurial behaviour could be categorized as heterogeneous resources that could be used as a source of competitive advantage and sustain performance (Barney, 1991). In line with results from earlier research on EO overall, research

including separated dimensions and the high correlations between the dimensions; namely innovativeness, proactiveness and risk taking (Covin & Slevin, 1989b, 1991), it is expected that all three dimensions are positively related to the business performance. Yet, there is a little concern on how EO determines the business performance of women-owned SMEs in Malaysia, despite the growing number of women entrepreneurs and the vital effect of EO on their success. Thus, it is postulated that:

H2a: There is a significant relationship between innovativeness and women-owned SMEs business performance.

H2b: There is a significant relationship between proactiveness and women-owned SMEs business performance.

H2c: There is a significant relationship between risk taking and women-owned SMEs business performance.

### **2.12.3 Ethics as Mediator**

Ethical views of managers have continued to be of interest to business practitioners and researchers (Phatshwane, 2013). However, to date researchers tend to agree that there has been more interest in ethical perceptions and behaviour of large corporations as opposed to smaller businesses (Painter-Morland & Spence, 2009), despite the fact that many SMEs make important ethical contributions, yet not being

described and reported in the terms to which we have become accustomed in the field of business ethics and corporate social responsibility (CSR) (Painter-Morland & Spence, 2009). Here, a resulting gap in the literature has been noted. Notwithstanding this observation, a number of researchers have taken an interest in the ethics of small-business managers (Longenecker, McKinney, & Moore, 1989; Quinn, 1997; Spence & Rutherford, 2001, 2003; Phatshwane, 2013) where managers in small business were found to be more ethical than the other comparison groups or their subordinates (Longenecker et al., 1996; Phatshwane, 2013). This further suggests that managers in small businesses are able to influence the ethical climate in the organization to a greater extent than those in larger organizations (Phatshwane, 2013).

From the previous subsection, since the SMEs owner-managers are more likely to view ethical values as universal rather than relativistic (Welsh & Birch, 1997), ethics in this study will be looked as unanimous. Moreover, Parboteeah, Seriki, and Hoegl (2014) argued that from the Human Resource Management (HRM)'s point of view, ethical climate speaks to an essential window to comprehend the ethical orientation in an organization. Ethical climate is also one of the critical factors determining intra-organizational relationships and influencing employee attitudes (Elci & Alpan, 2009) that further contribute to the organizational performance (Choi, Moon, & Ko, 2013; Karatepe, 2013; Khademfar et al., 2013; Moon & Choi, 2014; Arulrajah, 2015; Hijal-Moghrabi et al., 2015). Yet, although this variable had been tested as mediator in some studies (Elci, Sener, & Alpan, 2013; M. Y. Kim et al.,

2015; Mitonga-Monga, 2015; Mobarakeh & Ghorbani, 2015; Ensari & Karabay, 2016) and the results were positively significant, it has been argued that the research on ethics is an emerging field. As a result, a very little is known about what ethics are all about and their relationship with firm performance particularly in the SMEs in developing countries (S. Mahmood, 2008; Phatshwane, 2013).

Furthermore, in the studies of EM and EO, ethics are limited in the academic literatures which require more investigation considering the importance of the ethics among SMEs owner-managers since they are the decision makers (J. S. Harrison & Freeman, 1999) that will effect the entrepreneurial behaviours such as EM and EO, thereupon contribute to the firm performance (Christie et al., 2003). Therefore, proposing ethics as mediator variable in this study would have significant policy implications on firm performance more particularly among the women-owned SMEs in Malaysia. Thus, this study will employ ethics to mediate the relationship between EM, EO and women-owned SMEs business performance considering the fact that in RBV perspective, EM and EO influence firm performance through the development of resources that are deeply woven in an organization's history, ethics and culture. Likewise, ethics is also an intangible resource that is more likely to be a source of competitive advantage than physical resources (Manroop et al., 2014), that effects on the firm growth positively and finally enhance the performance in overall (Amine et al., 2012).

Consequently, on the basis of the above discussions, the present will examine the mediating effect of ethics on the relationships between EM and women-owned SMEs business performance which is yet to be explored in the literature. Thus, this study hypothesized that:

H3a: Ethics mediates the relationship between entrepreneurial culture and women-owned SMEs business performance.

H3b: Ethics mediates the relationship between growth orientation and women-owned SMEs business performance.

H3c: Ethics mediates the relationship between management structure and women-owned SMEs business performance.

H3d: Ethics mediates the relationship between resource orientation and women-owned SMEs business performance.

H3e: Ethics mediates the relationship between reward philosophy and women-owned SMEs business performance.

H3f: Ethics mediates the relationship between strategic orientation and women-owned SMEs business performance.

Similarly, even though Saeed, Yousafzai, and Engelen (2014) noted that the topic on EO and firm performance is among the best-researched topics in entrepreneurship

research, the relationships between the two variables are rather complex (Rauch et al., 2009) that calls for the mediating role (Qureshi & Kratzer, 2011). Specifically, EO contributes to overall performance of women-owned SMEs (A. Y. S. Ali & Ali, 2013; Hanafi & Mahmood, 2013). On the other hand, some argue that only a few dimensions are related to women-owned business performance or that the relationship between EO and firm performance could be negative (A. Y. S. Ali & Ali, 2014; Tantasuntisakul, 2015). Consequently, on the basis of the above discussions, the present study hypothesized that:

H4a: Ethics mediates the relationship between innovativeness and women-owned SMEs business performance.

H4b: Ethics mediates the relationship between proactiveness and women-owned SMEs business performance.

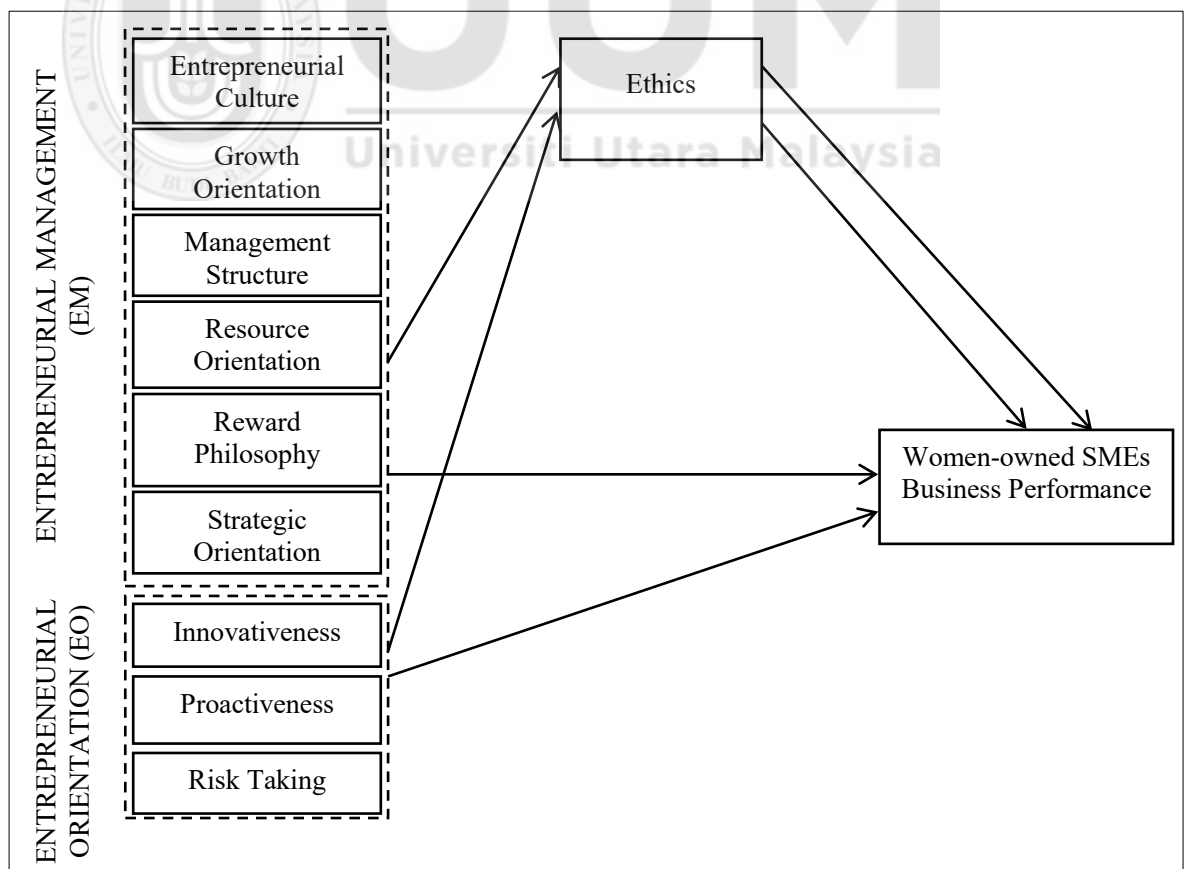
H4c: Ethics mediates the relationship between risk taking and women-owned SMEs business performance.

### **2.13 Research Framework**

The previous discussion on underpinning theories and the development of hypothesis lead to research framework of the study that is shown in Figure 2.1. The independent variables (IV) to be studied are entrepreneurial management (EM) and entrepreneurial orientation (EO). These independent variables are hypothesized to

have significant relationships on the dependent variable (DV) that is the women-owned SMEs business performance. This study also intends to look at ethics that is believed to mediate the relationships between the EM dimensions and EO dimensions. The EM of this study consists of six dimensions: entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, and strategic orientation. Meanwhile, the EO consists of three dimensions: innovativeness, proactiveness and risk taking. Figure 2.1 presents the framework of the proposed research.

Figure 2.1  
*The Relationships between Entrepreneurial Management (EM), Entrepreneurial Orientation (EO), Ethics and Women-owned SMEs Business Performance*





The first part of the framework is the independent variables (IV): EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, and strategic orientation), and EO (innovativeness, proactiveness and risk taking). The second part is the mediating variable: ethics, and finally the dependant variable (DV): women-owned SMEs business performance.

This framework is underpinned by Resource-Based View (RBV) theory as mentioned before. While Grant (1991) classified resources as financial, physical, human, technological, and organizational, Wernerfelt (1984) described resources in terms of brand names, in-house knowledge of technology, employment of skilled personnel, trade contract, machinery, efficient procedures, and capital. For the purpose of this study, resources included are related to human or individual; their EM, EO and ethics. Thus, these resources are to better understand more complex relationships that require the analysis of multiple variables on the women-owned business performance.

#### **2.14 Summary**

This chapter discusses about previous studies related to the objectives of the study and reviews the background of the definitions of women-owned SMEs in the Malaysian context, and other related variables: EM, EO, ethics and women-owned SMEs business performance. Next, direct and indirect effects of the interrelated variables have been examined thoroughly through the empirical and past studies by

the other researchers. All of these variables have been defined and reviewed in various general and specific contexts in entrepreneurship to provide a better explanation of the framework of this study. Hypotheses have been formulated to answer the research question and research model has been developed to meet the objectives of the research. Table 2.7 presents all the hypotheses being studied. The methodology used to conduct this study will be presented in the next chapter.



Table 2.7  
*List of the Hypotheses*

No.	Hypotheses	Item
1	H1a	There is a significant relationship between entrepreneurial culture and women-owned SMEs business performance.
2	H1b	There is a significant relationship between growth orientation and women-owned SMEs business performance.
3	H1c	There is a significant relationship between management structure and women-owned SMEs business performance.
4	H1d	There is a significant relationship between resource orientation and women-owned SMEs business performance.
5	H1e	There is a significant relationship between reward philosophy and women-owned SMEs business performance.
6	H1f	There is a significant relationship between strategic orientation and women-owned SMEs business performance.
7	H2a	There is a significant relationship between innovativeness and women-owned SMEs business performance.
8	H2b	There is a significant relationship between proactiveness and women-owned SMEs business performance.
9	H2c	There is a significant relationship between risk-taking and women-owned SMEs business performance.
10	H3a	Ethic mediates the relationship between entrepreneurial culture and women-owned SMEs business performance.
11	H3b	Ethic mediates the relationship between growth orientation and women-owned SMEs business performance.
12	H3c	Ethic mediates the relationship between management structure and women-owned SMEs business performance.
13	H3d	Ethic mediates the relationship between resource orientation and women-owned SMEs business performance.
14	H3e	Ethic mediates the relationship between reward philosophy and women-owned SMEs business performance.
15	H3f	Ethic mediates the relationship between strategic orientation and women-owned SMEs business performance.
16	H4a	Ethic mediates the relationship between innovativeness and women-owned SMEs business performance.
17	H4b	Ethic mediates the relationship between proactiveness and women-owned SMEs business performance.
18	H4c	Ethic mediates the relationship between risk taking and women-owned SMEs business performance.

## **CHAPTER 3 RESEARCH METHODOLOGY**

### **3.1 Introduction**

This study was designed specifically to look at the relationships between entrepreneurial management (EM), entrepreneurial orientation (EO) and ethics, particularly looking at the women-owned SMEs in Malaysia. In detail, this study examined the effects of the dimensions of EM, namely entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy and strategic orientation, and EO, namely innovativeness, proactiveness and risk taking) on the women-owned SMEs business performance.

This study also examined the effects of ethics as mediating variable on the relationships between the dimensions of EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy and strategic orientation) and women-owned SMEs business performance, as well as between EO (innovativeness, proactiveness and risk taking) and women-owned SMEs business performance.

Therefore, this section presents the methods used in order to achieve the purpose of this study. Among the topics that are discussed in this section include the research design, selection of respondents, instrumentations, unidimensional and multidimensional, measurement of variables, validity and reliability, result of pilot

test, data collection procedures, analysis of the data which include descriptive and regression analysis, and finally, the summary that wrap-up the chapter.

### **3.2 Research Design**

According to Borden and Abbott (2011), choosing an appropriate research design is crucial to the success of the research, despite of no definitive means to determine or choose the best design (D. Davis & Cosenza, 1995). Research design according to D. R. Cooper and Schindler (2014) is considered as the structure that holds the components of research together and it is always based on research question. The types of research designs that could be used in conducting researches may include quantitative (deductive approach), qualitative (inductive approach) or mixed methods (Creswell, 2003, 2009).

The quantitative paradigm is characterised by the use of theoretical propositions for empirical testing to determine if such propositions are true (Easterby-Smith, Thorpe, & Lowe, 2001). In addition, it entails a deductive approach to the relationship between theory and research in which the emphasis is on the testing of theories (Easterby-Smith et al., 2001). Meanwhile, qualitative research is used to explore complex social influences that acquire an in-depth understanding of occurrence or event (Creswell, 2003, 2009) and the data analysis is a dynamic, intuitive and creative process to permit inductive reasoning, thinking and theorising (Neuman, 2009).

In addition, while the ontological orientation for deductive approach is towards objectivism by viewing social reality as external, objective reality (Easterby-Smith et al., 2001), the inductive approach is towards constructivism by viewing social reality as interpretive and subjective (Hirschman, 1986). Finally, the epistemological orientation for deductive approach is towards the natural scientific model or positivism (Easterby-Smith et al., 2001), compared to inductive that is interpretivism (Hirschman, 1986).

On the other hand, mixed methods research design is a combination of qualitative/inductive and quantitative/deductive approaches in the same study (Creswell, 2003, 2009). However, due to time and resource constraints, there is usually only one major research methodology that suits the research problem (Perry, 1998). Thus, this study utilized quantitative method (deductive approach) to decide before and after outcomes and confirms hypotheses by testing theory and at the same time able to clarify and predict measured variables and phenomena (Leedy & Ormrod, 2005).

A cross sectional research design was also adopted for this study, taking into account individual women owners or managers as unit of analysis. A cross-sectional design refers to a collection of data or information from any given sample or population only once and represents a snapshot of a single point in time (Creswell, 2003, 2009; Malhotra, 2006; D. R. Cooper & Schindler, 2014). Furthermore, this study also employed the survey method by making use of the questionnaire in order to obtain

consistent and effective results. The next sections explained briefly about the quantitative and survey method.

### **3.2.1 Quantitative Study**

This study employed quantitative method rather than qualitative to achieve its aim, paralleled with the works by Hashim and Mahmood (2007), Aziz and Mahmood (2011), June and Mahmood (2011), Al-Swidi and Mahmood (2012), Hanafi and Mahmood (2013), Abdul Aziz, Mahmood, Tajudin, and Abdullah (2014), Shehu and Mahmood (2014), Bakar and Mahmood (2014), Otache and Mahmood (2015), Pratono and Mahmood (2015), D. Arshad, Razalli, Julienti, Ahmad, and Mahmood (2015), and Mustapa and Mahmood (2016a, 2016b).

According to Gelo, Braakmann, and Benetka (2008), “a great deal of quantitative research is concerned with counting occurrences, volumes, or the size of the associations between entities, while qualitative research aims to provide rich or “thick” descriptive accounts of the phenomenon under investigation” (p. 267-268).

Gelo et al. (2008) further added that the disciplines in psychological research are dominated by the paradigm of positivist/post-positivist and thus, quantitative approach is most suitable to explain and predict the nature of the relationship and also to test the theory (Leedy & Ormrod, 2005). It can also be reliably determined if one idea or concept is better than alternatives (D. R. Anderson, Sweeney, & Williams, 2004).

In agreement with Leedy and Ormrod (2005), quantitative research is used to answer questions about relationships among measured variables with the purpose of explaining, predicting, and controlling phenomena. It is also applied to describe trends or tendency when relationships among variables are examined and they are measured by instruments that enabled numbered data to be analysed using statistical procedures (Creswell, 2003, 2009). Therefore, in this study besides employing statistical procedures in observing and measuring the collected numeric information by the means of closed-ended questionnaires, variables studied had been identified beforehand and they were related in research questions and hypotheses (Creswell, 2003). Hence, the employment of quantitative method met the needs of this study that was to seek for reliable and valid outcomes. Table 3.1 shows the different approaches between quantitative and qualitative method.

Table 3.1  
*Quantitative and Qualitative Approaches*

	Quantitative	Qualitative
Philosophical assumptions	- Post positivist	- Constructivist/Advocacy/ Participatory
Strategies	- Surveys and experiments	- Phenomenology, grounded theory, ethnography, case study and narrative
Methods	- Close-ended questions, predetermined approaches, numeric data	- Open-ended questions, emerging approaches, text or image data



Research practices	<ul style="list-style-type: none"> <li>- Tests or verifies theories or explanations</li> <li>- Identifies variables to study</li> <li>- Relates variables in questions or hypotheses</li> <li>- Uses standards of validity and reliability</li> <li>- Observes and measures information numerically</li> <li>- Uses unbiased approaches</li> <li>- Employs statistical procedures</li> </ul>	<ul style="list-style-type: none"> <li>- Positions himself or herself</li> <li>- Collects participant meanings</li> <li>- Focuses on a single concept or phenomenon</li> <li>- Studies the context or setting of participants</li> <li>- Validates the accuracy of findings</li> <li>- Makes interpretations of the data</li> <li>- Creates an agenda for change or reform</li> <li>- Collaborates with the participants</li> </ul>
--------------------	--	---

*Source: Creswell (2003, 2009)*

### 3.2.2 Survey Method

Besides employing a quantitative method, this study also employed the survey method, the most widely used approach in business research (Aziz & Mahmood, 2011; June & Mahmood, 2011; Al-Swidi & Mahmood, 2012; Abdul Aziz et al., 2014; Shehu & Mahmood, 2014a; Bakar & Mahmood, 2014; Pratono & Mahmood, 2015; Wahab, Mahmood, & Bakar, 2015; Aliyu et al., 2015; D. Arshad et al., 2015; Otache & Mahmood, 2015; Mustapa & Mahmood, 2016a, 2016b), and in fact the best method for studying and desiring large populations and at a relatively low cost (D. Davis & Cosenza, 1995). Through this method also, researchers would be able to know the actual situation in a more realistic and achieve personal and social facts, beliefs and attitudes (Kerlinger, 1979).

However, despite of favourable outcome from survey method, Sekaran and Bougie (2010) argued that one of the drawbacks of survey method is the occurrence of low response rate among small business owners which is contributed by, such as mobility, failure rate, and the owner's limited time (Welsh & Birch, 1997). This is in keeping with Abu Bakar and Ahmad (2010) who also pointed out that survey method usually yielded a lower response rate, even though it allowed the individual to spend their available free time to answer the survey without any external pressure (L. J. Abu Bakar & Ahmad, 2010). Bartlett, Kotrlik, and Higgins (2001) through their research also found that many of the studies based on population census data achieved low response rates, which may lead to sample bias, low power, and inaccurate effect size (Sivo, Saunders, Chang, & Jiang, 2006). In this study, coverage errors were expected from the owners or managers of the firms whom by their very nature, were disinclined to respond due to their extremely busy schedule (Sivo et al., 2006).

Finally, in conducting this study, the primary data needed was obtained by means of a questionnaire which consisted of various scales measuring EM, EO, ethics and business performance of the women-owned SMEs. Demographic and company information of the respondents had also been included. All survey questionnaires were distributed and returned via mail. Therefore, the research design chosen met the needs of this study as it seeks to provide reliable and valid outcomes.

### **3.3 Respondent**

Basically, two processes were required to identify the respondent for investigation; namely the selection of the population on the territory or region, as well as selecting the samples. The descriptions with respect to population and sample selection in research are as follows:

#### **3.3.1 Population**

Unit analysis of this study is a firm or organization that was represented by the top management of the firm as owner or manager. Thus, women owners and managers who were involved in running the firms were selected as respondents. This was in consonance with the suggestion by Brush and Vanderwerf (1992) that business owners or top executives in small entrepreneurial firms often represented the views of the entire firms. Additionally, Chandler and Hanks (1993) found that firm performances reported by the owner/general manager of small firms were inextricably linked with the data archived. In other cases, Rauch et al., (2009) highlighted that the reliance on self-reported data from single informants had been the most common way of addressing performance in previous studies of EO and performance.

However, emphasis had been given to those who have at least three years of business experience because three years of business experience is sufficient to assess an entrepreneur (A. C. Cooper & Artz, 1995; Aziz & Mahmood, 2011; Ekpe, 2011a). Furthermore, Ferreira, Garrido Azevedo, and Fernández Ortiz (2011) suggested that

youngest firms; minimum three years, have the tendency to grow more than older ones. Wiklund and Shepherd (2011) then added that it was desirable to have a substantial lag-3 year, between EO and outcome variables, since it also took time for strategic initiatives, such as those arising from EO to have an impact on performance (Wiklund & Shepherd, 2005).

Before beginning the data collection, it was also a mandatory to identify the respondents' valid mailing list which could be compiled from telephone directories, customer databases or association membership databases by (Malhotra & Birks, 2008). Therefore, the respondents for this study were selected based on the accessibility of data of the women entrepreneurs from online database. There are several online databases or business directory contains important information about women entrepreneurs in Malaysia for example the contact person, address, contact number, and e-mail address.

One of the databases is SME Corp.'s website (<http://smecorp.gov.my>), a well-maintained SMEs business directory which contains a list of 58,705 companies, out of 645,136 that registered with them (DOSM, 2011b). The companies' information can be sought according to industry group or according to the state where they are located at. However, since there was no option to choose for the companies' owners' or managers' gender on the first page of the listing, it was difficult to identify the women entrepreneur unless the process was being done manually which required time consuming. Thus, this online database is not relevant to this study. As such,

websites featuring solely on the information and databases of the women entrepreneurs in Malaysia were focused.

In Malaysia, Peniagawati, Usahanita, AIM (Amanah Ikhtiar Malaysia), NAWEM (National Association of Women Entrepreneurs of Malaysia), and Wawasanita are the specific agencies to support women's business ownership. Peniagawati is an NGO which was established on March 24, 1980 with the aim of encouraging and supporting Bumiputera women who own and operate businesses (<http://peniagawati.org.my>). Peniagawati's representation of women entrepreneurs reflects, to a considerable extent, an urban, sophisticated, and active lifestyle (Mohd Rhouse, 2013). Meanwhile, Usahanita was established in 1981 to upgrade the skill and knowledge of women entrepreneur through courses, forums and seminars, expose the members to the economic situation and income generating, further to increase quantity of the memberships with quality (Usahanita, 2012). The AIM (Amanah Ikhtiar Malaysia, or the Endeavour Trust of Malaysia) was established on September 17, 1987, with the aim of reducing poverty among very poor households in Malaysia (<http://www.aim.gov.my>). It focuses on women with low income households and indigenous people located in rural areas (Chan, 2005).

Besides AIM, NAWEM (National Association of Women Entrepreneurs of Malaysia) was also established to provide leadership and inspiration to nurture women entrepreneurs towards realising their dreams (<http://nawem.org.my>). Its members were multi-ethnic entrepreneurs covering a wide cross-section of sectors

such as manufacturing, information technology (IT), financial, services, education, aerospace, trading, food and beverage, engineering and many more. Apart from that, another agency supporting women entrepreneurs is Wawasanita. Established in 1996, it's aimed was to produce visionary Bumiputra women entrepreneurs to grow the business for the purpose of increasing socio-economic respectively. Wawasanita is also working with the Government to establish Malaysia as a State of commercial and industrial (<http://wawasanita.org.my>).

Although all the agencies discussed above support closely women entrepreneurs or women's business ownership, the websites of AIM and NAWEM did not open their members' directories to the public due to privacy setting, while Wawasanita only updated their information in the media social such as Facebook and did not provide a proper access to the website. Only Peniagawati and Usahanita provided free complete listing directories of the owners, their companies, phone numbers, correspondence e-mails and addresses, making them the most appropriate database to be used in this study. Thus, the total population of women-owned SMEs as available on the websites of Peniagawati and Usahanita was approximately 9,000 companies - which had been chosen as the source of database to fulfil the needs of this study which was to examine the joint relationships between EM, EO, ethics and women-owned SMEs business performance in Malaysia.

### 3.3.2 Sample

As suggested by Sekaran and Bougie (2010) and Sekaran (1999) based on the table by Krejcie and Morgan (1970), the sampling frame which was being said to be made in accordance with the general scientific guidance for a population of approximately 9,000 women-owned SMEs; 1,000 from Peniagawati (2012) and 8,000 from Usahanita (2012), was 368 firms. This figure had also been determined after taking into consideration the significant levels and the sampling error as proposed by Cohen, Manion and Morrison (2004) and Sanders, Verhulst and Murdock (2007) that was 5 per cent margin of error (95 per cent of confidence level) for an appropriate sample size.

In other cases, Sekaran (1999) agreed that this frame also met the first rule of Roscoe's (1975) Rule of Thumb in determining the sample size which stated that: (1) Sample size which is more than 30, but less than 500 are appropriate for most of the research; (2) If the samples are divided into sub-samples, then the minimum size for each sub-sample must not less than 30; (3) In multivariate analysis (including multiple regression analysis), sample size must be 10 times or more the number of variables; (4) For simple experiment with tight controls, a small sample size (between 10-20) is quite sufficient.

Hair et al. (2006) also confirmed that researcher would generally prefer the sample size of 100 or larger to analyse the factor. As a general rule, the minimum is to have

at least five times as many observations as the number of variables to be analysed, and the more acceptable sample size would have a 10:1 ratio (Hair et al., 2006).

Despite of the above argument, Sekaran and Bougie (2010) claimed that the factors effecting decisions on sample size are as follows: (1) The research objective; (2) The extent of precision desired (the confidence interval); (3) The acceptable risk in predicting that level of precision (confidence level); (4) The amount of variability in the population itself; (5) The cost and time constraints; (6) In some cases, the size of the population itself.

However, in order to overcome the probability of not getting the appropriate responds which was expected from the survey research as shown in the above low responses rates derivated from the previous studies of the same or a similar population (Bartlett et al., 2001), oversampling was applied (Salkind, 1997) and sample size was adjusted for tendency of non-responses (Bartlett et al., 2001). This was proven by Sivo et al., (2006) in their study that small sample size and low response rate could be problematic.

In Malaysia, previous research on women entrepreneurs reported conflicting response rates. Hanafi and Mahmood (2013) reported 15.86 per cent of response rate, Salleh and Mohd Osman (2007) 28.42 per cent, Alam, Jani, et al. (2011) 39.8 per cent, and Alam, Senik, and Jani (2012) revealed 79.6 per cent of response rate.

Meanwhile, in other cases, the response rates among small business owners gained by Abu Bakar and Ahmad (2010), and Chelliah, Sulaiman, and Mohd Yusoff (2010)



was 20.1 per cent and 27 per cent respectively. Conforming to this, Aziz and Mahmood (2011), and June and Mahmood (2011) revealed that response rates for mail survey in Malaysia had also been found between 20 to 25 per cent, further supported by Bakar and Mahmood (2014) with 24.6 per cent of response rate for mail survey.

From the above response rates, it can be concluded that for instance only 20 per cent of the sample size from the total population are responding to the studies. Thus, accurate parameter estimation with a 60 per cent or more return should still be a concern and sample size ought to be adjusted for the tendency of non-responses (Bartlett et al., 2001; Sivo et al., 2006). Therefore, be based on the previous research, in order to achieve the recommendable rate at more than or equal to 60 per cent, the sample size need to be tripled. As such, a total of 1,000 names were selected from the list of approximately 9,000 women-owned SMEs derived from the websites of Peniagawati (2012) and Usahanita (2012), almost tripled than the intended sample needed (Aziz & Mahmood, 2011; Bakar & Mahmood, 2014). Further added, Blaikie (2003) suggested that in studies of large population that is tedious and expensive, a sample of around 1,000 may be satisfactory and 2,000 will be very satisfactory.

A systematic sampling technique was also being used in this study. Be based on this technique, the process of selecting the samples randomly from the database of Peniagawati and Usahanita was conducted by using Microsoft Office Excel 2010. From there, every  $K^{\text{th}}$  element would be selected from the list (Malhotra, 2006); for instance in this study where  $k=9$ , every 9<sup>th</sup> name was repeatedly picked up from the

list of approximately 9,000 names of women owners or managers in the sampling frame (Malhotra, 2006; Bordens & Abbott, 2002), where finally, a total of 1,000 names had been gathered from the list.

### 3.4 Instrumentation

The questionnaire was divided into six main sections; namely section A, B, C, D, E and F. Section A began with the demographic information of the respondent, whereas the section B was on the respondent's company information. The third section, section C, was on the EM, followed by EO in the section D. Ethics as mediating variable came in the section E, while the last section measured the business performance as featured in Table 3.2.

Table 3.2  
*Sections in Questionnaire*

Section	Content
A	Demographic Information
B	Company Information
C	Entrepreneurial Management (EM) <ul style="list-style-type: none"> <li>• Entrepreneurial Culture</li> <li>• Growth Orientation</li> <li>• Management Structure</li> <li>• Resource Orientation</li> <li>• Reward Philosophy</li> <li>• Strategic Orientation</li> </ul>
D	Entrepreneurial Orientation (EO) <ul style="list-style-type: none"> <li>• Innovativeness</li> <li>• Proactiveness</li> <li>• Risk Taking</li> </ul>
E	Ethics
F	Business Performance

### **3.5 Unidimensional and Multidimensional**

According to Hair, Black, Babin, and Anderson (2010), unidimensional measure is a set of measured variables (indicators) with only one underlying latent construct. That is, the indicator variables load on only one construct. In addition, unidimensionality becomes critically important when more than two constructs are involved. In such a situation, each measured variable is hypothesized to relate to only a single construct. All cross-loadings are hypothesized to be zero when unidimensional constructs exist (Hair et al., 2010).

Meanwhile, based on Law, Wong and Mobley (1998), a construct is multidimensional when it refers to several distinct but related dimensions treated as a single theoretical concept, and exists in multidimensional domains. Furthermore, different from the correlated unidimensional constructs, the dimensions of a multidimensional construct can be abstracted under an overall abstraction, and it is theoretically significant and parsimonious to use this overall abstraction as a representation of the dimensions (Law et al., 1998).

This study employed unidimensional construct to measure the dependent variable (business performance) and mediating variable (ethics), and multidimensional constructs for both independent variables (EM and EO).

### 3.6 Measurement of Variables

This scale consisted of a total of eighty-six items. Business performance and ethics were measured with unidimensional scales, while EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy and strategic orientation), and EO (innovativeness, proactiveness and risk taking) were measured with multidimensional scales. The questions which formed the scales were described in the next section.

A 7-point Likert-type scale was employed in this study. According to Zikmund, Babin, Carr, and Mitch (2009), Likert scale is a method that is simple to administer and therefore extremely popular is business researchers' adaptation of the method of summated ratings, developed by Rensis Likert. Supporting this view, Malhotra (2006) added that it is easy for the researcher to construct and administer this scale, and it is easy for the respondent to understand, therefore suitable for mail, telephone, personal, or electronic interviews (Malhotra, 2006). Sekaran and Bougie (2010) then clarified that Likert scale is a summated approach that is widely used; not only the responses over a number of items tapping a particular concept or variable can be analysed item by item, but it is also possible to calculate a total or summated score for each respondent by summing across items (Sekaran & Bougie, 2010).

Based on the study by Malhotra (2006), researchers must make six major decisions when constructing Likert type of scales: (1) The number of scale categories to use;

(2) Balanced versus unbalanced scale; (3) Odd or even number of categories; (4) Forced versus non-forced choice. Therefore, Likert's scale of 7 categories was adopted in this study based on the recommendation by Malhotra (2006) which is in link with the conventional guidelines had suggested that the appropriate number of categories should be seven plus or minus two: that is between five and nine, although no single optimal number of categories had been identified. This is supported by D. R. Cooper and Schindler (2013) that a higher number of scale enhances the reliability of the measure, 7-point scale was believed to be more appropriate compared to 5-point. Further added, Osgood, Suci, and Tannenbaum (1957) mentioned that semantic differential used 7-point scale, and the value of adding even more points to a rating scale may depend upon how refined people's mental representations of the construct are, in which case a 7-point scale would be more desirable than a 5-point scale (Krosnick & Presser, 2010).

However, since years, debates have been ongoing concerning whether to include a middle alternative or not (Krosnick & Fabrigar, 1997). For instance, midpoint on 1 to 7-point scale in this study is 4, and 3 on 1 to 5-point scale. According to Krosnick and Fabrigar (1997), on bipolar dimensions, a middle alternative can take a number of forms, including "neither" on a favor/oppose or agree/disagree or like/dislike scale, or a "status quo" endorsement on a scale representing change, ranging from a large increase to a large decrease. Meanwhile, on a unipolar scale, a midpoint presumably represents a moderate position, though its meaning is not as precise as is the case for the bipolar dimensions (Krosnick & Fabrigar, 1997). In addition,

offering a midpoint may discourage people from taking sides and may encourage them to satisfice, whereas if no midpoint is offered, respondents might optimize instead (Krosnick, 1991). Thus, offering a midpoint may forego collection of useful data (Krosnick, 1991).

Despite the debates, studies have examined the effect of midpoint presence on reliability and validity, but with contradictory results. Meaning to say, including a midpoint may at times increase data quality and at other times not (Krosnick & Fabrigar, 1997; Baumgartner & Steenkamp, 2001). However, there is a potential cost to eliminating midpoints. A study by Krosnick and Presser (2010) revealed that some people may truly belong at the scale midpoint and may wish to select such an option to communicate their genuine neutrality or endorsement of the status quo. In addition, if many people have neutral attitudes to report, eliminating the midpoint will force them to pick a point either on the positive side or on the negative side of the scale, resulting in inaccurate measurement, thus suggests that offering midpoints is desirable (Krosnick & Presser, 2010).

Therefore, taking into consideration the appropriateness of using 7-point scale, supported by the favourable suggestion on using midpoint as discussed above, in this study, EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy and strategic orientation) and EO (innovativeness, proactiveness and risk taking) were tested as the independent variable, while women-owned SMEs performance was the dependent variable, besides

examining the mediating effect of ethics through the data collected by the means of 7-Likert scale questionnaires.

As such, respondents were asked to mark on a 7-point Likert-type scale, reflecting degree of their tendency towards the variables, namely EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy and strategic orientation), EO (innovativeness, proactiveness and risk taking), ethics and business performance. Table 3.3 shows the format of the survey questionnaire.

Table 3.3  
*Survey Format*

Section	Variable and Dimensions	Total Questions
A	Demographic Information	9
B	Company Information	6
C	Entrepreneurial Management (EM)	
	• Entrepreneurial Culture	3
	• Growth Orientation	2
	• Management Structure	5
	• Resource Orientation	9
	• Reward Philosophy	6
	• Strategic Orientation	3
D	Entrepreneurial Orientation (EO)	
	• Innovativeness	3
	• Proactiveness	3
	• Risk Taking	3
E	Ethics	25
F	Business Performance	9
Total		86

### **3.6.1 Business Performance**

The instrument to measure business performance was adopted from the work of Gupta and Govindarajan (1984), in order to obtain the best outcome of the firm's achievement. According to Gupta and Govindarajan (1984), respondents should be asked to express their level of satisfaction related to the multiple dimensions of firm performance.

Subjective measures were employed in this study instead of objective approach which was parallel with the works by Aziz and Mahmood (2011), Al-Swidi and Mahmood (2012), Hanafi and Mahmood (2013), Abdul Aziz et al. (2014), and Shehu and Mahmood (2014). Meanwhile, objective approach was not being used since collecting objective data was very difficult as the owners or managers were not willing to disclose the firm's information to outsiders (Dess & Robinson, 1984; Aziz & Mahmood, 2011; Zulkiffli & Perera, 2011; Abdul Aziz et al., 2014). Dess and Robinson (1984) then confirmed that subjective measures were strongly correlated with objective measurements in terms of absolute changes in return on assets and sales over the same time period, which supported the validity of performance evaluation through subjective measures (Dess & Robinson, 1984). Thus, Zulkiffli and Perera (2011) suggested that subjective evaluations were appropriate alternatives to objective measurement.



Moreover, when subjective measures are employed, the owner or manager could use the relative performance of their industry as a benchmark (Dawes, 1999) or focused on firms within the same industry when providing a response which could avoid the issues of misinterpretations of the performance due to variations in profitability data when using the objective performance (Zulkiffli & Perera, 2011). Additionally, Chandler and Hanks (1993) suggested that examination of performance relative to competitors should be focused on the entire industry to assess “generalisability”, as some respondents may not know much about their competitors’ performance. Therefore in this study, by utilizing the subjective measurements, the owner or manager was asked to rate their business performance, based on the perception of comparison with their competitors in the same industry as mentioned above, on a 7-point Likert scale ranging from 1 (“Extremely low”) to 7 (“Extremely high”).

To make sure that the respondents were appropriate to become the subject of study, they were being asked to indicate their life of the business and those who answered with three years and above consistently were taken into consideration in response to the suggestions by A. C. Cooper and Artz (1995), Aziz and Mahmood (2011) and Ekpe (2011a) that three years of business experience was sufficient to assess an entrepreneur as explained in subsection 3.3.1. Finally, there were nine questions to measure this variable as presented in Table 3.4.

Table 3.4  
*Business Performance Questions*

Items
1. Cash Flow
2. Gross Profit Margin
3. Net Profit From Operation
4. Sales Growth
5. Return On Sales
6. Return On Investment
7. Profit to Sales Ratio
8. Return to Shareholder Equity
9. Ability to Fund Business Growth From Profit

*Source:* Gupta and Govindarajan (1984)

Note: Likert Scale 1 to 7; Very Low (1) to Very High (7)

### 3.6.2 Entrepreneurial Management (EM)

For this research, the instrument of EM was adopted from the scale developed earlier by Brown et al. (2001) based on the Stevenson's (1983) conceptualization of entrepreneurship as opportunity-based firm behaviour. This scale included a total of twenty-eight items: (1) three items related to the entrepreneurial culture; (2) two items related to growth orientation; (3) five items to measure management structure; (4) nine items related to resource orientation; (5) six items related to reward philosophy; and (6) three items related to strategic orientation.

Growth orientation was measured using only two items adopted from Brown et al. (2001). Studies by Kuhn et al. (2010) and Bradley et al. (2011) confirmed that the two items of growth orientation had all its highest loadings and were exclusively

loaded on one dimension, featuring the ongoing economic crises which possibly stunted the perception of items related to growth (Kuhn et al., 2010).

For the purpose of data collection, the respondents were asked to rate their EM on a 7-point Likert scale ranging from 1 (–Strongly disagree”) to 7 (–Strongly agree”).

Table 3.5 shows the EM’s questions.

Table 3.5  
*Questions of Entrepreneurial Management (EM)*

Items
<p><b>Entrepreneurial Culture</b></p> <ol style="list-style-type: none"> <li>1. We have many more promising ideas than we have time and the resources to pursue.</li> <li>2. Changes in the society-at-large seldom lead to commercially promising ideas for our firm.</li> <li>3. We never experience a lack of ideas that we can convert into profitable products/services.</li> </ol>
<p><b>Growth Orientation</b></p> <ol style="list-style-type: none"> <li>4. It is generally known throughout the firm that growth is our top objective.</li> <li>5. It is generally known throughout the firm that steady and sure growth is the best way to expand.</li> </ol>
<p><b>Management Structure</b></p> <ol style="list-style-type: none"> <li>6. We prefer tight control of funds and operations by means of sophisticated control and information systems.</li> <li>7. We strongly emphasize getting things done even if this means disregarding formal procedure.</li> <li>8. We strongly emphasize holding to tried and true management principles and industry norms.</li> <li>9. Managers’ operating styles are allowed to range freely from very formal to very informal.</li> <li>10. There is a strong emphasis on getting line and staff personnel to adhere closely to their formal job descriptions.</li> </ol>
<p><b>Resource Orientation</b></p> <ol style="list-style-type: none"> <li>11. Since our objective is to use our resources, we will usually invest heavily and rapidly.</li> <li>12. All we need from resources is the ability to use them.</li> <li>13. We like to employ resources that we borrow or rent.</li> <li>14. In exploiting opportunities, access to money is more important than just having</li> </ol>

---

the idea.

15. We divide a project into several stages and decide about the required resources for each stage individually, before starting it. (Multiple step commitment).
16. Our managers are dedicated to the same projects with long term commitment.
17. To maximize our return, we invest as little resources as possible even though this strategy may increase the risk of failure.
18. Borrowing, renting and contracting resources when we need them keep us up to the latest market developments and technologies.
19. We prefer the stability and the rapid availability of using resources that we own and are familiar with.

#### Reward Philosophy

20. Our employees are evaluated and compensated based on their responsibilities.
21. Our employees are usually rewarded by promotion and annual raises.
22. An employee's standing is based on the values/he adds.
23. An employee's performance is evaluated by short-term profit targets.
24. Rewarding in our firm is based on the employee's individual performance.
25. We reward our employees by giving them more job flexibility and access to resources they might need to develop new ideas.

#### Strategic Orientation

26. As we define our strategies, our major concern is how to best utilize the resources we control.
27. We limit the opportunities we pursue on the basis of our current resources.
28. Opportunities control our business strategies

---

Source: Brown *et al.*, (2001)

Note: Likert Scale 1 to 7; Strongly Disagree (1) to Strongly Agree (7)

### 3.6.3 Entrepreneurial Orientation (EO)

In measuring the EO construct, the dimensions were multidimensional where each of the dimensions namely; innovativeness, proactiveness, and risk taking, was a separate component and they were being used in majority of the studies related to the EO. Here, the owner-managers were asked to rate their EO based on 7-point Likert scale used by Covin and Slevin (1989) based on items adapted from Khandwalla (1976, 1977) and Danny Miller and Friesen (1982). This scale included a total of

nine items: (1) three items related to the innovativeness; (2) three items related to proactiveness; and (3) three items to measure risk taking. Table 3.6 presents the questions of EO.

Table 3.6  
*Questions of Entrepreneurial Orientation (EO)*

Items
Innovativeness
1. Our firm emphasizes on utilizing new technology.
2. Our firm encourages new idea from any workers regardless of his or her status in the firm.
3. Our firm emphasizes on research and development.
Proactiveness
4. Our firm initiates actions to which competitors then respond in using new technology.
5. Our firm is the first to introduce new product or service.
6. Our firm always respond to unrelated opportunities.
Risk Taking
7. Our firm practices —wait and see” position to minimize risk.
8. Our firm explores bravely and open minded to achieve goal.
9. Our firm always invest in unexplored technologies.

*Source:* Covin and Slevin (1986)

Note: Likert Scale 1 to 7; Strongly Disagree (1) to Strongly Agree (7)

### 3.6.4 Ethics

The instrument for measuring ethics was adopted from Cullen, Victor, and Bronson (1993), which was the revised version of Victor and Cullen (1987, 1988)‘s Ethical Climate Questionnaire.

The original Victor and Cullen (1988) framework consisted of a two-dimensional model of ethical climate types, wherein one dimension of the model was ethical

philosophy, namely, egoism, benevolence, and principle, and the other dimension was the sociological theory of reference groups, namely, individual, local, and cosmopolitan. The crossing of these two theoretical dimensions of ethical climate results in nine theoretical climate types; namely self-interest, company profit, efficiency, friendship, team-interest, social-responsibility, personal morality, company rules and procedures, and, law and professional codes (Victor & Cullen, 1988). However, empirically, only five ethical climates occur most often and are classified as follows – instrumental, caring, independence, law and code, and rules (K. D. Martin & Cullen, 2011; Simha & Cullen, 2012). In this study, ethical climates were conducted as a unidimensional construct to measure the ethics as mediating variable.

This scale consisted of twenty-five items and the owners-managers were asked to rate their perception on ethics on a 7-point Likert scale ranging from 1 (–Strongly disagree”) to 7 (–Strongly agree”). Besides, since the SMEs owner-managers were more likely to view ethical values as universal rather than relativistic (Welsh & Birch, 1997), ethics in this study had been looked as unanimous. Therefore, unidimensional construct of ethical climate was employed based on the studies conducted by Mitonga-Monga (2015) and Ensari and Karabay (2016), following the justification by Parboteeah and Kapp (2008) that the ethical climate framework is one of the most popular approaches to study ethics within organizations. Furthermore, it was also being concluded by Victor and Cullen (1988) that ethical

climate effected the employee behaviour, and that organization's ethical climate as a good predictor of unethical behaviour (S. L. Robinson & Bennett, 1995).

This measurement scale had both positively and negatively worded statements. Questions 1 to 14, followed by questions 18 to 25 were positively worded, while questions 15, 16 and 17 were the negatively worded statements which intended to ensure the consistent results (D. R. Cooper & Schindler, 2014) by showing clearly that the respondents had firm opinions on the subjects asked (F. S. Ahmad, Mohd Osman, & Baharun, 2012). More importantly, they precluded them from answering all questions with the same response (Taormina & Lao, 2007). For the negatively worded statements, reverse coding was done so a summated scale could be calculated to interpret the results (Hair et al., 2006). Table 3.7 shows the questions on ethics.

Table 3.7  
*Questions of Ethics*

Items
1. What is best for everyone in our firm is the major consideration here.
2. The most important concern is the good of all the people in our firm as a whole.
3. Our major concern is always what is best for the other person.
4. In our firm, it is expected that you will always do what is right for the customers and public.
5. The most efficient way is always the right way in our firm.
6. In our firm, each person is expected above all to work efficiently.
7. People are expected to comply with the law and professional standards over and above other considerations
8. In our firm, the law or ethical code of their profession is the major consideration.
9. In our firm, people are expected to strictly follow legal or professional standards.
10. In our firm, the first consideration is whether a decision violates any law.
11. It is very important to follow the firm's rules and procedures here.

- 
12. Everyone is expected to stick by firm rules and procedures.
  13. Successful people in our firm go by the book.
  14. People in our firm strictly obey the company policies.
  15. In our firm, people protect their own interests above all else. \*
  16. In our firm, people are mostly out for themselves. \*
  17. There is no room for one's own personal morals or ethics in our firm. \*
  18. People are expected to do anything to further the firm's interests, regardless of the consequences.
  19. People here are concerned with the firm's interests -to the exclusion of all else.
  20. Work is considered substandard only when it hurts the firm's interests.
  21. The major responsibility of people in our firm is to control costs.
  22. In our firm, people are expected to follow their own personal and moral beliefs.
  23. Each person in our firm decides for themselves what is right and wrong.
  24. The most important concern in our firm is each person's own sense of right and wrong.
  25. In our firm, people are guided by their own personal ethics.
- 

*Source:* Cullen et al. (1993)

Note: Likert Scale 1 to 7; Strongly Disagree (1) to Strongly Agree (7)

\*Reverse-coded Item

### **3.6.5 Demographic and Company Information**

This scale included a total of nine items to gather the demographic information, while the rest six items were related to the company information.

## **3.7 Validity and Reliability**

### **3.7.1 Validity**

According to Hair et al. (2006), validity is the extent to which a scale or set of measures accurately represents the concept of interest, or in other words, the extent to which research is accurate. This is in consonance with Malhotra and Birks (2008) that the validity of a scale may be considered as the extent to which differences in observed scale scores reflect true differences among objects on the characteristic



being measured, rather than systematic or random error. For this study, validity test was performed to ensure that the instrument measures what it intends to measure Borden and Abbott (2011). This includes internal validity and external validity tests that will be concerned about the issue of authenticity of the cause-and-effect relationships, and their generalizability to the external environment, respectively (Sekaran & Bougie, 2010).

Three broad headings of validity tests comprise of content validity, criterion-related validity, and face validity (Sekaran & Bougie, 2010), yet two most commonly used and accepted in business research are content or face validity, and construct validity (Borden & Abbott, 2011).

Content validity is the assessment of the degree of correspondence between the items selected to constitute a summated scale and its conceptual definition (Hair et al., 2010). In other words, the more the scale items represent the domain or universe of the concept being measured, the greater the content validity (Sekaran & Bougie, 2010). This form of validity, also known as face validity (Malhotra & Birks, 2008; Sekaran & Bougie, 2010), is considered as a basic and minimum index of construct validity (Sekaran & Bougie, 2010), despite being a weak form of validity (Borden & Abbott, 2011). It is also a subjective but systematic evaluation of how well the content of a scale represents the measurement task at hand where the researcher or someone else examines whether the scale items adequately cover the entire domain of the construct being measured (Malhotra & Birks, 2008).

For the purpose of this study, a group of experts at the School of Business Management (SBM), Universiti Utara Malaysia (UUM), who made up of lecturers and doctoral students in the field of entrepreneurship, were asked to read and help in the development of the questionnaires. The main purpose was to determine whether the survey instrument was recognizable and appropriate to the construct being measured. The experts then confirmed that the survey questionnaire was both understandable and appropriate, besides offering advices on altering the wordings of some items for the purpose of respondents friendly. The feedbacks provided by the experts were used on the revision of the instruments, and as a result of this process, the content and face validity for the questionnaire was provided.

Another form of validity test is construct validity which is measured empirically by the correlation between theoretically defined sets of variables (Hair et al., 2010). It testifies to how well the results obtained from the use of the measure fit the theories around which the test is designed (Sekaran & Bougie, 2010). The three forms of construct validity include convergent, discriminant and nomological validity (Hair et al., 2010), however the most widely accepted forms are convergent and discriminant (Sekaran & Bougie, 2010). Based on Hair et al. (2010), convergent validity assesses the degree to which two measures of the same concept are correlated, by which high correlations here indicate that the scale is measuring its intended concept. Meanwhile, discriminant validity is the degree to which two conceptually similar concepts are distinct, for instance if the correlation is low, then it shows that the

summated scale is sufficiently different from the other similar concept (Hair et al., 2010).

One of the common ways in measuring the construct validity is factor analysis, a class of procedures used for reducing and summarising data, where each variable is expressed as a linear combination of the underlying factors (Malhotra & Birks, 2008). It is also known as a multivariate technique that confirms the dimensions of the concept that have been operationally defined, as well as indicating which of the items are most appropriate for each dimension (Sekaran & Bougie, 2010). Therefore, factor analysis was carried out in this study to analyse the interrelationships among a large number of variables and to explain these variables in terms of their common underlying dimensions (Hair et al., 2010).

In addition, confirmed by Nunnally and Bernstein (1994) that “validation is an unending process...most psychological measures need to be constantly evaluated and re-evaluated to see if they are behaving as they should” (p. 84). Thus, this study had employed construct validity to assess the proposed measurement theory.

### **3.7.2 Reliability**

While validity is concerned with how well the concept is defined by the measure(s), reliability relates to the consistency of the measure(s) (Hair et al., 2010). In other words, reliability differs from validity in that it does not relate to what should be measured, but instead to how it is measured (Hair et al., 2010). According to Sekaran

and Bougie (2010), the reliability of a measure indicates the extent to which it is without bias (error free) and hence ensures consistent measurement across time and across the various items in the instrument. This will also help to assess the ‘goodness’ of a measure, and supported by Hair et al. (2010) that if multiple measurements are taken, reliable measures will all be consistent in their values.

Meanwhile, as reported by Malhotra and Birks (2008), reliability is assessed by determining the proportion of systematic variation in a scale, which is done by determining the association between scores obtained from different administrations of the scale. If the association is high, the scale yields consistent results and is therefore reliable. Approaches for assessing reliability include the test-retest, alternative-forms and internal consistency methods (Malhotra & Birks, 2008).

One form of reliability is test-retest, by which consistency is measured between the responses for an individual at two points in time (Malhotra & Birks, 2008; Hair et al., 2010). The objective is to ensure that responses are not too varied across time periods so that a measurement taken at any point in time is reliable. A second and more commonly used measure of reliability is internal consistency, which applies to the consistency among the variables in a summated scale. The rationale for internal consistency is that the individual items or indicators of the scale should all be measuring the same construct and thus highly intercorrelated (Hair et al., 2006). Meanwhile, to assess the internal consistencies, the following measures can be proposed for multiple regression analysis (Hair et al., 2006): (1) The item-to-total

correlation (the correlation of the item to be summated scale score; must exceed 0.50) and the inter-item correlation (the correlation among items; exceed 0.30); (2) Reliability coefficient with Cronbach's alpha (lower limit of 0.70, or decrease to 0.60 in exploratory research).

Hair et al. (2006, 2010) have provided guidelines for the values of coefficient alpha, also referred to as Cronbach's alpha which range from 0 to 1. Table 3.8 shows the rule of thumb to interpret alpha values as suggested by D. George and Mallery (2002) and Hair et al. (2006). Basically, the value of coefficient alpha of 0.7 is considered as minimal, even though lower values may also be acceptable depending on the research objectives (Hair et al., 2006, 2010). However, as a pre-caution, Hair et al. (2006, 2010) added that if the value of coefficient alpha recorded more than 0.95, the items should be inspected to ensure that they are measuring the different aspects of the concept.

Table 3.8  
*Rules of Thumb about Cronbach's Alpha Coefficient Size*

Alpha Coefficient Range	Strength of Association
< 0.5	Unacceptable
< 0.6	Poor
0.6 to < 0.7	Moderate
0.7 to < 0.8	Good
0.8 to < 0.9	Very Good
0.9	Excellent

*Source:* D. George and Mallery (2002), Hair et al. (2006)

### 3.7.2.1 Cronbach's Alpha for Entrepreneurial Management (EM)

The scales being used in this study had been validated and depicted high levels of internal consistency. Table 3.9 shows the values of Cronbach's alpha that were achieved by Brown et al. (2001), Gürbüz and Aykol (2009), Kuhn, Sassmannshausen, and Zollin (2010), and Bruining, Verwaal, and Wright (2011) upon measuring EM in their studies before.

Table 3.9  
*Cronbach's Alpha for Entrepreneurial Management (EM)'s Dimensions*

Item	Value/Author
Entrepreneurial Culture	0.714 (Gürbüz & Aykol, 2009), 0.68 (Brown et al., 2001), 0.66 (Bruining et al., 2011)
Growth Orientation	0.71 (Brown et al., 2001; Bruining et al., 2011)
Management Structure	0.80 (Bruining et al., 2011), 0.78 (Brown et al., 2001), 0.644 (Gürbüz & Aykol, 2009), 0.547 (Kuhn et al., 2010)
Resource Orientation	0.77 (Bruining et al., 2011), 0.648 (Kuhn et al., 2010), 0.58 (Brown et al., 2001)
Reward Philosophy	0.73 (Bruining et al., 2011), 0.690 (Gürbüz & Aykol, 2009), 0.610 (Kuhn et al., 2010), 0.58 (Brown et al., 2001)
Strategic Orientation	0.82 (Brown et al., 2001), 0.814 (Kuhn et al., 2010), 0.81 (Bruining et al., 2011), 0.748 (Gürbüz & Aykol, 2009)

*Source:* Brown et al. (2001), Gürbüz and Aykol (2009), Kuhn et al. (2010), Bruining et al. (2011)

The above results revealed that the values for Cronbach's alphas of, according to D. George and Mallery (2002) and Hair et al. (2006)'s rule of thumb; growth orientation and strategic orientation showed the values of above or approaching Nunnally (1978)'s recommended level which was above 0.7. Yet, the values for other

remaining variables, namely entrepreneurial culture, management structure, resource orientation and reward philosophy did not quite reach that level. However, Brown et al. (2001) stated that the corrected item-total correlations were ranged from 0.23 to 0.66, with the majority being above 0.50 which indicated that all items shared a high degree of variance with their respective constructs, and that the addition of one or two items with similar measurement properties to the problematic indices should have increased their reliability coefficients considerably (Nunnally & Bernstein, 1994). Moreover, this argument was further supported by Cavana, Delahaye, and Sekaran (2001) that Cronbach's alpha coefficient of 0.5 and above is considered acceptable.

### **3.7.2.2 Cronbach's Alpha for Entrepreneurial Orientation (EO)**

Table 3.10 shows the values of Cronbach's alpha that were achieved by Covin and Slevin (1989a), Richard, Barnett, Dwyer, and Chadwick (2004), Tang, Kreiser, Marino, Dickson, and Weaver (2008), Fairoz, Hirobumi, and Tanaka (2010), Hameed and Ali (2011), Kraus et al. (2011), Dai, Maksimov, Gilbert, and Fernhaber (2014), Munoz, Welsh, Chan, and Raven (2014) and Arshad, Rasli, Arshad, and Zain (2014) upon measuring EO in their previous studies.

Table 3.10  
*Cronbach's Alpha for Entrepreneurial Orientation (EO) 's Dimensions*

Item	Value/Author
Innovativeness	0.8 (Richard et al., 2004; Munoz et al., 2014), 0.79 (Kraus et al., 2011), 0.78 (Covin & Slevin, 1989a; Tang et al., 2008), 0.745 (Fairoz et al., 2010), 0.70 (Hameed & Ali, 2011), 0.649 (A. A. A. S. Arshad et al., 2014), 0.569 (Dai et al., 2014)
Proactiveness	0.85 (Munoz et al., 2014), 0.802 (Gürbüz & Aykol, 2009), 0.745 (Fairoz et al., 2010), 0.69 (Kraus et al., 2011), 0.65 (Covin & Slevin, 1989a; Tang et al., 2008), 0.630 (A. A. A. S. Arshad et al., 2014), 0.575 (Dai et al., 2014)
Risk Taking	0.78 (Covin & Slevin, 1989a; Richard et al., 2004; Tang et al., 2008), 0.75 (Kraus et al., 2011), 0.745 (Fairoz et al., 2010), 0.71 (Hameed & Ali, 2011), 0.699 (Gürbüz & Aykol, 2009), 0.67 (Munoz et al., 2014), 0.665 (A. A. A. S. Arshad et al., 2014), 0.587 (Dai et al., 2014)

*Source:* Covin and Slevin (1989a), Richard, Barnett, Dwyer, and Chadwick (2004), Tang, Kreiser, Marino, Dickson, and Weaver (2008), Fairoz, Hirobumi, and Tanaka (2010), Hameed and Ali (2011), Kraus et al. (2011), Dai, Maksimov, Gilbert, and Fernhaber (2014), Munoz et al. (2014) and Arshad et al. (2014)

From the above results, it is clear that all the dimensions of EO, namely innovativeness, proactiveness and risk taking showed Cronbach's alpha coefficient between 0.569 and 0.8 for innovativeness, between 0.575 and 0.85 for proactiveness, and finally between 0.587 and 0.78 in the case of risk taking. Thus, for the values exceeded 0.70 and 0.80, they were considered as good and very good respectively as regard to D. George and Mallery (2002) and Hair et al. (2006), while values above 0.6 were considered as moderate. However, although Cronbach's alpha coefficients stated below 0.6 had been considered as poor (D. George & Mallery, 2002; Hair et al., 2006), they were still acceptable (Cavana et al., 2001). Furthermore, in this case,



the range of Cronbach's alpha coefficient of the same constructs exceeded the value of 0.8, showing that it is an established instrument (Nunnally & Bernstein, 1994).

### **3.7.2.3 Cronbach's Alpha for Ethics**

In the case of ethical climates measurement, studies by Jensen and Luthans (2006), and Butarbutar, Sendjaya, and Hartel (2010) resulted the Cronbach's alpha coefficient of 0.81, and being judged as very good according to D. George and Mallery (2002) and Hair et al. (2006). Studies by Putranta (2008) and Putranta and Kingshott (2011) then also proved that the scales were well established and the reliability of the summated scales was best measured by Cronbach's alpha, which is in this case the internal reliability for all the scales are above the 0.70 (Nunnally, 1978; Nunnally & Bernstein, 1994; Hair et al., 2006).

### **3.7.2.4 Cronbach's Alpha for Business Performance**

For the measurement of the dependent variable, while Kuppusamy et al. (2010) achieved the Cronbach's alpha value of 0.743, thus, far away above the cut-off point of the reliability recommended by Nunnally and Bernstein (1994), Hj Halipah (2009) and Hafeez, Mohd Shariff, and Mad Lazim (2013) found that Cronbach's alpha for business performance based on the questionnaires adopted from Gupta and Govindarajan (1984) stated the value of 0.829 and 0.841 respectively, and being considered as very good (D. George & Mallery, 2002; Hair et al., 2006). Meanwhile,

Aziz and Mahmood (2011) retrieved the value of 0.944 which could be considered as excellent. Table 3.11 illustrates the Cronbach's Alpha for business performance.

Table 3.11  
*Cronbach's Alpha for Business Performance*

Item	Value/Author
Business Performance	0.944 (Aziz & Mahmood, 2011), 0.841 (Hafeez et al., 2013), 0.829 (Hj Halipah, 2009), 0.743 (Kuppusamy et al., 2010)

*Source:* Kuppusamy et al. (2010), Hj Halipah (2009), Hafeez, Mohd Shariff, and Mad Lazim (2013), Aziz and Mahmood (2011)

### 3.8 Pilot Test

While Zikmund, Babin, Carr and Mitch (2009) defined pilot study as a small-scale research project that collects data from respondents similar to those that will be used in the full study, Martin and Polivka (1995) verified that pilot-testing refers to testing the questionnaire on a small sample of respondents to identify and eliminate potential problems. Thus, pilot studies are critical in refining survey questions and reducing the risk that the full study will be fatally flawed (Zikmund et al., 2009). For instance, the nature of cluster analysis and the basic decisions on the part of the researcher will be illustrated by a simple example involving identification of customer segments in a retail setting (Hair et al., 2006, 2010). Furthermore, pilot testing or field testing is important to establish the content validity of an instrument and to improve questions, format and the scales (Creswell, 2003).

Sekaran and Bougie (2010) pointed out that pilot studies which are commonly being conducted on a small scale, by interviewing individuals or gathering information from a limited number of occurrences, are not uncommon in exploratory research. In addition, the respondents in the pilot-test should be similar to those who will be included in the actual survey in terms of background characteristics, familiarity with the topic, and attitudes and behaviours of interest (Shukla, 2008), or in other words, respondents for the pilot-test and for the actual survey should be drawn from the same population (Malhotra & Birks, 2008).

In this regard, as recommended by Robbins (1999) that sample size for pilot test should range from twenty-five (25) to seventy-five (75), a total of seventy-five (75) questionnaires were sent via mail to the population in order to conduct the pilot test. This is to determine if the respondents have any problem in understanding the questionnaire, or whether the scale items represent the underlying constructs of interest (Nunnally, 1978). The respondents were asked to fill the survey questionnaire and marked the questions that they found complicated or unclear. Detail comments on the questionnaires were recorded and adjustments were made according to the suggestions.

As a result, a total of forty-five (45) women entrepreneurs responded to this pilot study. Based on this test, the questionnaire was revised as required to prevail over the complexities in the data collection afterward. Amendments were made in the wordings and structural of the questions based on the suggestions from the

respondents. Definitions on the some of the words were also included to avoid misunderstanding, and thus provided a clear and easy answering questionnaire. Through the pilot test, not only content and face validity were obtained, but also most importantly the reliability of the questionnaire were also achieved. Table 3.12 presents the measures of the reliability scores. From the table, it is clear that the Cronbach's alpha for all the instruments valued above 0.65, which is considered acceptable in line with Hair et al. (2010) that the Cronbach's alpha value may decrease to 0.60 in exploratory research.

Table 3.12  
*Reliability Coefficient for Each Item in the Instrument*

Instrument	Number of Items	Cronbach's Alpha Based on Standardized Items
Entrepreneurial Management (EM)		
Entrepreneurial Culture	3	0.782
Growth Orientation	2	0.925
Management Structure	5	0.834
Resource Orientation	9	0.850
Reward Philosophy	6	0.788
Strategic Orientation	3	0.883
Entrepreneurial Orientation (EO)		
Innovativeness	3	0.685
Proactiveness	3	0.816
Risk Taking	3	0.725
Ethics	25	0.945
Business Performance	9	0.959

Note: N=45

### 3.9 Data Collection

A survey questionnaire had been used as the primary research instrument in this study. After completing the pilot study, a revised version of survey questionnaires was prepared which were distributed and returned via mail. The respondents who had been selected for this study were the women owners or managers who were involved in running the firms.

As discussed in section 3.3.2, in relation to the low or conflicting response rate for mail survey or among women entrepreneurs in Malaysia, a total of 1,000 packages of questionnaires comprising of a cover letter, a set of questionnaire and a self-addressed stamped envelope (Hussey & Hussey, 1997) were mailed to the respondents, almost tripled than the intended sample needed. The owner or manager of the firm must answer the questionnaire by themselves. The questionnaire was prepared in English and then translated into Malay Language version in order to encourage the respondents' participation and then, to reach expected outcome. To ensure the accuracy of the translation, a back-to-back translation was completed to check for any inconsistencies or possible translation errors.

Upon sending out the questionnaire packages to the respondents, follow-up procedure had been conducted in order to increase the response rate. Malhotra and Birks (2008), and Dillman (2007) inferred that response rate could be increased with the money incentives, non-monetary premium or rewards, personalisation, a

respondent-friendly questionnaire, a return envelope with stamps, or follow-up letters.

This study applied money incentives in terms of contributions to the charity or orphanage, and follow-up letters. In relation to money incentives, it seemed that prize offers or contributions to charity had an effect on the response rates (Dillman, 2007). Hence, RM2.00 was donated to Rumah Hembusan Kasih, an orphanage centre in Kangar, Perlis, as a token of appreciation for every questionnaire completed. Otherwise, in accordance to the follow-up procedure, Larson and Poist (2004) also elaborated that follow-up mailings and recipient pre-notification were effective in improving response rates to mail surveys.

### **3.10 Analysis of Data**

The objective of this study was to determine the effect of EM, EO, and ethics on the women-owned SMEs performance. After pilot test had been carried out, data was compiled and then analysed by using Statistical Package for the Social Sciences (SPSS) software version 20.

#### **3.10.1 Descriptive Analysis**

In this study, descriptive analysis was used to analyse the characteristics of the respondents including their current age, age when they started to own or manage their businesses, marital status, race, number of children, their locations by states,

educational background, total working experience, and their years of experience with the firm. Profile of their firms owned by the women entrepreneurs who acted in response to this study were also analysed including the ways of the respondents owning the firms, the age of the firms, structure of ownership of the respondents' firms, their involvement with the firm, number of employees in the firms, industry which they involved in, followed by the sub-sectors in the industry.

Apart from that, mean and standard deviations of the dimensions and variables being studied were also analysed. These included the means and standard deviations for nine dimensions of independent variables; six dimensions of EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, strategic orientation), and three dimensions of the EO (innovativeness, proactiveness, risk taking), ethics as mediating variable, and finally, business performance as the dependent variable.

According to (Hair et al., 2006, 2010), mean is the arithmetic average, and is one of the most commonly used measures of central tendency. It can be used when the data is measured with either an interval or a ratio scale (also called metric) (Hair et al., 2006, 2010). Meanwhile, standard deviation is a unit of measurement that has been squared (Hair et al., 2006, 2010). It describes the spread or variability of the sample distribution values from the mean, and is perhaps the most valuable index of dispersion (Hair et al., 2006, 2010). For instance, if the estimated standard deviation is large (for a 7-point Likert scale, value of  $>3.0$  is considered as large), the

responses in a sample distribution of numbers do not fall very close to the mean of the distribution or it means that there is a lot of variability in the respondents' opinions. However, if the estimated standard deviation is small (value of  $<1.0$ ), then the distribution values are close to the mean or it means that the respondents were very consistent in their opinions about the variable (Hair et al., 2006, 2010). Finally, the standard deviation of the sampling distribution of the mean is also referred to as the standard error of the mean (Hair et al., 2006, 2010).

### **3.10.2 Regression Analysis**

Regression analysis was conducted to determine the relationship between independent variables (EM and EO), mediating variable (ethics) and dependent variable (women-owned SMEs business performance).

In this study, multiple regressions analysis was used in hypothesis 1a, hypothesis 1b, hypothesis 1c, hypothesis 1d, hypothesis 1d, and hypothesis 1f to determine the relationship between EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, strategic orientation) and women-owned SMEs business performance. The same procedures were being conducted for hypothesis 2a, hypothesis 2b, and hypothesis 2c to determine the relationship between EO (innovativeness, proactiveness, risk taking) and women-owned SMEs business performance.



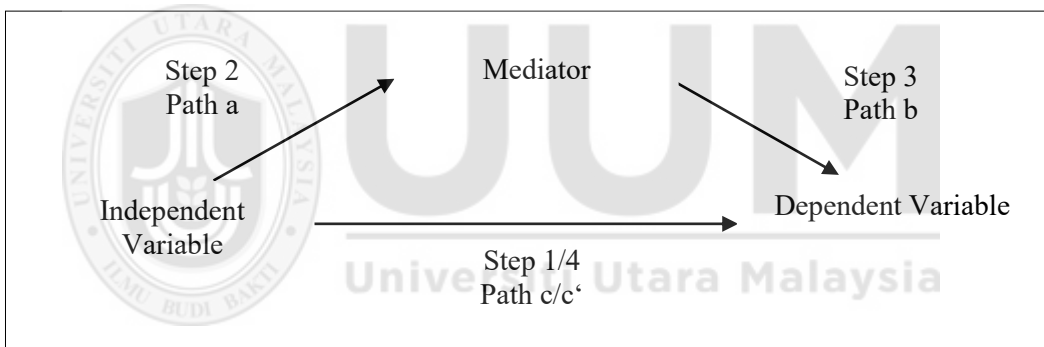
Otherwise, the similar method of analysis were also being applied in hypothesis 3a until hypothesis 4c to determine the mediating effect of ethics towards the relationships between EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, strategic orientation) and women-owned SMEs business performance (hypothesis 3a, hypothesis 3b, hypothesis 3c, hypothesis 3d, hypothesis 3e, and hypothesis 3f), and between EO (innovativeness, proactiveness, risk taking) and women-owned SMEs business performance (hypothesis 4a, hypothesis 4b, and hypothesis 4c).

As mentioned in the above paragraph, four steps of multiple regressions analysis were applied to test the mediating effects of ethics (hypotheses 3a until hypotheses 4c), as suggested by Baron and Kenny (1986). For instance, step 1 involved the ability to show that independent variable was correlated with dependent variable (path c). Then, step 2 involved the ability to show how the independent variable was correlated with mediator (path a). This followed by step 3 which was to show that mediating variable effected the dependent variable (path b). Finally, step 4 involved showing that mediating variable completely mediated the relationship between independent and dependent variable by establishing the zero effect of independent variable on dependent variable controlling for mediating variable (path c').

Again, for a mediation to occur, the regression from the independent variable to the dependent variable must be significant (path a), and the regression from the mediating variable to the dependent variable must also be significant. Meanwhile,

when paths a and b are being controlled, a previously significant relation between the independent and dependent variables is no longer significant, with the strongest demonstration of mediation occurring when path c is zero (path c'). In other words, when path c is reduced to zero, there is a strong evidence for a single, dominant mediator. However, if the residual path c is not zero, this indicates the operation of multiple mediating factors (Baron & Kenny, 1986). Figure 3.1 illustrates each equation for the mediation analysis.

Figure 3.1  
*The Process of Mediation*



*Source:* Baron and Kenny (1986)

Although it has been debated that the approach used by Baron and Kenny (1986) has several deficiencies such as; (1) low statistical power in detecting the indirect effect (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002); (2) the estimation of indirect effect and expected direction's tests have been of least consideration (Preacher & Hayes, 2008); (3) the necessity of testing the linear association in step 1 is being questioned (Collins, Graham, & Flaherty, 1998; MacKinnon, 2000; MacKinnon, Krull, & Lockwood, 2000); (4) the linear association test between

independent variable and dependent variable in step 1 is not required when the effect size is small or suppression is possibility (Shrout & Bolger, 2002); and (5) bootstrapping method is better in assessing mediation effect for small to moderate samples (Efron and Tibshirani (1993) in Shrout and Bolger (2002)), this approach has been the most commonly used in the literature (Cessna, 2014).

More importantly, Kenny (2014) has concluded that mediational model is a causal model (Kenny & Judd, 2010). It is not defined statistically; rather statistics can be used to evaluate a presumed mediational model (Kenny, 2014). And indeed, it is significant to check all the standard assumptions of the general linear model such as linearity, normality, homogeneity of error variance, and independence of errors before conducting the mediation analysis for it composes all of the criteria (Kenny, 2014).

Recently, Huber, Lechner, and Mellace (2016), Pappu and Quester (2016), Bi, Davison, and Smyrniotis (2016), Riquelme, Román, and Iacobucci (2016), Liu, Prajogo, and Oke (2016), Swaim, Maloni, Henley, and Campbell (2016), Zhang, Guo, Hu, and Liu (2016), Martin-Raugh, Kell, and Motowidlo (2016), Dardas and Ahmad (2015), Obadia, Bello, and Gilliland (2015), Otache (2015), Otache and Mahmood (2015), and Veríssimo and Lacerda (2015) had used the steps for mediation analysis as proposed by Baron and Kenny (1986) in their studies, and thus provided the evidence that this method is undeniably frequently employed in its kind of analysis.

### 3.11 Summary

This chapter discusses about the research methodology employed in this study. This study employed a survey method to collect the data, which then used a quantitative approach to observe and measured the collected numeric information. Unit analysis of this study was a firm that was represented by the owner-manager. All survey questionnaires were prepared in English and then translated into Malay Language version in order to encourage the respondents' participation. Then, the questionnaire booklets had been distributed and returned via mail, and to reach the expected outcome, follow-up procedures had been conducted as well.

Consisted of a total of eighty-six items, the measurement scales were being tested for validity and reliability to ensure the appropriateness. In order to examine the direct effect of the independent variables (IV) on the dependent variable (DV), and also the effect of mediator on the relationships between independent variables (IV) and dependent variable (DV), data were compiled and then analysed by using linear regression analysis for the direct relationship, and multiple regression analysis for determining the mediating effect, after pilot test had been carried out. However, prior to conduct the regression analysis, the collected data must be checked for missing value, outliers, normality, linearity, homoscedasticity and multicollinearity. The results of the analysis are presented in the next chapter.

## **CHAPTER 4 ANALYSIS AND FINDINGS**

### **4.1 Introduction**

This chapter elaborates the results of analyses being conducted for this study. The first part of this chapter presents the data collection process and survey response, including the following-up procedure that had been carried out in order to increase the response rate. The second section shows the results of the non-response bias, followed by the third section that explained about the data cleaning which included the detection of missing data and outliers. Profile of the 207 respondents', including demographic and their firms' background are explained briefly in the fourth section, followed by the descriptive analysis of all the constructs in the dimensions in the fifth section of this chapter.

The sixth section then describes the results of data analysis conducted, including factor analysis conducted on each variable in this study. The seventh section shows the preliminary analyses conducted to fulfil the underlying assumptions of multiple regression analysis such as normality, linearity, homoscedasticity and multicollinearity.

The eighth section presents the results of correlation analysis, followed by the final section of this chapter which reports the results of multiple regressions and mediated regressions among the variables, namely entrepreneurial management (EM) (entrepreneurial culture, growth orientation, management structure, resource

orientation, reward philosophy and strategic orientation), entrepreneurial orientation (EO) (innovativeness, proactiveness, and risk taking), ethics and women-owned SMEs business performance, to test the hypotheses established in the previous chapter of this study.

#### **4.2 Data Collection Process and Survey Response**

Before the actual data collection took place, a pilot study was conducted to establish the content validity of an instrument and to improve questions, format and the scales (Creswell, 2003). In May 2013, a pilot study was carried out and a total of 45 women who were the owners or managers of the firms responded to this study. Reliability analysis was then conducted based on the pilot test and results showed that the Cronbach's alpha for all the instruments being used in this study valued above 0.65, which was considered acceptable in line with Hair et al. (2010). Full results were reported in the previous chapter. Based on this test, not only the reliability of the constructs was retrieved, but content and face validity were also obtained. The questionnaire was then being revised and amendments were made as necessary to overcome any inconveniences in the data collection later.

The actual data collection started off in August 2013, and the process of preparing the questionnaire packages comprising of a cover letter, a set of questionnaire and a self-addressed stamped envelope (Hussey & Hussey, 1997), took one whole month. A total of 1,000 packages were mailed to the designated respondents from the whole

population using the addresses from the websites mentioned in the previous chapter (<http://peniagawati.org.my> and <http://usahanita.org.my>).

Initially, since the survey responses were allowed to accumulate for approximately four weeks (Dillman, 2007), after the first month, only 59 responses were received from the women business owner-managers of the firms in Malaysia which was somewhat still insufficient and considered as low response rate as expected from the survey method (Sekaran, 1999; L. J. Abu Bakar & Ahmad, 2010).

Conventionally, mail surveys had been identified to contributing the poorest response rate in most research (Malhotra & Birks, 2008). Inferred by Malhotra and Birks (2008), a mail survey of randomly selected respondents, without any pre- or post-mailing contact, response rates could be less than 15 per cent. Thus, expecting the low response rate from the survey method (Sekaran, 1999; L. J. Abu Bakar & Ahmad, 2010), an effort should be taken to improve the response rate since low response rates boost up the probability of non-response bias, although increasing the response rate might not reduce non-response bias if the additional respondents were from those who had already responded (Bordens & Abbott, 2002; Borden & Abbott, 2011; D. R. Cooper & Schindler, 2014).

For that reason, four weeks upon sending the mails, a follow-up procedure was deployed as suggested by Dillman (2007) and Malhotra and Birks (2008) in order to increase the response rate that was expected to be low among the entrepreneurs or SME owner-managers. As such, postcards were sent to the respective persons who

provided their addresses in the databases be based on Larson and Poist (2004) that follow-up mailings and recipient pre-notification were effective in improving response rates to mail surveys. By using the postcards, thankful messages were sent to those who had responded to this survey considering the results from the business studies by Dillman (2007) that survey in the same organizations year after year might usefully considered thanking people for their timely responses. Meanwhile, to those who had not replied, appreciation messages for their cooperation in ensuring the success of this study were also included in the postcards.

Therefore, reflecting the follow-up mails, some of the owner-managers indicated their enthusiastic about this survey by replying the mail using the post-paid envelope, while the others stated that they did not have a suitable candidate to respond to this survey, mainly because they were busy in managing the company. In other cases, there were also respondents who did not receive the mail packages and requested for the questionnaire to be resent to them.

After conducting the follow-up procedures, the responses increased to 122, which were still considered as small. Finally, after 5 months of data collection process, the total responses were 213 (21.3 per cent) and only 207 were treated in further analysis. Six (6) of the responses received were removed due to the insufficiency of the data.



### 4.3 Non-Response Bias

Non-response bias occurs in statistical surveys if the answers of respondents differ from the potential answers of those who did not answer. In keeping with Greer, Chuchinprakarn, and Seshadri (2000), low response rates and non-response bias are on-going concerns in conducting mail surveys. In fact, more importantly, Malhotra and Birks (2008) justified that the response rates as low as below 15 per cent can lead to serious bias (non-response bias). For the purpose of this study, non-response bias is defined as a bias that exists in the results when respondents to a survey are different from those who did not respond in terms of demographic or attitudinal variables, or other variables relevant to the survey purpose (McInnis, 2006).

According to Lindner, Murphy, and Briers (2001), the existence of non-response bias is a risk to the external validity or generalizability of research findings to the target population of a study. As a consequence, independent-sample t-test in this study to examine the differences between early and late informants' responses to selected questions from the variables. In addition, this approach provides an effective test for non-response bias because late respondents, compared to early respondents, are likely to respond in a manner similar to non-respondents (Armstrong & Overton, 1977; Lambert & Harrington, 1990).

Table 4.1 shows full results of non-response bias test performed in this study. 59 responses were considered as "early", while 148 responses received after the follow-up procedures were considered as "late" responses. The independent-sample t test

was then conducted on the independent variables (IV), EM and EO, which consisted of nine dimensions (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, strategic orientation, innovativeness, proactiveness, and risk taking), mediating variable (ethics), and dependent variable (women-owned SMEs business performance).

Result shows that t-value for all the dimensions tested is not significant at level  $t < 1.96$ , and p-value is more than 0.05 ( $p > 0.05$ ). These findings suggested that there are no significant differences between early and late respondents in the variables tested that effected the findings of this study. Hence, it can be concluded that the respondents are representative of the studied population and the data used in this study is free from non-response bias.

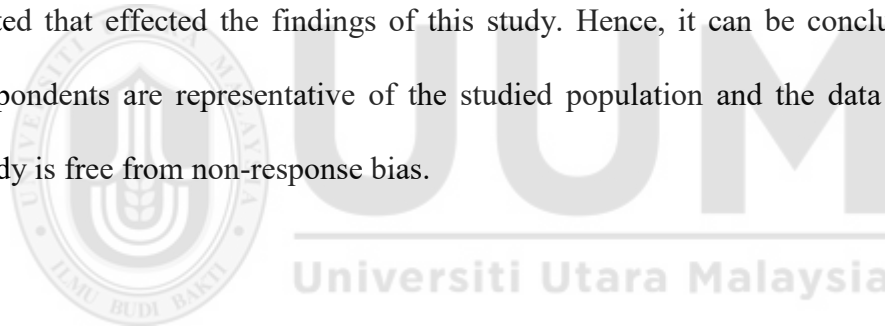


Table 4.1  
*Non-Response Bias*

Measure	Timeline	N	Mean	SD	t-value	p-value	Result
Entrepreneurial Culture	Early	59	5.7740	.46913	0.260	0.795	Not Significant
	Late	148	5.7545	.49542			
Growth Orientation	Early	59	6.3390	.75681	0.241	0.810	Not Significant
	Late	148	6.3108	.76132			
Management Structure	Early	59	5.2678	.46329	-1.096	0.275	Not Significant
	Late	148	5.3527	.59172			
Resource Orientation	Early	59	5.8098	.41730	-0.028	0.977	Not Significant
	Late	148	5.8078	.46811			
Reward Philosophy	Early	59	5.7090	.54280	0.710	0.479	Not Significant
	Late	148	5.6453	.59897			
Strategic Orientation	Early	59	6.0395	.57096	-0.934	0.351	Not Significant
	Late	148	6.1216	.57030			
Innovativeness	Early	59	5.4407	.28662	-0.207	0.836	Not Significant
	Late	148	5.4505	.34964			
Proactiveness	Early	59	5.4520	.33769	-0.612	0.541	Not Significant
	Late	148	5.4842	.34412			
Risk Taking	Early	59	5.4689	.31634	-1.032	0.303	Not Significant
	Late	148	5.5203	.32583			
Ethics	Early	59	5.9085	.54845	0.408	0.684	Not Significant
	Late	148	5.8786	.18828			
Business Performance	Early	59	5.6516	.49924	0.471	0.639	Not Significant
	Late	148	5.6186	.31644			

#### 4.4 Data Cleaning

Before pursuing further statistical analyses to explore the characteristics of the data, data cleaning or screening procedure was performed in order to verify the accuracy of data, missing data, pattern of the missing data, extreme responses, and whether the data meet the statistical assumptions as suggested by Tabachnick and Fidell (2007, 2013). Thus, all data in this study were subjected to outliers, normality, linearity, homoscedasticity, and multicollinearity evaluations (Hair et al., 2006, 2010). After all the collected data were edited, coded, saved, and analysed using SPSS, the

process of data screening was carried out in several steps. This section discusses on the data cleaning procedures, which include the identification of the missing data and the existence of the outliers.

#### **4.4.1 Detection of Missing Data**

Hair et al. (2006) suggested that missing data is the information which is not available for a case about whom other information is available. In particular, missing data exists due to the errors in data collection or data entry or from the omission of answers by respondents (Hair et al., 2006, 2010; Pallant, 2007). Additionally, missing data also must be addressed, regardless of the reason, since it can also seriously bias the conclusions drawn from an empirical study (Byrne, 2010). Therefore, at this stage, any incomplete questionnaires received from the respondents should be judged as unusable and would be disposed (Hair et al., 2006, 2010).

Upon performing the screening of data in this study, frequency distribution and missing value analysis for every variable had been carried out to detect any missing responses. According to this, all the returned questionnaires were found to be no missing responses. Thus, the process of data screening was preceded to the next step which was the detection for outliers.

#### **4.4.2 Outliers**

Outliers are observations which exist inconsistent with the reminder of the dataset (Barnett & Lewis, 1994), and must be examined thoroughly to make sure that they

are accurate or rather impact the results tremendously (Sekaran & Bougie, 2010). According to Tabachnick and Fidell (2007, 2013), the reasons of outliers are as follows: (1) Incorrect data entry; (2) Failure to specify missing values in the computer syntax so missing values are read as real data; (3) Outlier is not member of population that you intended to sample; (4) Outlier is representative of population you intended to sample but population has more extreme scores than a normal distribution.

This study employed the Mahalanobis distance ( $D^2$ ) method to detect outliers, as suggested by Tabachnick and Fidell (2007, 2013). Mahalanobis  $D^2$  is a multidimensional version of a z-score, which measures the distance of a case from the centroid (multidimensional mean) of a distribution, given the covariance (multidimensional variance) of the distribution (Tabachnick & Fidell, 2007, 2013). Hence, in this study, outliers were examined through Mahalanobis distance ( $D^2$ ) by looking into the box plots as suggested by Pallant (2007). The result showed that although several outliers were detected in some of the variables, the cases were maintained in the dataset since the loadings were not too far from the remaining distribution (Pallant, 2007).

#### **4.5 Descriptive Analysis**

This section consists of sample background analysis describing concisely the personal and firms' background of the 207 respondents being studied. While Table 4.2 to Table 4.10 illustrates the demographic profiles, Table 4.11 to Table 4.17

describes the profiles of the firms owned by the women entrepreneurs who acted in response to this study.

#### **4.5.1 Sample Background Analysis**

This section explained briefly the personal and firms' background of the 207 respondents. The first part described the respondents' profiles, and the second part explained about their firms' backgrounds.

##### **4.5.1.1 Profile of the Respondents**

Table 4.2 to Table 4.10 illustrates the demographic profiles of the 207 women owner-managers who responded this survey. Table 4.2 shows the current age categories of the respondents. The age distribution of the respondents was analysed to ensure the representation of the respondents from all age spans.

Women owner-managers in the age ranging from 36 to 40 years old and above 50 years old have the majority score of 22.2 per cent (n=46) each. 15.9 per cent (n=33) are in the range of 41 to 45 years old, followed closely by 15.5 per cent (n=32) of those in the age ranging between 46 to 50 years old. 11.6 per cent (n=24) of respondents are in the age ranging from 31 to 35 years old, 8.2 per cent (n=17) in the range of 26 to 30 years old, and finally 4.3 per cent (n=9) are 25 years old and below.

Table 4.2  
*Current Age*

Age (years)	Frequency	Percentage
Below 25	9	4.3
26 to 30	17	8.2
31 to 35	27	11.6
36 to 40	46	22.2
41 to 45	33	15.9
46 to 50	32	15.5
Above 50	46	22.2
TOTAL	207	100

Next, Table 4.3 presents the age of the respondents when they started to own or manage their businesses. Majority of them started owning or managing their businesses between 31 to 40 years old, with the total percentage of 45.4 per cent (n=94). Women owner-managers with age ranging from 26 to 30 years old accounted for 20.8 per cent (n=43), followed by 13.5 per cent (n=28) each of those with the age 25 years old and below, and those aging between 41 to 45 years old. The figures then dropped to 5.3 per cent (n=11) for the respondents in between 46 to 50 years old, and gradually, 1.4 per cent (n=3) of those above 50 years old.

Table 4.3  
*Age When Started Owning/Managing Business*

Age (years)	Frequency	Percentage
Below 25	28	13.5
26 to 30	43	20.8
31 to 35	47	22.7
36 to 40	47	22.7
41 to 45	28	13.5
46 to 50	11	5.3
Above 50	3	1.4
TOTAL	207	100

In terms of marital status, three options were given in the survey such as single, married or widow. According to Table 4.4, majority of the respondents (76.8 per cent) stated that they are married, while the percentage of those who are single or widow stated the same with 11.6 per cent (n=24) each.

Table 4.4  
*Marital Status*

Status	Frequency	Percentage
Single	24	11.6
Married	159	76.8
Widow	24	11.6
TOTAL	207	100

With regard to race, Table 4.5 reveals that the majority of the respondents were Malay, representing 91.3 per cent (n=189) of the sample population. There were 11 Chinese respondents (5.3 per cent), 5 Indian respondents (2.4 per cent) and 2 respondents from other races (1.0 per cent).

Table 4.5  
*Race*

Race	Frequency	Percentage
Malay	189	91.3
Chinese	11	5.3
Indian	5	2.4
Others	2	1.0
TOTAL	207	100



In relation to educational background, respondents who obtained their first degree accounted for 34.3 per cent (n=71) of the total respondents, while those who finished their secondary school accounted for 26.1 per cent (n=54). 24.2 per cent (n=50) holds a diploma, and 5.8 per cent (n=12) holds a master. The lowest education level is primary school which accounted for 3.9 per cent (n=8), while the highest education level obtained by the women owner-managers is PhD which accounted for 1.9 per cent (n=4) of the total respondents. 3.9 per cent (n=8) answered “others” which include the Malaysian Skills Certificate obtained from the public and private institutions in Malaysia. Table 4.6 present this proportion.

Table 4.6  
*Educational Background*

Educational Background	Frequency	Percentage
Primary	8	3.9
Secondary	54	26.1
Diploma	50	24.2
First Degree	71	34.3
Master	12	5.8
PhD	4	1.9
Others	8	3.9
TOTAL	207	100

Table 4.7 then explains that 22.2 per cent (n=46) of them have two children, 18.8 per cent (n=39) have 3 children, 15.5 per cent (n=32) of them have 4 children, and 13 per cent (n=27) have 5 children. Despite of that, 12.6 per cent (n=26) of the respondents have no children. Meanwhile, 6.3 per cent (n=13) are mompreneurs with 1 child, 4.8 per cent (n=10) are those with 6 children, 2.9 per cent (n=6) have 8 children, 1.9 per cent (n=4) have 7 children, 1.4 per cent (n=3) have 10 children, and

finally, only 1 has 12 children which accounted for 0.5 per cent from the total respondents.

Table 4.7  
*Number of Children*

Number of Children	Frequency	Percentage
0	26	12.6
1	13	6.3
2	46	22.2
3	39	18.8
4	32	15.5
5	27	13.0
6	10	4.8
7	4	1.9
8	6	2.9
10	3	1.4
12	1	0.5
TOTAL	207	100

Table 4.8 describes the locations by states where the women owner-managers who responded to this survey are conducting their businesses. Kuala Lumpur leads with the percentage of 18.4 per cent (n=38), followed by Selangor 15.5 per cent (n=32), Kelantan 10.1 per cent (n=21), Perlis 9.2 per cent (n=19), and Johor 8.7 per cent (n=18). Respondents from Perak and Negeri Sembilan accounted the same percentage of 6.8 per cent (n=14) each, followed closely by Pulau Pinang which accounted 6.3 per cent (n=13) of the total respondents. Meanwhile, respondents from Melaka accounted 5.3 per cent (n=11). For the states of Pahang, Terengganu, Kedah, Putrajaya, Sabah, Sarawak and Labuan, the percentage of response were below 5 per cent. Pahang 4.3 per cent (n=9), Terengganu 3.4 per cent (n=7), Kedah 2.4 per cent

(n=5), Putrajaya 1.4 per cent (n=3), and finally Sabah, Sarawak and Labuan accounted for 0.5 per cent (n=1) each.

Table 4.8  
*State*

State	Frequency	Percentage
Johor	18	8.7
Kedah	5	2.4
Kelantan	21	10.1
Melaka	11	5.3
Negeri Sembilan	14	6.8
Pahang	9	4.3
Pulau Pinang	13	6.3
Perak	14	6.8
Perlis	19	9.2
Sabah	1	0.5
Sarawak	1	0.5
Selangor	32	15.5
Terengganu	7	3.4
Kuala Lumpur	38	18.4
Labuan	1	0.5
Putrajaya	3	1.4
TOTAL	207	100

In terms of working experience, most of the respondents have the total working experience between 6 to 10 years which accounted for 26.6 per cent (n=55), followed by 25.6 per cent (n=53) of those with working experience more than 20 years. 21.7 per cent (n=45) have between 11 to 15 years of working experience, 14.5 per cent (n=30) have between 16 to 20 years of working experience, and 11.6 per cent (n=24) have between 1 to 5 years of working experience. Results are presented in Table 4.9.

Table 4.9  
*Total Working Experience*

Total Working Experience (years)	Frequency	Percentage
1-5	24	11.6
6-10	55	26.6
11-15	45	21.7
16-20	30	14.5
Above 20	53	25.6
TOTAL	207	100

Table 4.10 shows that in relation with the years of experience with the firm, 42.5 per cent (n=88) have been with the firm between 1 to 5 years, 34.3 per cent (n=71) have been with the firm between 6 to 10 years, 11.6 per cent (n=24) have been with the firm between 11 to 15 years, 6.8 per cent (n=10) have been with the firm for more than 20 years, and 4.8 per cent (n=14) have been with the firm between 16 to 20 years.

Table 4.10  
*Years of Experience with the Firm*

Years of Experience	Frequency	Percentage
1-5	88	42.5
6-10	71	34.3
11-15	24	11.6
16-20	10	4.8
Above 20	14	6.8
TOTAL	207	100

#### 4.5.1.2 Profile of the Firms

Table 4.11 to Table 4.17 describes the profiles of the firms owned by the women entrepreneurs who acted in response to this study. Table 4.11 presents the ways of the respondents owning the firms. More than half of the women owner-managers started their businesses on their own and this accounted for 61.4 per cent (n=127) of the total respondents. Besides that, 18.4 per cent (n=38) of them owned the firms through succession, 10.6 per cent (n=22) owned their firms as a partner, 6.8 per cent (n=14) by taking over other firms, and 2.9 per cent (n=6) owned their businesses from management buy in.

Table 4.11  
*Ways of Owning the Firm*

Ways of Owning	Frequency	Percentage
Start-up	127	61.4
Succession	38	18.4
Management Buy In	6	2.9
Joined As Partner	22	10.6
Take-over	14	6.8
TOTAL	207	100

Regarding the age of the firms, Table 4.12 shows that 44.4 per cent (n=92) of them were established between 5 to 10 years ago, 17.9 per cent (n=37) firms were established between 11 to 15 years ago, 17.4 per cent (n=36) firms were established in less than 5 years. In other cases, 8.7 per cent (n=18) of firms were established between 16 to 20 years back, 9.2 per cent (n=19) were established more than 25

years before, and only 2.4 per cent (n=5) of firms were established between 21 to 25 years ago.

Table 4.12  
*Firm Age*

Firm Age (Year)	Frequency	Percentage
Less Than 5	36	17.4
5-10	92	44.4
11-15	37	17.9
16-20	18	8.7
21-25	5	2.4
Above 25	19	9.2
TOTAL	207	100

Table 4.13 then describes structure of ownership of the respondents' firms. Most of them are sole proprietorships (61.4 per cent), compared to partnership (10.6 per cent) and private limited (28.0 per cent).

Table 4.13  
*Structure of Ownership*

Structure of Ownership	Frequency	Percentage
Sole Proprietorships	127	61.4
Partnership	22	10.6
Private Limited	58	28.0
TOTAL	207	100

In terms of firm involvement, almost all of the respondents have the direct involvement in the company which accounted for 99.5 per cent (n=206), and only 0.5 per cent (n=1) do not directly involve in the firm. Table 4.14 shows the proportion.

Table 4.14  
*Firm Involvement*

Firm Involvement	Frequency	Percentage
Yes	206	99.5
No	1	0.5
TOTAL	207	100

Table 4.15 presents full figures of the number of employees in the firms owned by women entrepreneurs. Majority of the firms employed from 5 to 50 employees (52.8 per cent), 46.3 per cent have less than 5 employees, and only 1.5 per cent has more than 75 employees.

Table 4.15  
*Number of Employees*

Number of Employees	Frequency	Percentage	Category (Micro/SME)
1	23	11.1	
2	35	16.9	MICROENTREPRISES
3	16	7.7	(Across All Sectors)
4	22	10.6	
5	20	9.7	
6	15	7.2	
7	5	2.4	
8	8	3.9	
9	1	0.5	SMALL
10	20	9.7	1) Manufacturing (Full
12	6	2.9	Time Employees From
13	1	0.5	5 To Less Than 75)
15	4	1.9	
16	4	1.9	2) Services & Other
17	1	0.5	Sectors (Full Time
18	3	1.4	Employees From 5 To
20	5	2.4	Less Than 30)
21	2	1.0	
24	1	0.5	
25	3	1.4	
26	1	0.5	
28	2	1.0	
30	1	0.5	
31	1	0.5	

33	1	0.5	MEDIUM
38	1	0.5	1) Services & Other
40	1	0.5	Sectors (Full Time
45	1	0.5	Employees From 30
50	1	0.5	Not Exceeding 75)
122	1	0.5	
300	1	0.5	
5000	1	0.5	
TOTAL	207	100	

In Table 4.16, it is clearly stated that more than half of the respondents are involved in service sector which accounted for 65.7 per cent (n=136). This is followed by manufacturing sector with 26.6 per cent (n=55), and agricultural 7.7 per cent (n=16).

Table 4.16  
*Industry*

Industry	Frequency	Percentage
Manufacturing	55	26.6
Service	136	65.7
Agricultural	16	7.7
TOTAL	207	100

In relation with the sub-sectors in the industry, women owner-managers in service sectors participated the most in this study with the majority of 65.6 per cent (n=136); hotel 3.9 per cent (n=8), restaurant 10.1 per cent (n=21), education 10.6 per cent (n=22), professional 1.4 per cent (n=3), transportation and communication 1.9 per cent (n=4), and others such as distributive trade, tourism, tailor, hair dresser, spa and saloon, fashion boutique, bridal boutique and travel agency which accounted for 37.7 per cent (n=78).



Women involved in manufacturing then followed with 26.6 per cent (n=55); food and beverage 20.3 per cent (n=42), textile 2.9 per cent (n=6), and others (wood products, plastic products, palm oil based products, and machinery and engineering) which accounted of 3.4 per cent (n=7). There were also 7.7 per cent (n=16) responses from agricultural sector; cultivation of crops 4.3 per cent (n=9), animal husbandry 1.9 per cent (n=4), logging 1.0 per cent (n=2), and finally, fish farming 0.5 per cent (n=1). Table 4.17 shows the entire list of the sub-sectors.

Table 4.17  
*Sub-sector of the Industry*

Sub-sector of the Industry	Frequency	Percentage
Manufacturing		
Food & Beverage	42	20.3
Textile	6	2.9
Others	7	3.4
Service		
Hotel	8	3.9
Restaurant	21	10.1
Education	22	10.6
Professional	3	1.4
Transportation & Communication	4	1.9
Others	78	37.7
Agricultural		
Cultivation of Crops	9	4.3
Animal Husbandry	4	1.9
Logging	2	1.0
Fish Farming	1	0.5
TOTAL	207	100

#### 4.5.2 Construct Analysis

This section explained briefly the mean and standard deviations (SD) of the dimensions and variables being studied. These descriptive statistics acquired a

common profile of the distribution replies. More specifically, means and SD were analysed to identify the characteristics of the sample for the study. Table 4.18 to 4.28 present the means and SD for nine dimensions of independent variables; six dimensions of EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, strategic orientation), and three dimensions of the EO (innovativeness, proactiveness, risk taking), ethics as mediating variable, and finally, women-owned business performance as the dependent variable.

#### **4.5.2.1 Entrepreneurial Culture**

Table 4.18 presents the means and SD for entrepreneurial culture. Mean scores were calculated by equivalently weighting the mean scores of all items. The SD ranged from 0.531 to 0.709. The highest average of entrepreneurial culture was “We have many more promising ideas than we have time and the resources to pursue” with the mean of 5.92, followed by “We never experience a lack of ideas that we can convert into profitable products/ services” with the mean of 5.71. The lowest score for this dimension was “Changes in the society-at-large seldom lead to commercially promising ideas for our firm” with mean of 5.68.

In this study, be based on Mahmmod and Abdul Rahman (2007), a mean rating value of 6.21 and above is classified as very high, a mean rating value of between 4.41 to 6.20 as high, and a mean rating value of 4.40 and below as moderate. Therefore, the

average means for all the three items in entrepreneurial culture shows the score of 5.77, which is considered as high.

Table 4.18  
*Means and Standard Deviations (SD) for Entrepreneurial Culture*

No.	Questions	Mean	SD
1.	We have many more promising ideas than we have time and the resources to pursue.	5.92	0.709
2.	Changes in the society-at-large seldom lead to commercially promising ideas for our firm.	5.68	0.611
3.	We never experience a lack of ideas that we can convert into profitable products/ services.	5.71	0.531

Note: Likert Scale 1 to 7; Strongly Disagree (1) to Strongly Agree (7)

#### 4.5.2.2 Growth Orientation

Table 4.19 then shows the means and SD for growth orientation. With the SD of 0.742 and 0.842, the highest average for growth orientation was “It is generally known throughout the firm that steady and sure growth is the best way to expand” with the mean of 6.39, while the lowest average score for this dimension was “It is generally known throughout the firm that growth is our top objective” with the mean of 6.26. The average means for the two items in growth orientation shows the score of 6.33, which is considered as very high.

Table 4.19  
*Means and Standard Deviations (SD) for Growth Orientation*

No.	Questions	Mean	SD
1.	It is generally known throughout the firm that growth is our top objective.	6.26	0.842
2.	It is generally known throughout the firm that steady and sure growth is the best way to expand.	6.39	0.742

Note: Likert Scale 1 to 7; Strongly Disagree (1) to Strongly Agree (7)

### 4.5.2.3 Management Structure

Table 4.20 presents the means and SD for management structure dimension of the entrepreneurial management. The SD ranged from 0.699 to 1.184. “There is a strong emphasis on getting line and staff personnel to adhere closely to their formal job descriptions” was rated the highest item in this dimension with the mean of 6.06. This was followed by “Managers’ operating styles are allowed to range freely from very formal to very informal” with the mean of 5.79, “We prefer tight control of funds and operations by means of sophisticated control and information systems” and “We strongly emphasize holding to tried and true management principles and industry norms” with the average score of 5.67 and 5.66 each. Meanwhile, “We strongly emphasize getting things done even if this means disregarding formal procedure” rated the lowest with the average of 4.44. The average means for all the five items in management structure shows the score of 5.52, which is considered as high.

Table 4.20  
*Means and Standard Deviations (SD) for Management Structure*

No.	Questions	Mean	SD
1.	We prefer tight control of funds and operations by means of sophisticated control and information systems.	5.67	0.908
2.	We strongly emphasize getting things done even if this means disregarding formal procedure.	4.44	1.184
3.	We strongly emphasize holding to tried and true management principles and industry norms.	5.66	0.956
4.	Managers' operating styles are allowed to range freely from very formal to very informal.	5.79	0.699
5.	There is a strong emphasis on getting line and staff personnel to adhere closely to their formal job descriptions.	6.06	0.786

Note: Likert Scale 1 to 7; Strongly Disagree (1) to Strongly Agree (7)

#### 4.5.2.4 Resource Orientation

Table 4.21 then shows the means and SD for resource orientation. With the SD ranged from 0.657 to 0.999, the average rating for this dimension ranged from 4.68 to 6.57. The lowest average of resource orientation was "We like to employ resources that we borrow or rent" with the mean of 4.68, while the highest average score for this dimension was "In exploiting opportunities, access to money is more important than just having the idea" with the mean of 6.57. Meanwhile, the other average ratings for this dimension range between 5.63 and 6.25. The average means for all the nine items in resource orientation shows the score of 5.83, which is considered as high.

Table 4.21  
*Means and Standard Deviations (SD) for Resource Orientation*

No.	Questions	Mean	SD
1.	Since our objective is to use our resources, we will usually invest heavily and rapidly.	5.87	0.688
2.	All we need from resources is the ability to use them.	6.08	0.695
3.	We like to employ resources that we borrow or rent.	4.68	0.810
4.	In exploiting opportunities, access to money is more important than just having the idea.	6.57	0.657
5.	We divide a project into several stages and decide about the required resources for each stage individually, before starting it. (multiple step commitment).	5.83	0.999
6.	Our managers are dedicated to the same projects with long term commitment.	5.73	0.986
7.	To maximize our return, we invest as little resources as possible even though this strategy may increase the risk of failure.	5.87	0.863
8.	Borrowing, renting and contracting resources when we need them keep us up to the latest market developments and technologies.	5.63	0.946
9.	We prefer the stability and the rapid availability of using resources that we own and are familiar with.	6.25	0.740

Note: Likert Scale 1 to 7; Strongly Disagree (1) to Strongly Agree (7)

#### 4.5.2.5 Reward Philosophy

Table 4.22 reports the means and SD for reward philosophy dimension of the entrepreneurial management. While the SD ranged from 0.682 to 1.036, the average rating for this dimension ranged from 4.72 to 6.01. –Our employees are evaluated and compensated based on their responsibilities” rated the highest score with the mean of 6.01, followed by –Our employees are usually rewarded by promotion and annual raises” with the mean of 5.99, –Rewarding in our firm is based on the employee’s individual performance” with the mean of 5.97, –An employee’s standing is based on the values/he adds” with the mean of 5.94, and –We reward our

employees by giving them more job flexibility and access to resources they might need to develop new ideas” with the mean of 5.49. The lowest average score for this dimension is –An employee’s performance is evaluated by short-term profit targets” with the mean of 4.72. The average means for all the six items in reward philosophy shows the score of 5.69, which is considered as high.

Table 4.22  
*Means and Standard Deviations (SD) for Reward Philosophy*

No.	Questions	Mean	SD
1.	Our employees are evaluated and compensated based on their responsibilities.	6.01	0.727
2.	Our employees are usually rewarded by promotion and annual raises.	5.99	0.839
3.	An employee’s standing is based on the values/he adds.	5.94	0.798
4.	An employee’s performance is evaluated by short-term profit targets.	4.72	1.036
5.	Rewarding in our firm is based on the employee’s individual performance.	5.97	0.682
6.	We reward our employees by giving them more job flexibility and access to resources they might need to develop new ideas.	5.49	0.858

Note: Likert Scale 1 to 7; Strongly Disagree (1) to Strongly Agree (7)

#### 4.5.2.6 Strategic Orientation

Table 4.23 shows the means and SD for strategic orientation; the last dimension in entrepreneurial management. The SD ranged from 0.564 to 0.727 and the average rating for this dimension ranged from 5.99 to 6.36. The highest average of strategic orientation was –As we define our strategies, our major concern is how to best utilize the resources we control” with the mean of 6.36, followed by –Opportunities control our business strategies” with the mean of 6.02. The lowest score for this dimension

was –We limit the opportunities we pursue on the basis of our current resources” with average rating of 5.99. The average means for all the three items in strategic orientation shows the score of 6.12, which is considered as high.

Table 4.23  
*Means and Standard Deviations (SD) for Strategic Orientation*

No.	Questions	Mean	SD
1.	As we define our strategies, our major concern is how to best utilize the resources we control.	6.36	0.564
2.	We limit the opportunities we pursue on the basis of our current resources.	5.99	0.721
3.	Opportunities control our business strategies	6.02	0.727

Note: Likert Scale 1 to 7; Strongly Disagree (1) to Strongly Agree (7)

#### 4.5.2.7 Innovativeness

Additionally, Table 4.24 shows the means and SD for innovativeness of entrepreneurial orientation. The SD ranged from 0.652 to 0.700. The highest average for innovativeness was –Our firm emphasizes on research and development” with the value of 4.10, followed by –Our firm emphasizes on utilizing new technology” with the mean of 4.04. The lowest score for this dimension was –Our firm encourages new idea from any workers regardless of his or her status in the firm” with mean of 3.99. The average means for all the three items in innovativeness shows the score of 4.04, which is considered as moderate.



Table 4.24  
*Means and Standard Deviations (SD) for Innovativeness*

No.	Questions	Mean	SD
1.	Our firm emphasizes on utilizing new technology.	4.04	0.652
2.	Our firm encourages new idea from any workers regardless of his or her status in the firm.	3.99	0.700
3.	Our firm emphasizes on research and development.	4.10	0.697

Note: Likert Scale 1 to 7; Strongly Disagree (1) to Strongly Agree (7)

#### 4.5.2.8 Proactiveness

Table 4.25 presents the means and SD for proactiveness. With the SD ranged from 0.755 to 0.813, the means for proactiveness shows less than 4.0 for all the three items. The lowest average of proactiveness was “We initiate actions to which competitors then respond in using new technology” with the mean of 3.71. “We always respond to unrelated opportunities” had the mean of 3.94, followed closely by the lowest score for this dimension that was “We are the first to introduce new product or service” with mean of 3.93. The average means for all the three items in proactiveness shows the score of 3.86, which is considered as moderate.

Table 4.25  
*Means and Standard Deviations (SD) for Proactiveness*

No.	Questions	Mean	SD
1.	We initiate actions to which competitors then respond in using new technology.	3.71	0.813
2.	We are the first to introduce new product or service.	3.93	0.806
3.	We always respond to unrelated opportunities.	3.94	0.755

Note: Likert Scale 1 to 7; Strongly Disagree (1) to Strongly Agree (7)

#### 4.5.2.9 Risk Taking

Table 4.26 then provides the means and SD for risk taking; the third dimension in entrepreneurial orientation. While the SD ranged from 0.631 to 0.720, the highest average of risk taking was “We always invest in unexplored technologies” with the mean of 4.12. “Our firm explore bravely and open minded to achieve goal” reported the mean of 4.02, followed by the lowest score for this dimension that was “We practice “wait and see” position to minimize risk” with mean of 3.80. The average means for all the three items in risk taking shows the score of 3.98, which is considered as moderate.

Table 4.26  
*Means and Standard Deviations (SD) for Risk Taking*

No.	Questions	Mean	SD
1.	We practice “wait and see” position to minimize risk.	3.80	0.720
2.	Our firm explore bravely and open minded to achieve goal.	4.02	0.649
3.	We always invest in unexplored technologies.	4.12	0.631

Note: Likert Scale 1 to 7; Strongly Disagree (1) to Strongly Agree (7)

#### 4.5.2.10 Ethics

Apart from that, the means and SD were also calculated for ethics; the mediating variable in this study. Table 4.27 shows the result of the findings. The SD ranged from 0.649 to 1.184, and the highest average of ethics' item was “It is very important to follow the company's rules and procedures here” with the score of 6.57, while the

lowest average was “The most important concern is the good of all the people in the company as a whole” (mean of 3.71). Three items were reverse-coded; “In this company, people protect their own interests above all else” (3.94), “In this company, people are mostly out for themselves” (3.80), and “There is no room for one's own personal morals or ethics in this company” (4.02). The average means for all the twenty-five items in ethics shows the score of 5.31, which is considered as high.

Table 4.27  
Means and Standard Deviations (SD) for Ethics

No.	Questions	Mean	SD
1.	What is best for everyone in the company is the major consideration here.	4.10	0.697
2.	The most important concern is the good of all the people in the company as a whole.	3.71	0.813
3.	Our major concern is always what is best for the other person.	5.97	0.682
4.	In this company, it is expected that you will always do what is right for the customers and public.	5.49	0.858
5.	The most efficient way is always the right way in this company.	6.26	0.842
6.	In this company, each person is expected above all to work efficiently.	6.02	0.727
7.	People are expected to comply with the law and professional standards over and above other considerations	4.68	0.810
8.	In this company, the law or ethical code of their profession is the major consideration.	4.44	1.184
9.	In this company, people are expected to strictly follow legal or professional standards.	5.99	0.839
10.	In this company, the first consideration is whether a decision violates any law.	4.68	0.810
11.	It is very important to follow the company's rules and procedures here.	6.57	0.657
12.	Everyone is expected to stick by company rules and procedures.	5.99	0.721
13.	Successful people in this company go by the book.	6.02	0.727
14.	People in this company strictly obey the company policies.	5.78	0.870
15.	In this company, people protect their own interests above all else. *	3.94	0.755

16.	In this company, people are mostly out for themselves. *	3.80	0.720
17.	There is no room for one's own personal morals or ethics in this company. *	4.02	0.649
18.	People are expected to do anything to further the company's interests, regardless of the consequences.	5.91	0.834
19.	People here are concerned with the company's interests -to the exclusion of all else.	5.56	0.993
20.	Work is considered substandard only when it hurts the company's interests.	5.86	0.842
21.	The major responsibility of people in this company is to control costs.	5.95	0.902
22.	In this company, people are expected to follow their own personal and moral beliefs.	5.58	0.909
23.	Each person in this company decides for themselves what is right and wrong.	5.55	1.060
24.	The most important concern in this company is each person's own sense of right and wrong.	5.62	0.987
25.	In this company, people are guided by their own personal ethics.	5.22	1.119

Note: Likert Scale 1 to 7; Strongly Disagree (1) to Strongly Agree (7)

\*Reverse-coded Item

#### 4.5.2.11 Business Performance

Finally, the average rating for business performance was from 3.80 to 6.36, with the SD ranged from 0.564 to 0.902. The highest average was –Cash Flow” with the mean of 6.36, while –Return to Shareholder Equity” had the lowest with the mean of 3.80. –Sales Growth” reported the mean of 6.25, followed by –Gross Profit Margin” (6.08), –Return on Investment” (5.99), –Ability to Fund Business Growth From Profit” (5.95), –Return on Sales” (5.62), –Net Profit From Operation” (5.57), and –Profit to Sales Ratio” (3.80). The average means for all the nine items in business performance shows the score of 5.51, which is considered as high. The full results are presented in Table 4.28.

Table 4.28  
*Means and Standard Deviations (SD) for Business Performance*

No.	Questions	Mean	SD
1.	Cash Flow	6.36	0.564
2.	Gross Profit Margin	6.08	0.695
3.	Net Profit From Operation	5.57	0.619
4.	Sales Growth	6.25	0.740
5.	Return On Sales	5.62	0.656
6.	Return On Investment	5.99	0.839
7.	Profit to Sales Ratio	3.94	0.755
8.	Return to Shareholder Equity	3.80	0.720
9.	Ability to Fund Business Growth From Profit	5.95	0.902

Note: Likert Scale 1 to 7; Very Low (1) to Very High (7)

## 4.6 Data Analysis

### 4.6.1 Factor Analysis

One of the ways in measuring the construct validity is factor analysis; a multivariate technique that confirms the dimensions of the concept that have been operationally defined, as well as indicating which of the items are most appropriate for each dimension (Sekaran & Bougie, 2010). It also deals with the degree to which the construct or –scale represents and acts like the concept being measured” (D. Davis & Cosenza, 1995). Factor analysis, which was formulated based on the variables specified from past research, theory and the judgement of the researcher (Malhotra & Birks, 2008) was carried out in this study and the interrelationships among a large number of variables were investigated, and furthermore, the common underlying dimensions among the variables were clarified (Hair et al., 2006, 2010).

#### 4.6.1.1 KMO and Sphericity Test

One of the considerations for factor analysis is KMO (Kaiser-Meyer-Olkin measure of sampling adequacy) which indicates the amount of variance shared among the items designed to measure a latent variable when compared to that shared with the error. As suggested by Tabachnick and Fidell (2007, 2013), Kaiser-Meyer-Olkin (KMO) statistic should be a minimum of 0.6 (Blaikie, 2003), while Kaiser (1974) recommended accepting values greater than 0.5 as acceptable. If this value falls below the minimum value, it is recommended that either more data be collected or that other variables should be included (Field, 2009). Hutcheson and Sofroniou (1999) interpreted the KMO values between 0.5 and 0.7 as “mediocre”, values between 0.7 and 0.8 as “good”, values between 0.8 and 0.9 are deemed “great”, and values above 0.9 are “superb”. Meanwhile, values more than 0.7 are the common threshold for confirmatory analysis (Hair et al., 2006, 2010). Table 4.29 shows the interpretation of the Kaiser-Meyer-Olkin (KMO) Value.

Table 4.29  
*Interpretation of the Kaiser-Meyer-Olkin (KMO) Value*

Range	Degree of Common Variance
0.5 to < 0.7	Mediocre
0.7 to < 0.8	Good
0.8 to < 0.9	Great
0.9 and above	Superb

*Source:* Hutcheson and Sofroniou (1999)

\*Value <0.5 is not acceptable

Another measure that should be put into consideration in conducting factor analysis is the Bartlett's Test of Sphericity. Here, p value should be significant at  $p < 0.05$  in order to show the appropriateness of the correlations among the variables and thus provide a sufficient basis for factor analysis (Ho, 2006). Finally, the values of Measure of Sampling Adequacy (MSA) for the individual items should be more than 0.50 (Hair et al., 2006, 2010). Table 4.30 shows the summary of the measures of appropriateness of factor analysis.

Table 4.30  
*Measures of Appropriateness of Factor Analysis*

Item	Range
Kaiser-Meyer-Olkin (KMO)	>0.5
Measure of Sampling Adequacy (MSA)	>0.5
Bartlett's Test of Sphericity	<0.05 (p-value)
Total Variance Explained	>60 per cent
Eigenvalue	>1.0
Factor Loadings	>0.3
Communalities	>0.5
Anti-image	>0.5

*Source:* Hutcheson and Sofroniou (1999), Hair et al., (2006, 2010), Ho (2006), Tabachnick and Fidell (2007, 2013)

#### 4.6.1.2 Principal Component Analysis (PCA)

One of the basic approaches to factor analysis is principal components analysis (PCA). According to Malhotra and Birks (2008), principal components analysis (PCA) is recommended when the researcher's primary concern is to determine the minimum number of factors that will account for maximum variance in the data for use in subsequent multivariate analysis. In addition, in common factor analysis, the

factors are estimated based only on the common variance, which is appropriate when the primary concern is to identify the underlying dimensions and when the common variance is of interest (Malhotra & Birks, 2008).

Tabachnick and Fidell (2007, 2013) fully supported the PCA for the factor extraction over the explanatory factor analysis (EFA) especially for empirical summary of data set. In addition, Tabachnick and Fidell (2007, 2013) have also indicated that in order to conduct factor analysis, a total number of more than 150 samples would be ideal. Hutcheson and Sofroniou (1999) recommended at least 150 - 300 cases, more toward the 150 end when there are a few highly correlated variables, as would be the case when collapsing highly multicollinear variables. For this study, a usable sample size of 207 was employed.

All the dimensions of independent variables; six dimensions of EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy and strategic orientation), and three dimensions of the EO (innovativeness, proactiveness, risk taking), ethics as mediating variable, and finally, business performance as the dependent variable, were submitted to PCA to determine their factor loadings. As a rule of thumb, Hair et al. (2006, 2010) and Tabachnick and Fidell (2007, 2013) highlighted that, the eigenvalue of factors must be greater than 1. Yet, another point to be considered is the shape of the scree plot where the cut-off point at which the pattern of the curve had changed to nearly horizontal line will be determined and used as guideline to find out the optimum



number of factors to be extracted (Hair et al., 2006, 2010, Tabachnick & Fidell, 2007, 2013).

Tabachnick and Fidell (2007, 2013) stated that only a variable with a loading of 0.3 and above should be considered. Concurrently, Hair et al. (2006, 2010) suggested that factor loadings  $\pm 0.30$  are considered as acceptable;  $\pm 0.50$  are moderately important; and  $\pm 0.70$  are very important. Nevertheless, Comrey and Lee (1992) interpreted that factor loading of 0.32 as “poor”, 0.45 as “fair”, 0.55 as “good”, 0.63 as “very good”, and finally, any loading that exceeds 0.71 is considered as “excellent”. However, Tabachnick and Fidell (2007, 2013) indicated that the cut off point for size of loading is a matter of researcher’s preference. For this study, based on the size of loadings which were influenced by homogeneity of scores in the samples, factor loadings which were higher than 0.3 had been considered. The outcomes of the factor analysis of all the variables can be found in Table 4.31 to Table 4.34.

#### **4.6.1.3 Factor Analysis for Entrepreneurial Management (EM)**

The measurement scales for EM consisted of 28 items: entrepreneurial culture was measured by three items, growth orientation by two items, management structure was measured using five items, resource orientation was measured using six items, reward philosophy was measured by nine items, and strategic orientation was measured using three items. A varimax rotated principal components factor analysis

was then conducted on these 28 items. Prior to performing the principal components analysis (PCA), the suitability of the data for factor analysis was assessed. It was also suggested that all items with factor loadings below 0.30 should be removed (Hair et al., 2006, 2010).

From Table 4.31, the total variance explained is reported as 66.97 per cent. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy for the items were 0.871, exceeding the recommended value of 0.6 (Kaiser, 1974), and thus interpreted as in the range of “great” (Hutcheson & Sofroniou, 1999). Bartlett’s Test of Sphericity was also found to be significant at  $p < 0.001$ , with the Approx. Chi-Square value of 3797.892, indicating the appropriateness of the correlations among the variables and thus provide a sufficient basis for factor analysis (Ho, 2006). Meanwhile, the MSA values for individual items ranged from 0.659 to 0.927 also denoted that the data matrix was suitable for factor analysis.

Consequently, the factor analysis resulted in six factors with eigenvalue greater than 1 that explained 66.97 per cent of variance in the data. The first factor accounted for 27.79 per cent of the total variance with an eigenvalue of 7.503. Factor loadings for items in this factor ranged from 0.472 to 0.786. Factor 1 reflected the management structure dimension and therefore, being classified as management structure.

The second factor was consisted of nine factors originally before one item was deleted prior to anti-image. Factor loadings for the eight remaining factors ranged from 0.515 to 0.850 and accounted for 14.08 per cent of the total variance in the

data. The eigenvalue was 3.802. Factor 2 are related to resource orientation dimension and accordingly, named as resource orientation.

Next, the third factor was represented by three factors and their factor loadings were ranged from 0.615 to 0.735. This factor accounted for 9.67 per cent of the total variance with an eigenvalue of 2.61. Factor 3 reflected the strategic orientation dimension and therefore, named as strategic orientation.

The fourth factor was represented by six factors. Factor loadings for the eight remaining factors ranged from 0.678 to 0.861 and accounted for 5.75 per cent of the total variance in the data. The eigenvalue was 1.55. Factor 4 are related to reward philosophy dimension and consequently, named as reward philosophy.

The fifth factor was represented by three factors and their factor loadings were ranged from 0.496 to 0.557. This factor accounted for 4.89 per cent of the total variance with an eigenvalue of 1.32. Factor 5 reflected the entrepreneurial culture dimension and therefore, classified as entrepreneurial culture.

Finally, the sixth factor was represented by two factors. Factor loadings for the two factors were 0.710 and 0.867 each and accounted for 4.79 per cent of the total variance in the data. The eigenvalue was 1.29. Factor 6 are related to growth orientation dimension and hence, named as growth orientation.

Table 4.31  
*Factor Analysis for Entrepreneurial Management (EM)*

Items	Factor Loading					
	1	2	3	4	5	6
<b>Management Structure</b>						
MS1	.603					
MS2	.725					
MS3	.760					
MS4	.472					
MS5	.786					
<b>Resource Orientation</b>						
RO1		.526				
RO2		.850				
RO3		.593				
RO4		.515				
RO5		.614				
RO6		.612				
RO7		.601				
RO8		.733				
<b>Strategic Orientation</b>						
SO1			.735			
SO2			.642			
SO3			.615			
<b>Reward Philosophy</b>						
RP1				.793		
RP2				.789		
RP3				.861		
RP4				.723		
RP5				.754		
RP6				.678		
<b>Entrepreneurial Culture</b>						
EC1					.512	
EC2					.496	
EC3					.557	
<b>Growth Orientation</b>						
GO1						.867
GO2						.710
Eigenvalues	7.50	3.80	2.61	1.55	1.32	1.29
Percentage	27.79	14.08	9.67	5.75	4.89	4.79
KMO	0.871					
Barlett's Test of Sphericity	3797.892					
Sig.	0.000					

#### 4.6.1.4 Factor Analysis for Entrepreneurial Orientation (EO)

The measurement scales for EO consisted of 9 items: innovativeness was measured using three items, proactiveness was measured using three items, and risk taking was measured by three items. A varimax rotated principal components factor analysis was then conducted on these 9 items. Prior to performing the principal components analysis (PCA), the suitability of the data for factor analysis was assessed. Only loadings of at least 0.30 were included in the factor (Hair et al., 2006, 2010).

From Table 4.32, the total variance explained is reported as 76.507 per cent. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy for the items were 0.790, exceeding the recommended value of 0.6 (Kaiser, 1974), and thus interpreted as in the range of “fair” (Hutcheson & Sofroniou, 1999). Barlett’s Test of Sphericity was also found to be significant at  $p < 0.001$ , with the Approx. Chi-Square value of 1004.200, indicating the appropriateness of the correlations among the variables and thus provide a sufficient basis for factor analysis (Ho, 2006). Meanwhile, the MSA values for individual items ranged from 0.706 to 0.886 also denoted that the data matrix was suitable for factor analysis.

Consequently, the factor analysis resulted in three factors with eigenvalue greater than 1 that explained 76.507 per cent of variance in the data. The first factor accounted for 26.57 per cent of the total variance with an eigenvalue of 2.39. Factor

loadings for items in this factor ranged from 0.755 to 0.878. Factor 1 reflected the innovativeness dimension and therefore, named as innovativeness.

The second factor was consisted of three items and factor loadings ranged from 0.714 to 0.880 which accounted for 25.12 per cent of the total variance in the data. The eigenvalue was 2.26. Factor 2 are related to proactiveness and therefore, classified as proactiveness.

Finally, the third factor was also represented by three factors. Factor loadings were ranged from 0.750 to 0.843. This factor accounted for 24.81 per cent of the total variance with an eigenvalue of 2.23. Factor 3 reflected the risk taking dimension and accordingly, classified as risk taking.

Table 4.32  
*Factor Analysis for Entrepreneurial Orientation (EO)*

Items	Factor Loading			
	1	2	3	
<b>Innovativeness</b>				
I1	.878			
I2	.755			
I3	.853			
<b>Proactiveness</b>				
P1		.714		
P2		.880		
P3		.820		
<b>Risk Taking</b>				
RT1			.750	
RT2			.843	
RT3			.787	
	Eigenvalues	2.39	2.26	2.23
	Percentage	26.57	25.12	24.81
	KMO	0.790		
	Barlett's Test of Sphericity	1,004.20		
	Sig.	0.000		

#### 4.6.1.5 Factor Analysis for Ethics

The measurement scales for ethics consisted of 25 items. A varimax rotated principal components factor analysis was then conducted on these 25 items and only one factor was extracted for this variable. Table 4.33 presents the result of this analysis. Here, only items that had factor loadings more than 0.30 were included (Hair et al., 2006, 2010).

From Table 4.33, Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy for the items were 0.798, exceeding the recommended value of 0.6 (Kaiser, 1974), and thus interpreted as in the range of “fair” (Hutcheson & Sofroniou, 1999). Bartlett’s Test of Sphericity was also found to be significant at  $p < 0.001$ , with the Approx. Chi-Square value of 1375.297, indicating the appropriateness of the correlations among the variables and thus provide a sufficient basis for factor analysis (Ho, 2006). Meanwhile, the MSA values for individual items ranged from 0.601 to 0.899 also denoted that the data matrix was suitable for factor analysis. Furthermore, the factor analysis resulted in one factor with eigenvalue greater than 1 (2.950) that explained 64.736 per cent of variance in the data. Factor loading for items in this factor ranged from 0.323 to 0.642.

Table 4.33  
*Factor Analysis for Ethics*

Items	Factor Loading
	1
Ethics	
E1	.513
E2	.478
E3	.516
E4	.486
E5	.591
E6	.497
E7	.472
E8	.530
E9	.477
E10	.398
E11	.553
E12	.438
E13	.554
E14	.534
E15	.405
E16	.323
E17	.342
E18	.452
E19*	.353
E20*	.478
E21*	.642
E22	.413
E23	.475
E24	.525
E25	.494
Eigenvalues	2.950
Percentage	64.736
KMO	0.798
Barlett's Test of Sphericity	300
Sig.	0.000

#### 4.6.1.6 Factor Analysis for Business Performance

The measurement scales for business performance consisted of 9 items. A varimax rotated principal components factor analysis was then conducted on these 9 items. Here, only loadings of at least 0.30 were included and as a result, only one factor was extracted for this variable. Table 4.34 presents the result of this analysis.



From Table 4.34, Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy for the items were 0.765, showing that the items were correlated and shared common factors. Test of Sphericity was also found to be significant at  $p < 0.001$ , with the Approx. Chi-Square value of 467.172, indicating the appropriateness of the correlations among the variables and thus provide a sufficient basis for factor analysis (Ho, 2006). Meanwhile, the MSA values for individual items ranged from 0.668 to 0.815 also denoted that the data matrix was suitable for factor analysis. Besides that, the factor analysis resulted in one factor with eigenvalue greater than 1 (1.767) that explained 63.429 per cent of variance in the data. Factor loading for items in this factor ranged from 0.640 to 0.925.

Table 4.34  
*Factor Analysis for Business Performance*

Items	Factor Loading
	1
Business Performance	
Cash Flow	.673
Gross Profit Margin	.640
Net Profit From Operation	.793
Sales Growth	.675
Return On Sales	.777
Return On Investment	.649
Profit to Sales Ratio	.839
Return to Shareholder Equity	.871
Ability to Fund Business Growth From Profit	.925
	-----
	Eigenvalues
	1.767
	Percentage
	63.429
	KMO
	0.765
	Barlett's Test of Sphericity
	467.172
	Sig.
	0.000

## 4.7 Assumptions of Multiple Regressions

Prior to using multiple regression analysis to explore relationships among variables, all the assumptions recommended by Tabachnick and Fidell (2007, 2013) have been fulfilled, such as normality, linearity, homoscedasticity, and multicollinearity.

### 4.7.1 Normality

Based on Hair et al. (2006, 2010), correlation and regression analysis can only be done if the data distribution shows normal and linear relationships exist among the variables.

The normality distribution of data was examined by two statistical components such as skewness and kurtosis values for each variable. Skewness values present the symmetry of the distribution score and a skew variable's mean will not be at the center of this distribution; while kurtosis confer information about the "peakness" of distribution which can be either too peaked (with short and thick tail) or too flat (with long and thin tail) (Tabachnick & Fidell, 2007, 2013).

Normal distribution is considered when the value of skewness and kurtosis is closed to zero. Positive skewness value will have a cluster of cases to the left at a low value and negative skewness will have the score cluster or pile at the right side with a long left tail (Tabachnick & Fidell, 2007, 2013). Steed and Coakes (2001) confirmed that a good data is one that possess normal distribution, without noticeable skewness

(tails off to the right in case of large values, or tails off to the left in case of small values) or bell-shaped. In other cases, normality of the data can be identified by focusing on the vertical lines in the histogram (Norusis, 1985).

In other cases, (Hair et al., 2006, 2010) recommended the rejection of the normality assumptions at absolute values of  $\pm 3.29$  at  $p < 0.001$  significant level,  $\pm 2.58$  at  $p < 0.01$  significant level and  $\pm 1.96$  at  $p < 0.05$  significant level. To assess the normality of the variables, the above suggestions were applied and noticeably none of the variables fell outside the  $\pm 3.29$  at  $p < 0.001$  probability range level. This was expected as the sample size was 207. Table 4.35 is a summary of the kurtosis and skewness for all the variables. The data shows the variables were normally distributed. Therefore, in conclusion, all the variables do not deviate the normality test requirement.

Table 4.35  
*Normality Test for the Variables*

Construct	Mean	SD	Skewness	Kurtosis
Entrepreneurial Culture	5.771	0.492	-.537	-.696
Growth Orientation	6.326	0.754	-.745	-.706
Management Structure	5.795	0.668	-.064	-.210
Resource Orientation	5.994	0.553	-.022	-.751
Reward Philosophy	5.847	0.669	-.311	-.805
Strategic Orientation	6.122	0.582	.059	-.650
Innovativeness	4.040	0.584	-.011	-.133
Proactiveness	3.862	0.684	-.341	-.104
Risk Taking	3.982	0.543	-.152	-.253
Ethics	5.895	0.318	-.177	1.776
Business Performance	5.625	0.372	.307	-.468

Note: N=207

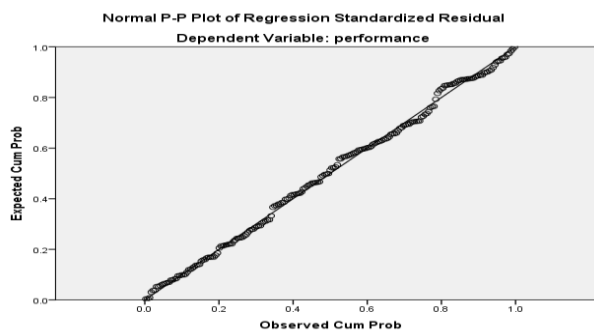
For the purpose of this study, not only normality had been tested through statistical method, but also graphical method. As suggested by Steed and Coakes (2001),

normal probability plots were used in determining the normality. If the assumption is met, then the residuals should be normally and independently distributed (Tabachnick & Fidell, 2007, 2013). Figure 4.1 and 4.2 shows the normal probability plots for the dependent variable (business performance) in this study.

Figure 4.1  
*Normal Probability Plot of Business Performance*



Figure 4.2  
*Normal Probability Plot of Regression Standardized Residual For Business Performance*

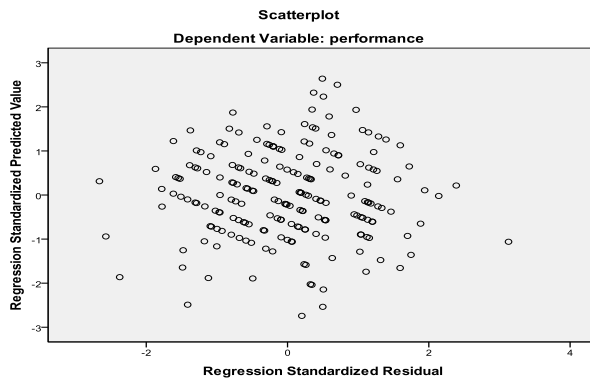


#### 4.7.2 Linearity

Another assumption to meet is linearity of data which is the relationship between the residuals against the predicted values; linearity refers as the error term of distribution. According to Hair et al. (2006, 2010), linearity is used to express the concept that the model possesses the properties of additivity and homogeneity. In a simple sense, linear models predict values that fall in a straight line by having a constant unit change (slope) of the dependent variable for a constant unit change of the independent variable. Linearity is important for the regression analysis because correlation can capture only the linear association between variables and if there are substantial non-linear relationship, it will be ignored in the analysis because will underestimate the actual strength of the relationship (Tabachnick & Fidell, 2007, 2013).

Linearity can be observed by examining the scatterplots (Hair et al., 2006, 2010). Therefore, upon assessing all scatterplots of the standardized residual versus standardized predicted values, it was clear that in all the plots the residual were scattered with no systematic or curvilinear pattern (U shape distribution) or clustering or residuals as indicated by Tabachnick and Fidell (2007, 2013). The randomized pattern of the scatter plots indicated that the assumption of linearity was met. Therefore, the linearity could be assumed. Figure 4.3 presents the scatterplots of standardized residuals against the predicted values.

Figure 4.3  
*Scatterplots of Standardized Residuals against the Predicted Values*



### 4.7.3 Homoscedasticity

Homoscedasticity refers as constant variance of the error term and the variance of the dependent variables is approximately the same different levels of the explanatory variable (Hair et al., 2006, 2010). Homoscedasticity is indicated when the width of the band of the residuals is approximately the same at the different level of the dependent variables and scatter plot show a pattern of residual normally distributed around the mean (Berry & Feldman, 1985). To check the homoscedasticity, the scatterplots of standardized residual against the predicted values were applied (Hair et al., 2006, 2010). There is need to inspect the plots of residual against the predicted values to reveal that the residuals were scattered randomly with no obvious systematic pattern. Accordingly, if the existence of systematic pattern of decreasing or increasing residuals cannot be detected, then it can be concluded that the assumption of homoscedasticity is not disrupted.

#### 4.7.4 Multicollinearity

Multicollinearity is statistical phenomenon in which two or more independent variables in a multiple regression model are highly correlated (Sekaran & Bougie, 2010). Or as clarified by Hair et al. (2010), multicollinearity is the extent to which a variable can be explained by the other variables in the analysis. Yet, as multicollinearity increases, it complicates the interpretation of the variate because it is more difficult to ascertain the effect of any single variable, owing to their interrelationships (Hair et al., 2010). The presence of high correlations (most consider correlations of 0.70 and above high) is a first sign of sizeable multicollinearity (Sekaran & Bougie, 2010).

Multicollinearity occurs when the explanatory variables are highly correlated with each other. By any means, the existence of multicollinearity could adversely effect the statistical significance of the regression coefficients, and subsequently required for remedial measures (Hair et al., 2010; Borden & Abbott, 2011). According to Berry and Feldman (1985), intercorrelations of greater than 0.8 are considered to be the evidence of high multicollinearity. Meanwhile, based on Tabachnick and Fidell (2007, 2013), tolerance values approaching zero specify the presence of high multicollinearity.

Therefore, as stated in Sekaran and Bougie (2010), the common measures for identifying multicollinearity are tolerance value and the variance inflation factor

(VIF-the inverse of the tolerance value). These measures indicate the degree to which one independent variable is explained by the other independent variable, and a common cut-off value for tolerance value is 0.10, which corresponds to a VIF of 10 (Hair et al., 2010; Sekaran & Bougie, 2010). Table 4.36 shows that there is no disruption of the assumption for this study. All the independent variables (IV) (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, strategic orientation, innovativeness, proactiveness, and risk taking) and mediating variable (ethics) show tolerance value of more than 0.1 and VIF value of less than 10.

Table 4.36  
*Test of Multicollinearity*

	Tolerance	VIF
Entrepreneurial Culture	.409	2.443
Growth Orientation	.347	2.881
Management Structure	.305	3.274
Resource Orientation	.341	2.932
Reward Philosophy	.292	3.424
Strategic Orientation	.459	2.177
Innovativeness	.652	1.533
Proactiveness	.554	1.805
Risk Taking	.642	1.557
Ethics	.915	1.093

#### 4.8 Correlation Analysis

In order to identify the factors that have associations with women owned business performance, correlation analysis was conducted where the correlation coefficient illustrates the relationship between the independent variables (entrepreneurial



culture, growth orientation, management structure, resource orientation, reward philosophy, strategic orientation, innovativeness, proactiveness, and risk taking) , mediating variable (ethics), and dependent variable (women-owned SMEs business performance).

According Hair et al. (2006), the number representing the Pearson correlation is referred to as a correlation coefficient. It ranges from -1.00 to +1.00, with +1.00 indicating perfect positive relationship, and zero representing absolutely no association between the two matrix variables. Meanwhile, -1.00 indicates a perfect negative or reverse relationship (the larger the correlation coefficient, the stronger the linkage or level of association). J. Cohen (1988) has put forward a guideline on the effect sizes of the correlation coefficients in social science studies as; small effect size:  $r = 0.10$  to  $0.29$  or  $r = -0.10$  to  $-0.29$ , medium:  $r = 0.30$  to  $0.49$  or  $r = -0.30$  to  $-0.49$ , and large:  $r = 0.50$  to  $1.0$  or  $r = -0.50$  to  $-1.0$ .

However, as a rule of thumb, Hair et al. (2006) have proposed the guidelines as shown in Table 4.36. Based on the Table, correlation coefficients between  $\pm 0.91$  and  $\pm 1.00$  are considered "very strong", correlation coefficients between  $\pm 0.71$  and  $\pm 0.90$  are considered "high", and correlation coefficients between  $\pm 0.41$  and  $\pm 0.70$  are considered "moderate". Meanwhile, correlation coefficients between  $\pm 0.21$  and  $\pm 0.40$  are considered "small but definite relationship", and finally, correlation coefficients between  $\pm 0.01$  and  $\pm 0.20$  are considered "slight, almost negligible". On

the other hand, Berry and Feldman (1985) argued that the correlation coefficients that exceeded 0.8 (very strong correlation) will likely to result in multicollinearity.

Table 4.37  
*Rules of Thumb about Correlation Coefficient Size\**

Range	Degree of Common Variance
±0.91 to ±1.00	Very Strong
±0.71 to ±0.90	High
±0.41 to ±0.70	Moderate
±0.21 to ±0.40	Small but definite relationship
±0.01 to ±0.20	Sight, almost negligible

Source: Hair *et al.* (2003)

Note: \*Assumes correlation coefficient is statistically significant

#### 4.8.1 The Correlations between Entrepreneurial Management (Entrepreneurial Culture, Growth Orientation, Management Structure, Resource Orientation, Reward Philosophy, Strategic Orientation) and Women-owned SMEs Business Performance

Table 4.38 exhibits the results of correlations analysis to examine the relationship between the dimensions of EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy and strategic orientation) and women-owned SMEs business performance. Based on Table 4.38, all of the dimensions in EM were significantly associated with business performance. Results indicated that resource orientation had the strongest relationship with business performance ( $r=0.629$ ,  $p<0.01$ ), followed by strategic orientation ( $r=0.582$ ,  $p<0.01$ ), entrepreneurial culture ( $r=0.551$ ,  $p<0.01$ ), management structure ( $r=0.539$ ,  $p<0.01$ ), reward philosophy ( $r=0.485$ ,  $p<0.01$ ) and finally, growth orientation ( $r=0.391$ ,  $p<0.01$ ).

Table 4.38

*The Correlations between Entrepreneurial Culture, Growth Orientation, Management Structure, Resource Orientation, Reward Philosophy and Strategic Orientation, and Women-owned SMEs Business Performance.*

	P	SO	RO	MS	RP	GO	EC
P	1						
SO	.582**	1					
RO	.629**	.628**	1				
MS	.539**	.673**	.736**	1			
RP	.485**	.541**	.553**	.692**	1		
GO	.391**	.541**	.500**	.584**	.786**	1	
EC	.551**	.609**	.708**	.619**	.585**	.564**	1

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

P = Performance

SO = Strategic Orientation

RO = Resource Orientation

MS = Management Structure

RP = Reward Philosophy

GO = Growth Orientation

EC = Entrepreneurial Culture

#### **4.8.2 The Correlations between Entrepreneurial Orientation (Innovativeness, Proactiveness, Risk Taking) and Women-owned SMEs Business Performance**

Results in Table 4.39 indicated that the entire dimensions had the significant relationships with the business performance of the women-owned SMEs. Risk taking showed the highest relationship ( $r=0.481$ ,  $p<0.01$ ), followed by proactiveness ( $r=0.413$ ,  $p<0.01$ ), and innovativeness ( $r=0.162$ ,  $p<0.05$ ).

Table 4.39

*The Correlations between Innovativeness, Proactiveness, Risk Taking and Women-owned SMEs Business Performance*

	P	I	P	RT
P	1			
I	.162*	1		
P	.413**	.549**	1	
RT	.481**	.423**	.559**	1

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

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

P = Business Performance

I = Innovativeness

P = Proactiveness

RT = Risk Taking

### 4.8.3 The Correlation between Ethics and Performance of the Women-owned SMEs Business Performance

Table 4.40 described the results of correlation analysis to examine the relationship between ethics and women-owned SMEs business performance. Result indicated that there was a significant relationship between them ( $r=0.430$ ,  $p<0.01$ ).

Table 4.40

*The Correlation between Ethics and Women-owned SMEs Business Performance.*

	Performance	Ethics
Performance	1	
Ethics	0.430**	1

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

#### **4.9 Multiple Regressions**

This section tested the direct effects and mediated hypotheses on the relationships between the independent variables (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, strategic orientation, innovativeness, proactiveness, and risk taking), mediating variable (ethics), and dependent variable (women-owned SMEs business performance).

The first section of the hypotheses testing reported the analysis being conducted on the relationships between the dimensions of EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, and strategic orientation) and women-owned SMEs business performance. The second section then reported on the direct relationships between EO (innovativeness, proactiveness, and risk taking) and women-owned SMEs business performance. The third section of the hypotheses testing reported the analysis being conducted on mediated relationships between EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, and strategic orientation), ethics and women-owned SMEs business performance. Finally, the fourth section then reported on the mediated relationships between EO (innovativeness, proactiveness, and risk taking), ethics and women-owned SMEs business performance.

#### **4.9.1 The Relationships between Entrepreneurial Management (Entrepreneurial Culture, Growth Orientation, Management Structure, Resource Orientation, Reward Philosophy, Strategic Orientation) and Women-owned SMEs Business Performance**

Table 4.41 illustrates the result of multiple regressions to examine the effects of EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy and strategic orientation) on women-owned SMEs business performance. The results indicated that EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy and strategic orientation) explained 47.4 per cent of the women-owned business performance ( $R^2=0.474$ ,  $F=30.070$ ,  $p<0.001$ ). Only three dimensions showed the significant effect on women-owned SMEs business performance. They were resource orientation ( $\beta=0.220$ ,  $t=4.224$ ,  $p<0.01$ ), reward philosophy ( $\beta=0.108$ ,  $t=2.321$ ,  $p<0.05$ ), and strategic orientation ( $\beta=0.161$ ,  $t=3.779$ ,  $p<0.001$ ). On the contrary, the other three dimensions such as entrepreneurial culture, growth orientation, and management structure, failed to predict the women-owned SMEs business performance ( $p>0.05$ ).

Table 4.41

*The Regressions of Entrepreneurial Culture, Growth Orientation, Management Structure, Resource Orientation, Reward Philosophy and Strategic Orientation, On Women-owned SMEs Business Performance.*

	$\beta$	t	Sig.
Entrepreneurial Culture	.072	1.347	.180
Growth Orientation	-.064	-1.706	.090
Management Structure	-.028	-.604	.546
Resource Orientation	.220	4.228	.000***
Reward Philosophy	.108	2.321	.021**
Strategic Orientation	.161	3.779	.000***
R <sup>2</sup>	0.474		
F	30.070		
Sig.	0.000		

Note: \*Significance level at 0.05 (2-tailed)

\*\* Significance level at 0.01 (2-tailed)

\*\*\*Significance level at 0.001 (2-tailed)

Dependent Variable: Business Performance

The regression results in Table 4.41 revealed that resource orientation, reward philosophy and strategic orientation had significant relationships with the business performance of the women-owned SMEs in Malaysia. Hence, the results supported the alternative hypotheses that:

H1d: There is a significant relationship between resource orientation and women-owned SMEs business performance.

H1e: There is a significant relationship between reward philosophy and women-owned SMEs business performance.

H1f: There is a significant relationship between strategic orientation and women-owned SMEs business performance.

On the other hand, the regression results in Table 4.41 then showed that entrepreneurial culture, growth orientation, and management structure had no significant relationships with the business performance of the women-owned SMEs in Malaysia. Hence, the results rejected the alternative hypotheses that:

H1a: There is a significant relationship between entrepreneurial culture and women-owned SMEs business performance.

H1b: There is a significant relationship between growth orientation and women-owned SMEs business performance.

H1c: There is a significant relationship between management structure and women-owned SMEs business performance.

#### **4.9.2 The Relationships between Entrepreneurial Orientation (Innovativeness, Proactiveness, Risk Taking) and Women-owned SMEs Business Performance**

Table 4.42 shows the result of multiple regressions to examine the effects of EO (innovativeness, proactiveness, and risk taking) on women-owned SMEs business performance. The results indicated that EO (innovativeness, proactiveness, and risk taking) explained only 27.9 per cent of business performance of women-owned SMEs ( $R^2=0.279$ ,  $F=26.130$ ,  $p<0.01$ ), that was lower than entrepreneurial management. All of the dimensions were found to significantly predict the women-owned SMEs business performance as follows: innovativeness ( $\beta=-0.089$ ,  $t=-2.177$ ,  $p<0.05$ ), proactiveness ( $\beta=0.136$ ,  $t=3.561$ ,  $p<0.001$ ) and risk taking ( $\beta=0.238$ ,  $t=5.354$ ,  $p<0.001$ ).



Table 4.42

*The Regressions of Innovativeness, Proactiveness and Risk Taking On Women-owned SMEs Business Performance.*

	$\beta$	t	Sig.
Innovativeness	-.089	-2.177	.031*
Proactiveness	.136	3.561	.000***
Risk Taking	.238	5.354	.000***
R <sup>2</sup>	0.279		
F	26.130		
Sig.	0.000		

Note: \*Significance level at 0.05 (2-tailed)

\*\*\*Significance level at 0.001 (2-tailed)

Dependent Variable: Business Performance

The regression results in Table 4.41 revealed that innovativeness, proactiveness, and risk taking had significant relationships with the business performance of the women-owned SMEs in Malaysia. Hence, the results supported the alternative hypotheses that:

H2a: There is a significant relationship between innovativeness and women-owned SMEs business performance.

H2b: There is a significant relationship between proactiveness and women-owned SMEs business performance.

H2c: There is a significant relationship between risk-taking and women-owned SMEs business performance.

#### **4.9.3 The Mediated Relationships between Entrepreneurial Management (Entrepreneurial Culture, Growth Orientation, Management Structure, Resource Orientation, Reward Philosophy, Strategic Orientation), Ethics and Women-owned SMEs Business Performance**

Hypotheses 3a, 3b, 3c, 3d, 3e and 3f on the mediating effect of ethics on the relationship between EM's dimensions: entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy and strategic orientation, and women-owned SMEs business performance were proposed in Chapter 2 based on the literatures that proved the relationships between them. Thus, in analysing the mediation effect, four steps of hierarchical regressions were adopted in accordance with Baron and Kenny's (1986) description of mediation which suggested that, a variable functions as a mediator when it meets the following conditions: (a) variations in levels of the independent variable significantly account for variations in the presumed mediator (Path a), (b) variations in the mediator significantly account for variations in the dependent variable (Path b), and (c) when Paths a and b are controlled, a previously significant relation between the independent and dependent variables is no longer significant, with the strongest demonstration of mediation occurring when Path c is zero" (p. 1176).

The first step (path c) involved the examination of how the EM's dimensions: entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, and strategic orientation are significant with mediator (ethics). However, in the previous segment, only resource orientation, reward philosophy and strategic orientation were found to having significant

relationships with the women-owned SMEs business performance in Malaysia. While entrepreneurial culture, growth orientation and management structure had no significant relationships with the women-owned SMEs business performance in Malaysia. Therefore, since the first condition set forth by Baron and Kenny (1986) was not met, no further tests for mediation were conducted towards these three dimensions of EM (entrepreneurial culture, growth orientation and management structure). Mediation tests were only being conducted among three remaining dimensions of EM, namely resource orientation, reward philosophy, and strategic orientation.

Table 4.43 shows the results of step 1 (path c), which were to accessed the relationships between resource orientation, reward philosophy and strategic orientation, and the business performance of the women-owned SMEs. The overall model was significant ( $F=30.07$ ,  $p<0.001$ ) accounting for 47.4 per cent of the variance in the business performance of the women-owned SMEs. When all the three independent variables were measured concurrently in the model, they showed significant positive contribution to the women-owned SMEs business performance, that is resource orientation ( $\beta=0.220$ ,  $t=4.228$ ,  $p<0.001$ ), reward philosophy ( $\beta=0.108$ ,  $t=2.321$ ,  $p<0.05$ ), and strategic orientation ( $\beta=0.161$ ,  $t=3.779$ ,  $p<0.001$ ).

Table 4.43  
*The Regressions of Resource Orientation, Reward Philosophy and Strategic Orientation On Women-owned SMEs Business Performance (Step 1)*

	$\beta$	t	Sig.
Resource Orientation	.220	4.228	.000***
Reward Philosophy	.108	2.321	.021*
Strategic Orientation	.161	3.779	.000***
R <sup>2</sup>	0.474		
F	30.070		
Sig.	0.000		

Note: \*Significance level at 0.05 (2-tailed)

\*\*\*Significance level at 0.001 (2-tailed)

Dependent Variable: Business Performance

Table 4.44 exhibits the results of test on step 2 (path a), which were to examine the effects of EM: resource orientation, reward philosophy, and strategic orientation on ethics as mediating variable. Since the first condition set forth by Baron and Kenny (1986) was met for resource orientation, reward philosophy, and strategic orientation, further tests for mediation on these dimensions were conducted.

Results indicated that the overall model was significant ( $F=36.574$ ,  $p<0.001$ ) accounting 52.3 per cent of the variance of ethics. When all the three dimensions were regressed simultaneously in the model, only reward philosophy ( $\beta=0.126$ ,  $t=3.042$ ,  $p<0.01$ ) and strategic orientation ( $\beta=0.176$ ,  $t=4.639$ ,  $p<0.001$ ) had positive significant with ethics, which means that women entrepreneurs' ethics was strongly effected by reward philosophy and strategic orientation. However, resource orientation did not contribute significantly to the regression model in relation to ethics.

Table 4.44  
*The Regressions of Resource Orientation, Reward Philosophy and Strategic Orientation on Ethics (Step 2)*

	$\beta$	t	Sig.
Resource Orientation	.050	1.091	.277
Reward Philosophy	.126	3.042	.003*
Strategic Orientation	.176	4.639	.000***
R <sup>2</sup>	0.523		
F	36.574		
Sig.	0.000		

Note: \*Significance level at 0.05 (2-tailed)

\*\*\*Significance level at 0.001 (2-tailed)

Dependent Variable: Ethics

Then, step 3 (path b) revealed that mediating variable (ethics) effected the dependent variable (business performance). Table 4.45 presents the result of path b, which was the effect of ethics as mediating variable to women-owned SMEs business performance as the dependent variable. Ethics was found significantly effected women-owned SMEs business performance at  $p < 0.001$  ( $\beta = 0.752$ ,  $t = 14.106$ ). The R<sup>2</sup> value was 0.493 indicating that ethics explained 49.3 per cent of the variance in the women-owned SMEs business performance.

Table 4.45  
*The Regression of Ethics On Women-owned SMEs Business Performance (Step 3)*

	$\beta$	t	Sig.
Ethics	0.752	14.106	.000***
R <sup>2</sup>	0.493		
F	198.980		
Sig.	0.000		

Note: \*\*\*Significance level at 0.001 (2-tailed)

Dependent Variable: Business Performance

Finally, step 4 (path c') was the effects of independent variables (reward philosophy and strategic orientation) on the dependent variable (women-owned SMEs business performance), with the presence of mediating variable (ethics). Since it was just reward philosophy and strategic orientation that fulfilled the conditions set forth by Baron and Kenny (1986) in step 1 (path c), step 2 (path a) and step 3 (path b), therefore only these variables were assessed through regression analysis in step 4 (path c'), where paths a and b were being controlled. Again, according to Baron and Kenny (1986), when paths a and b are being controlled, a previously significant relation between the independent and dependent variables is no longer significant, with the strongest demonstration of mediation occurring when path c is zero (path c'). Additionally, when path c is reduced to zero, there is a strong evidence for a single, dominant mediator. However, if the residual path c is not zero, this indicates the operation of multiple mediating factors (Baron & Kenny, 1986)

Results in Table 4.46 shows that reward philosophy and strategic orientation were fully mediated by ethics on the relationship with women-owned SMEs business performance. The relationships between both of the independent variables (reward philosophy and strategic orientation) with mediating variable (ethics) and dependent variable (women-owned SMEs business performance) were still significant although  $\beta$  value were reduced. Hence, in line with the mediation criteria of Baron and Kenny (1986), the results supported the alternative hypotheses that:

H3e: Ethic mediates the relationship between reward philosophy and women-owned SMEs business performance.

H3f: Ethic mediates the relationship between strategic orientation and women-owned SMEs business performance.

And at the same time, the results also rejected the alternative hypotheses that:

H3a: Ethic mediates the relationship between entrepreneurial culture and women-owned SMEs business performance.

H3b: Ethic mediates the relationship between growth orientation and women-owned SMEs business performance.

H3c: Ethic mediates the relationship between management structure and women-owned SMEs business performance.

H3d: Ethic mediates the relationship between resource orientation and women-owned SMEs business performance.

Table 4.46

*The Mediating Effects of Ethics on the Relationships between Reward Philosophy and Strategic Orientation, and Women-owned SMEs Business Performance (Step 4)*

	$\beta$	t	Sig.
Reward Philosophy	.034	.845	.399*
Strategic Orientation	.058	1.518	.131*
Ethics	.585	8.584	.000
R <sup>2</sup>	0.616		
F	45.666		
Sig.	0.000		

Note: \*partially mediated

Dependent Variable: Business Performance

#### **4.9.4 The Mediated Relationships between Entrepreneurial Orientation (Innovativeness, Proactiveness, Risk Taking), Ethics and Women-owned SMEs Business Performance**

In testing Hypotheses 4a, 4b and 4c on the mediating effect of ethics on the relationships between EO's dimensions: innovativeness, proactiveness and risk taking, and women-owned SMEs business performance, again, the four steps of hierarchical regressions were applied in accordance with Baron and Kenny's (1986).

The first step (path c) involved the examination of how the EO's dimensions: innovativeness, proactiveness and risk taking are significant with mediator (ethics). Based on the results in Table 4.47, all of the dimensions were found to having significant relationships with the women-owned SMEs business performance in Malaysia: innovativeness ( $\beta=-0.089$ ,  $t=-2.177$ ,  $p<0.05$ ), proactiveness ( $\beta=0.136$ ,  $t=3.561$ ,  $p<0.001$ ) and risk taking ( $\beta=0.238$ ,  $t=5.354$ ,  $p<0.001$ ). Therefore, since the first condition set forth by Baron and Kenny (1986) was met, further tests for mediation were conducted towards these three dimensions of EO: innovativeness, proactiveness and risk taking.



Table 4.47

*The Regressions of Innovativeness, Proactiveness and Risk Taking on Women-owned SMEs Business Performance (Step 1)*

	$\beta$	t	Sig.
Innovativeness	-.089	-2.177	.031*
Proactiveness	.136	3.561	.000***
Risk Taking	.238	5.354	.000***
R <sup>2</sup>	0.279		
F	26.130		
Sig.	0.000		

Note: \*Significance level at 0.05 (2-tailed)

\*\*\*Significance level at 0.001 (2-tailed)

Dependent Variable: Business Performance

Table 4.48 then exhibits the results of test on step 2 (path a), which were to examine the effects of independent variables (innovativeness, proactiveness and risk taking) on the mediating variable (ethics). Results indicated that two of the dimensions were significantly effect ethics; proactiveness ( $\beta=0.109$ ,  $t=2.797$ ,  $p<0.01$ ) and risk taking ( $\beta=0.116$ ,  $t=2.571$ ,  $p<0.05$ ). However, innovativeness did not contribute significantly to the regression model in relation to ethics.

Table 4.48

*The Regressions of Innovativeness, Proactiveness and Risk Taking on Ethics (Step 2)*

	$\beta$	t	Sig.
Innovativeness	-0.022	-0.535	.593
Proactiveness	0.109	2.797	.006**
Risk Taking	0.116	2.571	.011*
R <sup>2</sup>	0.139		
F	10.908		
Sig.	0.000		

Note: \*Significance level at 0.05 (2-tailed)

\*\* Significance level at 0.01 (2-tailed)

Dependent Variable: Ethics

Then again, Table 4.49 revealed the result for step 3 (path b) that mediating variable (ethics) was found significantly effected dependent variable (women-owned SMEs business performance) at  $p < 0.001$  ( $\beta = 0.752$ ,  $t = 14.106$ ). The  $R^2$  value was 0.493 indicating that ethics explained 49.3 per cent of the variance in the women-owned SMEs business performance.

Table 4.49  
*The Regression of Ethics on Women-owned SMEs Business Performance (Step 3)*

	$\beta$	t	Sig.
Ethics	0.752	14.106	.000***
$R^2$	0.493		
F	198.980		
Sig.	0.000		

Note: \*\*\*Significance level at 0.001 (2-tailed)  
 Dependent Variable: Business Performance

Finally, step 4 (path c') was the effects of independent variables (innovativeness, proactiveness, and risk taking) on the dependent variable (women-owned SMEs business performance), with the presence of mediating variable (ethics). Here, although innovativeness fulfilled the condition set forth by Baron and Kenny (1986) in step 1 (path c), the result in step 2 (path a) indicated the non-significant relationship between innovativeness and ethics as mediator. Therefore, only proactiveness and risk taking had been examined through regression analysis in step 4 (path c'), where paths a and b were being controlled. Once again, according to Baron and Kenny (1986), when paths a and b are being controlled, a previously significant relation between the independent and dependent variables is no longer significant, with the strongest demonstration of mediation occurring when path c is

zero (path c'). Furthermore, when path c is reduced to zero, there is a strong evidence for a single, dominant mediator. However, if the residual path c is not zero, this indicates the operation of multiple mediating factors (Baron & Kenny, 1986).

Results in Table 4.50 indicated that proactiveness and risk taking were significantly predicted business performance with the presence of ethics as mediator as follows: proactiveness ( $\beta=0.067$ ,  $t=2.248$ ,  $p<0.05$ ), risk taking ( $\beta=0.164$ ,  $t=4.753$ ,  $p<0.01$ ).

Table 4.50  
*The Mediating Effects of Ethics on the Relationships between Innovativeness, Proactiveness and Risk Taking, and Women-owned SMEs Business Performance (Step 4)*

	$\beta$	t	Sig.
Proactiveness	0.067	2.248	0.026*
Risk Taking	0.164	4.753	0.000*
Ethics	0.635	12.075	0.000
R <sup>2</sup>	0.581		
F	70.030		
Sig.	0.000		

Note: \*partially mediated  
Dependent Variable: Business Performance

Following the mediation criteria as suggested by Baron and Kenny (1986), from the regression results in Table 4.50, it is clear that proactiveness and risk taking were partially mediated by ethics on the relationship with women-owned SMEs business performance since the relationships were found significant at  $p<0.05$  and  $p<0.001$  respectively, but with a reduced  $\beta$  values. Hence, the results supported the hypotheses that:

H4b: Ethic mediates the relationship between proactiveness and women-owned SMEs business performance.

H4c: Ethic mediates the relationship between risk taking and women-owned SMEs business performance.

And at the same time, the result also rejected the hypotheses that:

H4a: Ethic mediates the relationship between innovativeness and women-owned SMEs business performance.

#### **4.10 Summary of the Hypotheses Testing**

In summary, there were eighteen hypotheses being tested in the previous section of this chapter. H1a, H1b, H1c, H1d, H1e and H1f were the hypothesized related to the dimensions of EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy and strategic orientation) as the first proposed independent variable, while H2a, H2b and H2c were related to the dimensions of EO (innovativeness, proactiveness and risk taking) as the second independent variable with the business performance of the women-owned SMEs as dependent variable respectively.

H3a, H3b, H3c, H3d, H3e and H3f then followed with the hypothesized related to the effect of ethics on relationships between the dimensions of the first proposed independent variable and the women-owned SMEs business performance, whilst H4a, H4b and H4c were the hypothesized related to the effect of ethics on relationships between the dimensions of the secondly proposed independent variable

in the framework and the women-owned SMEs business performance. Table 4.51 shows the results of all the hypotheses being studied.

Table 4.51  
*Summary of the Hypotheses*

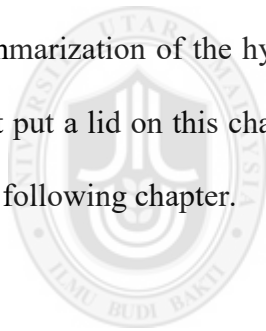
Hypotheses	Item	Result
H1a	There is a significant relationship between entrepreneurial culture and women-owned SMEs business performance.	Not Supported
H1b	There is a significant relationship between growth orientation and women-owned SMEs business performance.	Not Supported
H1c	There is a significant relationship between management structure and women-owned SMEs business performance.	Not Supported
H1d	There is a significant relationship between resource orientation and women-owned SMEs business performance.	Supported
H1e	There is a significant relationship between reward philosophy and women-owned SMEs business performance.	Supported
H1f	There is a significant relationship between strategic orientation and women-owned SMEs business performance.	Supported
H2a	There is a significant relationship between innovativeness and women-owned SMEs business performance.	Supported
H2b	There is a significant relationship between proactiveness and women-owned SMEs business performance.	Supported
H2c	There is a significant relationship between risk-taking and women-owned SMEs business performance.	Supported
H3a	Ethic mediates the relationship between entrepreneurial culture and women-owned SMEs business performance.	Not Supported
H3b	Ethic mediates the relationship between growth orientation and women-owned SMEs business performance.	Not Supported
H3c	Ethic mediates the relationship between management structure and women-owned SMEs business performance.	Not Supported
H3d	Ethic mediates the relationship between resource orientation and women-owned SMEs business performance.	Not Supported
H3e	Ethic mediates the relationship between reward philosophy and women-owned SMEs business performance.	Supported
H3f	Ethic mediates the relationship between strategic orientation and women-owned SMEs business performance.	Supported
H4a	Ethic mediates the relationship between innovativeness and women-owned SMEs business performance.	Not Supported
H4b	Ethic mediates the relationship between proactiveness and women-owned SMEs business performance.	Supported
H4c	Ethic mediates the relationship between risk taking and women-owned SMEs business performance.	Supported

#### 4.11 Summary

This chapter presents the results of analyses being conducted for this study. The first part of this chapter elaborated the results of analyses being conducted for this study. This followed by the second section that reported on the data collection process and survey response, including the following-up procedure that had been carried out in order to increase the response rate. The third section showed the results of the non-response bias, followed by the fourth section that explained about the data cleaning which included the detection of missing data and outliers. Profile of the 207 respondents', including their demographics and firms' background were explained in the first subchapter of the fifth section, followed by the descriptive analysis of all the constructs in the dimensions in the second subchapter.

While the sixth section presented the results of data analysis conducted, including factor analysis, KMO and Sphericity Tests, and Principal Component Analysis (PCA) conducted on each variable in this study, the seventh section reported the preliminary analyses conducted to fulfil the underlying assumptions of multiple regression analysis such as normality, linearity, homoscedasticity and multicollinearity. The eighth section then reported the correlation analysis where all the entire dimensions in the framework were found to have significant relationships with the business performance of the women-owned SMEs. This followed by the ninth section of this chapter which reported the results of multiple regressions and mediated regressions among the variables, including EM, EO, ethics and the women-owned SMEs business performance, to test the hypotheses established in this study.

The results revealed that only three of the EM's dimensions; namely resource orientation, reward philosophy and strategic orientation supported the hypotheses on the direct relationships with the women-owned SMEs business performance. Then, further to the analysis on the mediated relationships, it was found that reward philosophy and strategic orientation supported the hypotheses. Meanwhile, EO's dimensions; namely innovativeness, proactiveness, and risk taking, supported all the hypotheses on direct relationships with the women-owned SMEs business performance. However, for mediated relationships, only proactiveness and risk taking supported the hypotheses. Section ten in this chapter illustrated the summarization of the hypotheses that had been tested, followed by the final section that put a lid on this chapter. The discussions of the findings were then presented in the following chapter.



**UUM**  
Universiti Utara Malaysia

## **CHAPTER 5 DISCUSSIONS AND CONCLUSIONS**

### **5.1 Introduction**

The purpose of this chapter is to discuss the findings presented in the previous chapter in relation to the research questions and hypotheses developed for this study. The first section of this chapter provides a key descriptive summary of this study. This includes a discussion on all the demographic results that are obviously appropriate for further amplification. In the second section, the researcher discusses the study findings on the platform of the research questions and objectives in relation to the underpinning theories and previous studies. In the third section, the researcher discusses on the theoretical and practical implications of the present study to both the body of knowledge as well as the context of the research. In section four, the researcher identifies some limitations of the study and recommends some directions of future research on the basis of the research constraints. Finally, in the last section, the researcher concludes the research based on such research findings.

### **5.2 Discussions on Sample Background Analysis Results**

This section discusses about the results of demographic profiles of the 207 women-owned SMEs who responded to this survey and is believed to be worth further elaboration in this study. They are discussed in the following sections.



## **5.2.1 Profile of the Respondents**

The first section discusses on the respondents' profiles.

### **5.2.1.1 Current Age**

The current age categories of the respondents' result as presented in Table 4.2 confirms the findings of many researchers (Gadar & Yunus, 2009; Wan Mustapha et al., 2011; Redzuan et al., 2012; F. Hassan et al., 2014; Al Mamun, 2016) that majority of the women entrepreneurs in their study in the Malaysian context were in their middle aged or mostly above 40 years old. On the other hand, Carter and Shaw (2006), Roomi and Parrott (2008), Ekpe (2011), Thayammal (2011), Yasa, Apriliani and Nor (2011) and Subramaniam and Islam (2014) found that women entrepreneurs in France, Pakistan, Nigeria, India, Indonesia and Pakistan respectively, were above 30 years of age. Meanwhile, in the US, a mean age of women entrepreneurs were revealed as 36 years old (W. D. Allen, 2000).

From the study, it is also clear that young women entrepreneurs have shown less involvement in business operations. This is parallel with the findings by Thayammal (2011) that respondents who were in the group of 25 years and below were relatively fewer in number. Based on the study by Yasa et al. (2011), age of respondents was convincingly related with productivity where respondents below 30 years old usually did not have enough experience in developing businesses, while 30 to 39 years old was the most productive age, and labour productivity for respondents at 50 years old

and over normally had started to drop. Allen, Elam, Langowitz, and Dean (2007) also argued that most women aged between 25 to 34 years old were found in the early-stage of entrepreneurship which is contradicted with this study that required the women entrepreneurs with business experiences of 3 years and above with the firms as the respondents.

#### **5.2.1.2 Age When Started Owning/Managing Business**

From Table 4.3, it can be concluded that most of the women entrepreneurs started off their businesses in the range of 31 to 40 years old, yet those aged more than 50 years old had less enthusiasm in starting the businesses. This result is in line with the finding by Che Ismail, Mohd Shamsudin, and Chowdhury (2011) in their study in the Malaysian context that most women who were between the age of 25 and 45 are most likely to be involved in entrepreneurial activity. Gadar and Yunus (2009) also argued that most of the women entrepreneurs in Malaysia had started their business between the ages of 31 and 50 (61.3 per cent).

#### **5.2.1.3 Marital Status**

The finding in Table 4.4 is consistent with the current age groups of the respondents because the sample is consisted of majority of the women owner-managers who are in their middle age. Interestingly, married women are more interested into venturing businesses which reflected in their personal goals, which is not only to support their family, but also for their own self-satisfaction.

This result also replicated the results by Selamat, Abdul Razak, Abdul Gapor, and Sanusi (2011), Redzuan et al. (2012), Hassan et al. (2014), Mahajar and Mohd Yunus (2012) and Al Mamun (2016) who found that most of women entrepreneurs in Malaysia have been married. This finding is also parallel with Roomi and Parrott (2008), Arasti and Kanani (2011), Ekpe (2011), Thayammal (2011), Garba, Mansor, and Djafar (2013), and Subramaniam and Islam (2014) that most women entrepreneurs in Pakistan, Iran, Nigeria, India, and Singapore respectively were married. Salleh and Mohd Osman (2007) then further verified that married women are more interested into venturing businesses which reflected in their personal goals, although many of them displayed more economically inclined goals, majority of them admitted that they choose to be in business in attempt to balance between family and work.

However, in other cases, Wan Mustapha et al. (2011) argued that women who played the roles as breadwinners to the families were the single mothers and women whose husbands were disabled. As of October, 2010, Albert (2011) confirmed that for the first time ever in the history of the United States, the number of unmarried adult women outnumbered adult married women. This evidenced to the fastest growing demographics of single women entrepreneurs in the country, and thus, in keeping with the Kaufmann Foundation Report which shows that women who are single, divorced or widowed start more businesses than men in their respective categories of marital status (Cohoon et al., 2010). Finding by Tundui and Tundui (2013) was also

in contradicted with this study that being married had a negative impact on enterprise performance.

#### **5.2.1.4 Race**

Result of respondents' races in Table 4.5 shows that Malay women entrepreneurs responded the most to this study. This result is in link with the studies by Alam, Mohd Jani, and Omar (2011), Mahajar and Mohd Yunus (2012), Arham (2014), Jafri, Ismail, Khurram, and Soehod (2014), Omar, Nazri, and Che Wel (2014), and Mat Rashid, Che Ngah, Mohamed, and Mansor (2015). The possible explanation for there being mostly Malay respondents in this study is because the sources of data collection was from the websites of Peniagawati and Usahanita which both of them consist of mostly Malays or Bumiputera.

Yet, this finding also appeared to be one of the study's limitations due to the irregular distribution of the respondents who was targeted to be received from all over Malaysia and from other races as well. Also, due to the fact that all ethnic Malays are Muslim (Hickling & Wu, 1995), as argued by (Quinn, 1997), respondents in the religious group, who are the members of the organisations with the most explicitly ethical dimension to their constitutions, expressed on overall higher concern on ethical issues. In addition, important features such as the initiatives, opportunities exploration, perseverance, motivation, enhancing knowledge, concern and discipline on the quality of work, commitment to the responsibilities entrusted and other factors that is needed to be a successful entrepreneur are featured in the

Muslims (Nordin, 2009). That is to say, religion have an influence on an individual's perception of ethics (Hunt & Vitell, 1986). However, despite of this finding, Yahya, Choong, Othman, Abdul Rahman, and Moen (2011) confirmed that the over-representation of Malays might not influence the generalisation of the outcomes as people regardless of race have similar perceptions of many organisational factors that associated with the organisational success of SMEs in Malaysia such as leadership and entrepreneurial skills, and others.

#### **5.2.1.5 Educational Background**

In relation to educational background, Table 4.6 shows the importance of higher academic qualification for an owner-managerial position with the majority of the sample consisted with respondents who finished their education ranging from secondary school until first degree level. Interestingly, this result confirms the findings of many researchers (Gadar & Yunus, 2009; Idris, 2009; Roomi & Harrison, 2010; Yasa et al., 2011; Mahajar & Mohd Yunus, 2012; Redzuan et al., 2012; F. Hassan et al., 2014; Teoh & Chong, 2014; Mat Rashid, Che Ngah, et al., 2015; Mat Rashid, Mohamad, et al., 2015) that majority of their study sample had attended at least high schools.

Education of entrepreneurs has been repeatedly cited as an effective way to reduce small business failures (Roomi & Harrison, 2010). Yet, in other cases, Tundui and Tundui (2013) found that education level of business owners was not a significant predictor of enterprise performance, but experience and skill were found more

significant factors for women in becoming entrepreneurs (Wan Mustapha et al., 2011). Garba et al. (2013) in their study revealed that more women gradually became entrepreneurs and financially independent due to the improvement in their education. Besides finding that most of the outstanding women entrepreneurs attended above the school level, Rao, Venkatachalm, and Joshi (2013) also debated that a higher level of education delivered the individual with more confidence in dealing with the business. The results are also in line with Carter and Shaw (2006) who revealed that most of the women entrepreneur in France had high educational background, which in line with Subramaniam and Islam (2014) in their study among the women entrepreneurs in Singapore.

However, in contrary, Ekpe (2011) found that women entrepreneurs in Nigeria and in most developing countries had low educational levels compared to their counterparts in developed countries. This is supported by Yusuf (2012) that women entrepreneurs in Malaysia chose their paths into entrepreneurship due to their low academic qualifications that disbarred them from getting a well-paid job, while Tambunan (2009) explained that low representation of women in entrepreneurship was due to low level of education, lack of capital, and cultural or religious constraints. The scenario is similar with the women entrepreneurs in India (Revathi & Krishnan, 2012), Pakistan (Salman, 2009), and in the United States (Gatewood, Brush, Carter, Greene, & Hart, 2008) although in 2010, survey by Catalyst (Lang, 2010) to the US Joint Economic Committee confirmed that women earned more degrees than men in the categories such as bachelor's (women 57.4 per cent and men

42.6 per cent), master's (women 60 per cent and men 40 per cent), doctorate (women 50.1 per cent and men 49.9 per cent), while first professional degree stated the same percentage of 50 per cent each for women and men.

#### **5.2.1.6 Number of Children**

From Table 4.7, it can be concluded that most of the respondents have between two to five children, which is parallel with their marital status (Yasa et al., 2011) and their decision to be in business in attempt to balance between family and work.

This study is also in line with the works of Gadar and Yunus (2009), Ekpe (2011) and Roomi and Parrott (2008) that women entrepreneurs in Malaysia, Nigeria and Pakistan had between three to five children respectively. In India, most of the respondents in India belonged to the nuclear family system (Thayammal, 2011), while in Singapore, most of the married women had from 1 to 3 children (Subramaniam & Islam, 2014).

#### **5.2.1.7 Location by State**

From Table 4.8, it can be concluded that women owner-managers from the Central Region of Malaysia (Kuala Lumpur, Selangor and Putrajaya) responded the most towards this study, which accounted for 35.3 per cent (73) of the total respondents. This is due to the fact that most of the SMEs are flooded in the states of Federal Territory, Selangor, Perak and Johor (DOSM, 2010). Idris (2008a) then supported

that women entrepreneurs who were involved in the consumer services sector mostly located in the city.

#### **5.2.1.8 Total Working Experience**

Results presented in Table 4.9 concluded that according to Raman, Anantharaman, and Jayasingam (2008), the educated and experienced women are more attracted in becoming entrepreneurs compared to the low educated and less experienced ones. Besides being supported by the work of Roomi and Parrott (2008) that women entrepreneurs were exposed to business experiences before started off their current businesses, the working experience indicated that these respondents were well-versed and knowledgeable in the jobs. More importantly, Tundui and Tundui (2013) verified that previous entrepreneurial experience was positively related to profits increase. Therefore, women entrepreneurs perceived obstacles to becoming entrepreneurs due to the inadequate working experience and/or education, and went in search of training to overcome those barriers (Roomi & Harrison, 2010).

However, another perspective holds that most of the women entrepreneurs in India were housewives before starting their enterprises (Thayammal, 2011). Only a small number of them were either students or have working experiences (Thayammal, 2011). This phenomenon is similar to women entrepreneurs in Malaysia from the study by Hassan et al. (2014). Similarly, the works of Ekpe (2011) also found that women entrepreneurs were not on paid jobs before starting their businesses. In addition, a study by I. E. Allen et al. (2007) also revealed that women entrepreneurs



were lacked of experiences and they were found in nascent or early-stage entrepreneurship.

#### **5.2.1.9 Years of Experience with the Firm**

When comparing between the respondents' working experiences and their years of experiences with the firms, it is interesting to note that most of the respondents have below 15 years of experiences (88.4 per cent) with the firm, despite of having between 6 to 15 years, and above 20 years of working experiences (73.9). Table 4.10 shows this finding which is in line with the works of Ekpe (2011) who found that women entrepreneurs in Nigeria had three to five years of experience in businesses generally, which is sufficient to verify the previous works of Ekpe (2011), Aziz and Mahmood (2011), Salman (2009), Carter and Shaw (2006), and A. C. Cooper and Artz (1995) who emphasized that three years of business experience is appropriate to evaluate an entrepreneur. Thus, this could imply that most of the women managers quit their jobs and started off their own businesses only after they have gained a few years of experiences in their previous jobs.

In Malaysia, a study by Al Mamun (2016) proved that experience plays a crucial role in the performance of the women-owned SMEs. According to Morrison (2010), women with industry experience would have the ability to communicate the relationship between strategy and business outcomes more effectively. Additionally, Gundry and Welsch (2001) in Redzuan et al. (2012) also argued that years of experience in the businesses or years of establishment of the businesses significantly

effected the company growth. However, this result rejected the results by Hassan et al. (2014) who found that most of the women entrepreneurs have been doing business for more than 10 years.

## **5.2.2 Profile of the Firms**

The second section discusses about their firms' background.

### **5.2.2.1 Ways of Owning the Firm**

From the result in Table 4.11, the finding is in keeping with the works of Kuzilwa (2005), Che Ismail et al. (2011), Ekpe (2011), and Subramaniam and Islam (2014) who found that most of the businesses owned by women entrepreneurs were start-ups which were funded from their own resources. More importantly, the common way of explaining why women start a business was associated with the individual needs for independence, self-achievement and job flexibility (Gadar & Yunus, 2009). Concurrently, from many of the women surveyed, the founding of their own enterprise had been the only way of managing economically (Rao et al., 2013).

On the other hand, it was also found that the entrepreneurs were more likely to be from families in which the parents owned businesses (Davidsson & Honig, 2003; Rao et al., 2013; Casson, 2004 in Tundui & Tundui, 2013a). Besides, studies also had found that businesses started by partners were more likely to grow than a business started by a single person (Lussiers & Preifer, 2001 in Tundui and Tundui, 2013a).

### **5.2.2.2 Firm Age**

From the result in Table 4.12, it can be concluded that nearly half of the respondents' firms were established between 5 to 10 years before, which is in keeping with the finding by Ekpe (2011) that most of the enterprises owned by women in Nigeria were less than 10 years old. Nevertheless, a study by Thayammal (2011) found that majority of the respondents had between 1 to 5 year old enterprises, or known as young firms that tend to be highly entrepreneurial (Abdul Majid et al., 2011). This was in line with Tundui and Tundui (2013a) that businesses aged less than five (5) years performed better than otherwise, and pursuant to B. S. Anderson and Eshima (2013) that younger firms were able to generate higher levels of performance compared to older firms.

### **5.2.2.3 Structure of Ownership**

Table 4.13 reveals that majority of the women-owned SMEs in Malaysia are sole proprietorships (61.4 per cent), supporting the notion that sole proprietorships are the simplest and most common structure chosen to start a business (Kuzilwa, 2005), provided the women owner-managers gained enough experiences while working with the previous companies, and are confident enough to start off their own businesses without considering partnerships or private limited. This finding is in line with Che Ismail et al. (2011), Thayammal (2011), Okurut and Ama (2013), and

Hassan et al. (2014) that majority of the women entrepreneurs in Malaysia, Botswana and India conducted their businesses as sole proprietorship ventures.

#### **5.2.2.4 Firm Involvement**

Result in Table 4.14 shows the involvement of women as an owner-manager at the firm. Here, when comparing between Table 4.13 and Table 4.14, it is clear that the respondents are involved actively in the firms due to their sole proprietorships which entitled the owner-managers to all profits and are responsible for all the business's debts, losses and liabilities. A study of women entrepreneurs in Iran by Javadian and Singh (2012) supported this finding that the respondents were active in different industries ranging from agriculture and carpet to manufacturing and transportation.

#### **5.2.2.5 Number of Employees**

The result in Table 4.15 is parallel with Thayammal (2011) for the case of women entrepreneurs in India that most of the respondents had between 10 to 12 employees, followed by those who had above 12 employees in their enterprises. Yet, only a few of the respondents have less than 4 employees in their enterprise. Thus, it can be concluded that most of the women owner-managers in the population are managing small firms, followed by medium enterprises.

According to the definitions of small and medium enterprises (SMEs) by SME Corp (2013), one company is considered as small when; (1) sales turnover from

RM300,000 to less than RM15 million OR full-time employees from 5 to less than 75 (manufacturing sector); (2) sales turnover from RM300,000 to less than RM3 million OR full-time employees from 5 to less than 30 (sales and other sectors). In addition, for sales and other sectors, one company is considered medium when sales turnover from RM3 million to not exceeding RM20 million OR full-time employees from 30 to not exceeding 75.

From the above, it is clear that small and medium-sized enterprises in Malaysia are differentiated according to the number of employees and sales turnover. The significantly larger number of small enterprises is consistent with the actual distribution of small and medium enterprises in Malaysia, where there are more small enterprises than medium-sized enterprises. In fact, small enterprises are even regarded as the main contributors to economic growth in the developing countries (Jamil & Mohamed, 2011; Akinruwa, Awolusi, & Ibojo, 2013). This could imply that women entrepreneurs are actively engaged in micro, and small and medium enterprises (SMEs) with less than 50 employees that are still considered manageable within the power of a woman who are looking for work and family balance.

#### **5.2.2.6 Industry**

Table 4.16 shows the supporting evidence to the statement that women entrepreneurs are highly involved in the service sector which accounts for 91.7 per cent, followed by manufacturing sector with 7 per cent, and finally less than 1.0 per cent in the

other sectors such as construction, agriculture, mining and quarrying (DOSM, 2011b).

This finding is parallel with the works of Thayammal (2011), and Okurut and Ama (2013) that women and youth microenterprises are involved mainly in the trade and services sectors. Furthermore, in line with the findings of Carter and Shaw (2006), Gatewood et al. (2008), and Ekpe (2011) that women were more attracted to sectors such as distribution, manufacturing, agriculture, catering and business services.

#### **5.2.2.7 Sub-sector of the Industry**

Result in Table 4.17 then provided evidence that women-owned SMEs in Malaysia still dominated in service sector areas such as education, retail trade, childcare, beauty and healthcare (Mohd Rhouse, 2013). Moreover, in Singapore, women entrepreneurs were found to involve in the service industry which consisted of retail, travel, securities, design and printing, beauty, E-magazine, spa and wellness, real estate, training and education (Subramaniam & Islam, 2014). Yet, in the contrary, Hassan et al. (2014) found that women entrepreneurs were largely involved in food and beverages industry, while Che Ismail et al. (2011) revealed that most of the women entrepreneurs in their study were operating in retail trade with few engaged in other sectors like food, services, agriculture and others.

### 5.3 Discussions on the Main Findings

In this study, four main research questions have been explored, based on the objectives of the study that is to examine the relationships between the dimensions of entrepreneurial management (EM), namely entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy and strategic orientation), three dimensions of entrepreneurial orientation (EO), namely innovativeness, proactiveness and risk taking), ethics and women-owned SMEs business performance. Basically, the objectives of this study as presented in Chapter 1 are:

- 1) To determine the significant relationship between entrepreneurial management (EM) and women-owned SMEs business performance.
- 2) To determine the significant relationship between entrepreneurial orientation (EO) and women-owned SMEs business performance.
- 3) To determine whether ethics mediates the relationship between entrepreneurial management (EM) and women-owned SMEs business performance.
- 4) To determine whether ethics mediates the relationship between entrepreneurial orientation (EO) and women-owned SMEs business performance.

Therefore, to meet these objectives, the following research questions were developed:

- 5) Is there a significant relationship between entrepreneurial management (EM) and women-owned SMEs business performance?
- 6) Is there a significant relationship between entrepreneurial orientation (EO) and women-owned SMEs business performance?
- 7) Does ethics mediate the relationship between entrepreneurial management (EM) and women-owned SMEs business performance?
- 8) Does ethics mediate the relationship between entrepreneurial orientation (EO) and women-owned SMEs business performance?

The next discussion sections will be addressed according to these four research objectives and research questions.

### **5.3.1 To Determine the Significant Relationship between Entrepreneurial Management (EM) and Women-owned SMEs Business Performance**

This study used six dimensions of entrepreneurial management (EM) as proposed by Brown, Davidsson, and Wiklund (2001) and the dimensions are entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy, and strategic orientation. The results indicated that the dimensions of EM (entrepreneurial culture, growth orientation, management structure, resource



orientation, reward philosophy and strategic orientation) explained 47.4 per cent of the women-owned business performance ( $R^2=0.474$ ,  $F=30.070$ ,  $p<0.001$ ).

Further, to answer the first research question, six hypotheses were developed. The first hypothesis was developed to examine the significant relationship between entrepreneurial culture and women-owned SMEs business performance (Hypothesis 1a). The result of regression analysis revealed that entrepreneurial culture does not relate in the women-owned SMEs business performance ( $\beta=0.072$ ,  $t=1.347$ ,  $p>0.05$ ).

The second hypothesis was developed to examine the significant relationship between growth orientation and women-owned SMEs business performance (Hypothesis 1b). The result of regression analysis indicated that growth orientation does not relate in the women-owned SMEs business performance as well ( $\beta=-0.064$ ,  $t=-1.706$ ,  $p>0.05$ ).

The third hypothesis stated that there is a significant relationship between management structure and women-owned SMEs business performance (Hypothesis 1c). The result of regression analysis also indicated that management structure does not relate in the women-owned SMEs business performance ( $\beta=-0.028$ ,  $t=-0.604$ ,  $p>0.05$ ).

The fourth hypothesis then stated that there is a significant relationship between resource orientation and women-owned SMEs business performance (Hypothesis

1d). The regression result in Chapter 4 supported this hypothesis ( $\beta=0.220$ ,  $t=4.224$ ,  $p<0.01$ ).

In the fifth hypothesis, it was postulated that reward philosophy significantly related to the women-owned SMEs business performance (Hypothesis 1e). The regression result in Chapter 4 then supported this hypothesis ( $\beta=0.108$ ,  $t=2.321$ ,  $p<0.05$ ).

Finally, the sixth hypothesis was developed to examine the significant relationship between strategic orientation and women-owned SMEs business performance (Hypothesis 1f) and the regression result in Chapter 4 then supported this hypothesis ( $\beta=0.161$ ,  $t=3.779$ ,  $p<0.001$ ).

Based on the empirical tests conducted in the previous chapter, it was clear that only three hypotheses (Hypothesis 1d, Hypothesis 1e, and Hypothesis 1f) from the six dimensions of entrepreneurial management (EM) showed the significant effects on women-owned SMEs business performance. On the contrary, the other three dimensions (Hypothesis 1a, Hypothesis 1b, and Hypothesis 1c) failed to predict the women-owned SMEs business performance ( $p>0.05$ ).

These findings are particularly consistent and supported by the RBV theory, which categorised the firm's resources according to physical, human and organisational capital resources (Barney, 1991), and that management falls under organisational capital which includes structures for reporting, formal and informal planning, and the whole organising process in the firm (Barney, 1991). Thus, not only one of the

intangible resources that is crucial factors for firm success (Barney, 1991; Hall, 1993), but also the sources of performance (Grant, 1991).

To date, even though significant relationship were found between EM and firm growth (Eliasson & Davidsson, 2003; Hameed & Ali, 2011), supporting the notion that the firms tend to be more entrepreneurial with regard to the EM's dimensions, however the studies were conducted considering EM as a unidimensional concept, whereby EM as multidimensional concepts may effect performance in many ways. Therefore in this study, it was proven that out of six dimensions of EM, only three dimensions are significantly related with women-owned SMEs business performance (resource orientation, reward philosophy and strategic orientation) which suggested that some of the EM dimensions used by the overall SMEs might not be relevant to the women-owned firms, further added to the existing literature on the six sub-dimensions of EM that were proposed, yet have been very limited follow-up empirical efforts on the relationships between those constructs and firm performance (Lin et al., 2006).

Further added, this study provided the evidences that there is a significant relationship between resource orientation, reward philosophy, strategic orientation and women-owned SMEs business performance. These findings are paralleled with the work by Lin et al. (2006) on the resource orientation, and contradicted with their findings on reward philosophy and strategic orientation. Meanwhile, compared to the work of Bradley et al. (2011), the above findings are paralleled with them in terms of

reward philosophy, yet, contradicted in the results of resource orientation and strategic orientation. In other studies, strategic orientation that was defined as an organization's orientation in strategy creation, and concerned with the decisions that businesses make to achieve superior performance (Slater et al., 2006), was found to significantly related with the performance (Wiklund & Shepherd, 2005; Runyan et al., 2006; Ibrahim & Mohd Shariff, 2015).

### **5.3.2 To Determine the Significant Relationship between Entrepreneurial Orientation (EO) and Women-owned SMEs Business Performance**

Entrepreneurial orientation (EO) in this study consists of three dimensions: innovativeness, proactiveness and risk taking. Thus, there were also three hypotheses developed to examine these relationships. The results indicated that innovativeness, proactiveness, and risk taking explained only 27.9 per cent of business performance of women-owned SMEs ( $R^2=0.279$ ,  $F=26.130$ ,  $p<0.01$ ), that was lower than the dimensions of entrepreneurial management (EM).

The first hypothesis developed to examine this relationship (Hypothesis 2a) stated that there is a significant relationship between innovativeness and women-owned SMEs business performance. The regression analysis result in Chapter 4 supported this hypothesis ( $\beta=-0.089$ ,  $t=-2.177$ ,  $p<0.05$ ).

In the second hypothesis, it was postulated that proactiveness significantly related to the women-owned SMEs business performance (Hypothesis 2b). The regression analysis result in Chapter 4 supported this hypothesis ( $\beta=0.136$ ,  $t=3.561$ ,  $p<0.001$ ).

Finally, the third hypothesis was developed to examine the significant relationship between risk taking and women-owned SMEs business performance (Hypothesis 2c), and the regression result in Chapter 4 supported this hypothesis as well ( $\beta=0.238$ ,  $t=5.354$ ,  $p<0.001$ ).

As expected, the significant results of these hypotheses (Hypothesis 2a, Hypothesis 2b, and Hypothesis 2c) under research question and objective number two revealed that all of the three EO's dimensions (innovativeness, proactiveness, and risk-taking) were found to exert influence on the business performance of women-owned SMEs in Malaysia, further shows that this variable is one of the most important predictors to the success of a firm since it was related to performance.

These findings are consisted and as well supported by the Resource-Based View (RBV) theory under which such relationships were proposed. According to this perspective, for a firm to have superior performance, it must control intangible valuable, rareness, inimitable, and non-substitutable resources, to be used in implementing strategy that is not simultaneously being implemented by current or potential competitors (Barney, 1991, 1995). In addition, the RBV theoretically foresees intangible resources to consist of knowledge, skills and reputation and entrepreneurial orientation such as proactiveness, innovativeness and risk-seeking ability (Runyan et al., 2006), and parallel with EM, EO is also being determined as one of the crucial factors for firm success (Barney, 1991; Hall, 1993)

Overall, the significant results of these three dimensions of EO show that this variable is undeniably one of the important predictors to the success of a firm, since it is related to the performance. Furthermore, recent findings from the Malaysian scenario in the context of women-owned SMEs regarding the dimensions of EO namely innovativeness, proactiveness, and risk-taking, and the business performance of women-owned SMEs were also proven by Ali and Ali (2013) that the variables were all significantly related.

Thus, the findings in this study also support the notions that the dimensions of EO vary independently in their influence on the business performance and that entrepreneurs who are willing to exploit each of these factors have a high possibility of success. Furthermore, SMEs in Malaysia need to be efficient and brave enough to nurture each factor of EO in order to achieve success for their organisations in the environment of globalisation, legislation, reduction of trade barriers and market expansion due to the advances in technology and innovations (Smit & Watkins, 2012). To this end, it is also evidently enough to confirm that it is both theoretically and empirically supported that the dimensions of EO namely innovativeness, proactiveness, as well as risk taking influenced the business performance of Malaysian women-owned SMEs, further add to the body of knowledge in the contexts of the study among women entrepreneurs.

### **5.3.3 To Determine Whether Ethics Mediates the Relationship between Entrepreneurial Management (EM) and Women-owned SMEs Business Performance**

The first indirect relationship is concerned with the mediating effect of ethics on the relationships between EM (entrepreneurial culture, growth orientation, management structure, resource orientation, reward philosophy and strategic orientation) and women-owned business performance. Hence, to answer the third research question, six hypotheses were developed. Specifically, the hypotheses stated as:

H3a: Ethic mediates the relationship between entrepreneurial culture and women-owned SMEs business performance.

H3b: Ethic mediates the relationship between growth orientation and women-owned SMEs business performance.

H3c: Ethic mediates the relationship between management structure and women-owned SMEs business performance.

H3d: Ethic mediates the relationship between resource orientation and women-owned SMEs business performance.

H3e: Ethic mediates the relationship between reward philosophy and women-owned SMEs business performance.

H3f: Ethic mediates the relationship between strategic orientation and women-owned SMEs business performance.

Based on the empirical tests conducted in the previous subchapter, it was clear that only three hypotheses (Hypothesis 1d, Hypothesis 1e, and Hypothesis 1f) from the six dimensions of entrepreneurial management (EM) showed the significant effects on women-owned SMEs business performance, while the other three dimensions (Hypothesis 1a, Hypothesis 1b, and Hypothesis 1c) failed to predict the direct effects on the women-owned SMEs business performance ( $p > 0.05$ ).

Therefore, since the first condition set forth by Baron and Kenny (1986) was not met, no further tests for mediation were conducted towards these three dimensions of entrepreneurial management (entrepreneurial culture, growth orientation and management structure). Mediation tests were only being conducted among three remaining dimensions of entrepreneurial management namely resource orientation (Hypothesis 3d), reward philosophy (Hypothesis 3e), and strategic orientation (Hypothesis 3f). In addition, for Hypothesis 3a, 3b and 3c, as there were no significant direct relationships between entrepreneurial culture, growth orientation and management structure, and women-owned business performance in this study, the mediating relationship is also not expected to be significant empirically (Baron & Kenny, 1986). Consequently, as the direct relationship was not supported by the former, it is expected to not be supported by the latter as well.



For Hypothesis 3d, the relationship between resource orientation and business performance was found not to be mediated by ethics. In other words, the statistical results revealed that the ethics' construct exerts the mediating influence between resource orientation and women-owned business performance in Malaysia. This result is not consistent with underpinning theory (RBV) that recognized ethics as integrative mechanism between firm resources and performance (Barney, 1991; Grant, 1991).

Subsequently, Hypothesis 3e and 3f were then tested and the results revealed that ethics mediates the relationships between reward philosophy and strategic orientation and women-owned SMEs business performance in Malaysia respectively. Thus, Hypothesis 3e and 3f were supported. Also, to prove that mediation occurs, it is important to establish that the dimensions representing EM have significant relationships with the mediating variable of ethics. As required, significant relationships were shown between two of the EM dimensions namely reward philosophy and strategic orientation, and ethics. The results upheld the relationships between EM (reward philosophy and strategic orientation), and so it can be postulated that two of the dimensions of EM (reward philosophy and strategic orientation) enhances ethics, further supported Hypothesis 3e and Hypothesis 3f.

Thus far, the literature that shows the support for these relationships are still lacking. However, as proposed by Stevenson (1983) that an entrepreneurial firms are driven and motivated by the opportunity, seize it regardless of the resources. In this study,

ethics act as an intangible resource that promote the firm's performance by enhancing the ethical behaviour in the organizational culture that will further determine the intra-organizational relationships. By doing this, not only the employee attitudes would be influenced in a positive way (Elci & Alpkan, 2009), but also would definitively contribute to the organizational performance (Choi et al., 2013; Karatepe, 2013; Hijal-Moghrabi et al., 2015).

Furthermore, in agreement with the HRM's point of view that ethical climate speaks to an essential window to comprehend the ethical orientation in an organization, the owner-manager as the decision maker of the firm (J. S. Harrison & Freeman, 1999) should consider the importance of the ethics in their organization due to the fact that ethical organizations tend to be more successful than companies unconcerned about ethics (Fritz et al., 1999; Valentine et al., 2002; Treviño & Nelson, 2004). This also assists in an effective development of EM in their organization.

Another important element in proving that mediation occurs is that there must be a significant relationship between the mediator (ethics) and the dependent variables (performance). The results as presented in Table 4.44 meet this condition and similar results were also discussed in the literature of EM regarding the relationships between ethics and the performance of the women entrepreneurs (Still & Timms, 2000; Marta, Singhapakdi, & Kraft, 2008; Oumlil & Balloun, 2009; Abbasi, Rehman, & Bibi, 2011). Thus, previous researchers confirmed that ethical behaviour of the owner-managers spoke to an essential window to comprehend the ethical

orientation in an organization by reflecting significant results in their studies. These findings supported the argument in this study that ethics could mediate the relationship between EM and women-owned business performance based on their critical role in transmitting EM into real performance outcomes.

In other words, the statistical analysis in this study proved that ethics exerted an influence on the relationships between reward philosophy and strategic orientation of the EM dimensions, and women-owned business performance in Malaysia. These results had not come with any surprised as all the supported hypotheses were consistent with the ethics' perspective that posited that ethics is an intangible resource that is more likely to be a source of competitive advantage (Manroop et al., 2014), that effects on the firm growth positively and enhances the performance in overall (Amine et al., 2012).

Empirically, although the study on the mediating effect of ethics on the relationships between the dimensions of EM, particularly in reward philosophy and strategic orientation, and women-owned SMEs business performance has not been found in the available literature, some studies are considered relevant in this discussions' section for the purpose of comparison. Specifically, besides supporting the fact that reward philosophy had a positive relationship with firm growth (Bradley et al., 2011), reward philosophy has also been found to mediate the relationship between EO and firm performance, and between EO and marketing capability (Pratono & Mahmood, 2015). In a nutshell, the present thesis revealed that the reward

philosophy and performance relationships were rather through some reconfiguration mechanisms and ethics had been hypothesized as an interrelated mechanisms between firm's resources and its performance (Victor & Cullen, 1988; Christie et al., 2003).

On the other hand, the dimension of strategic orientation that was defined as an organization's orientation in strategy creation, and concerned with the decisions that businesses made to achieve superior performance (Slater et al., 2006). According to Venkatraman (1989), strategic orientation refers to the general pattern of various means employed to achieve the business, and the concept of strategic orientation is developed to operationalize and measure business strategies using six dimensions, including aggressiveness, analysis, defensiveness, futurity, proactiveness, and riskiness (Venkatraman, 1989).

From the above, it could be concluded that the dimensions of strategic orientation and EO were partly overlapping and in fact, EO itself was described as "strategic orientation" (Pehrsson, 2016). This is parallel with the work of Covin and Slevin (1989) that described EO as strategic posture of companies through three separate dimensions namely innovativeness, proactiveness, and risk taking. Also, as a strategic resource, EO had been found to have a significant positive relationship to business performance (Wiklund & Shepherd, 2005; Runyan et al., 2006). On one hand, strategic orientation as in EO, market orientation (MO), learning orientation (LO), and technology orientation (TO) was found to relate significantly with firm

performance except for EO (Ibrahim & Mohd Shariff, 2015), while on the other hand, strategic orientation showed a non-significant relationship towards the firm growth (Bradley et al., 2011). There is yet a study has been found on the mediating effect of the single dimension of strategic orientation.

Thus, the findings of this study highlight the importance of being ethical in conducting business since ethics are proven to be one of the vital predictors in enhancing the relationships between EM dimensions and business performance particularly among the women-owned SMEs. In conclusion, the significance of ethics in enhancing the relationships between EM dimensions namely reward philosophy and strategic orientation should be highlighted and further investigated since they were proven to be among the most important factors that play their part in the reconfiguration mechanisms in the context women-owned SMEs' study.

#### **5.3.4 To Determine Whether Ethics Mediates the Relationship between Entrepreneurial Orientation (EO) and Women-owned SMEs Business Performance**

The next indirect relationship is concerned with the mediating effect of ethics on the relationships between EO (innovativeness, proactiveness and risk taking) and women-owned business performance. Hence, to answer the fourth research question, three hypotheses were postulated. Specifically, the hypotheses stated as:

H4a: Ethic mediates the relationship between innovativeness and women-owned SMEs business performance.

H4b: Ethic mediates the relationship between proactiveness and women-owned SMEs business performance.

H4c: Ethic mediates the relationship between risk taking and women-owned SMEs business performance.

Based on the empirical tests conducted in the subchapter 5.2.2, it was clear that all the hypotheses (Hypothesis 2a, Hypothesis 2b, and Hypothesis 2c) of the direct effects of EO on the women-owned SMEs business performance showed the significant relationships. Therefore, since the first condition set forth by Baron and Kenny (1986) was met, further tests for mediation were conducted towards all these three dimensions of EO namely innovativeness (Hypothesis 4a), proactiveness (Hypothesis 4b) and risk taking (Hypothesis 4c). Consequently, as the direct relationship was supported by the former, it is expected to be supported by the latter as well (Baron & Kenny, 1986).

In addition, to prove that mediation occurs, it is important to establish that the dimensions representing EO have significant relationships with the mediating variable of ethics. As required, significant relationships were shown between two of the EO dimensions, namely proactiveness (Hypothesis 4b) and risk taking (Hypothesis 4c), and ethics. The results upheld the relationships between EO (proactiveness and risk taking), and so it can be assumed that two of the dimensions of EO (proactiveness and risk taking) enhances ethics.

Again, for Hypothesis 4a, the relationship between innovativeness and business performance was found not to be mediated by ethics. In other words, the statistical results revealed that the ethics' construct exerts the mediating influence between resource orientation and women-owned business performance in Malaysia. This result is not consistent with underpinning theory (RBV) that recognized ethics as integrative mechanism between firm resources and performance (Barney, 1991; Grant, 1991).

Similar with the facts mentioned in the previous subchapter of EM, to date, the literature of management studies that shows the support for the relationships between EO, ethics and business performance are still inadequate despite of EO being one of the well-developed variables that contribute to the business performance. However, as suggested Covin and Slevin (1991), a smooth conversion of EO into superior performance requires input and activities from all functional groups in the organisation. Particularly, leaders with strong ethical values or owner-managers who were found to be more ethical than the other comparison groups or their subordinates (Longenecker et al., 1996; Phatshwane, 2013) could assist in an effective development of ethics in their organisation and hereafter enhanced the intra-organizational relationships. This would definitely influence the employees' attitudes (Elci & Alpkan, 2009) that further contribute to the organizational performance (Khademfar et al., 2013; Moon & Choi, 2014; Arulrajah, 2015).

Again, another essential factor in proving that mediation occurs is that there must be a significant relationship between the mediator (ethics) and the dependent variables (performance). The results as presented in Table 4.48 meet this condition and similar results were also discussed in the literature of EO regarding the relationships between ethics and the performance of the women entrepreneurs (Cheng & Md. Isa, 2011; Riddle & Ayyagari, 2011; Yusof, 2012; Tlaiss, 2014). That is to say, previous studies in various contexts verified that ethics among owner-managers proved an ethical orientation in the organizations. These findings support the argument in this study that ethics could mediate the relationship between EO and women-owned SMEs business performance.

However, due to the lack of study on the mediating effect of ethics on the relationships between the dimensions of EO, particularly in proactiveness and risk taking, and women-owned SMEs business performance, some studies are considered relevant in this discussions' section for the purpose of comparison. Specifically, Hanafi and Mahmood (2013) as well as Otache and Mahmood (2015) have empirically established that EO and performance relationships have been mediated by competitive advantage and teamwork respectively. Similarly, Jiang, Yang, Pei, and Wang (2014) established the mediating effect of strategic alliances on the relationship between EO and firm performance. That is to say, these studies confirmed that the EO's dimensions and performance relationships are rather through some reconfiguration mechanisms, and again, in this study, ethics have been



hypothesized as an interrelated mechanisms between firm's resources and its performance (Victor & Cullen, 1988; Christie et al., 2003).

To sum up, the vital role of ethics should be emphasized and further explored since it is confirmed to be one of the important factors that contribute to the improvement of the relationships between EO and business performance particularly among women-owned SMEs. In this study, not only EO itself was proven to boost up the connection towards the business performance, but in the existence of the mediating variable of ethics, the relationships between the two variables (EO and business performance) are improved and strengthened. This confirmed that dimensions of EO (proactiveness and risk taking) in this study.

#### **5.4 Implications of the Study**

The results of the study have provided several theoretical implications for future studies and also some practical implications particularly for Malaysian women-owned SMEs.

##### **5.4.1 Theoretical Implications**

The first theoretical implication of this study related to the variables of entrepreneurial management (EM), entrepreneurial orientation (EO) and ethics itself.

Firstly, the studies on EM dimensions available in the current literature as described in Chapter 2 were conducted on the SMEs in various contexts and countries outside Malaysia such as Unites States (Barrett et al., 2007), Hungary (Hortovanyi, 2010), Sweden (Eliasson & Davidsson, 2003; Bradley et al., 2011), Australia (Kuhn et al., 2010), and Turkey (Gürbüz & Aykol, 2009).

In Malaysia, Abdul Majid et al. (2011) conducted a study covering the whole population of the Malaysian-owned high-tech Multimedia Super Corridor (MSC) status companies. Compared to the previous studies, this study however was conducted on the firms owned by women entrepreneurs, which is different from previous setting. In addition, EM concepts are common to be discussed in the male-owned SMEs or SME owner-managers in overall but might be a new concept to the ones owned solely by women. Yet, the study further contributes by extending the theory's application specifically to a population that has not yet been reported as being studied before, the women-owned SMEs particularly in Malaysia. Thus, the findings provide a valuable addition to the literature.

Secondly, this study breaks new ground in examining the direct effect of EM dimensions to the business performance of women-owned SMEs. Furthermore, the study extends the theory of RBV by examining, identifying and testing the effects of those resources that matter most in the success of SMEs. It contributes to the literature by demonstrating that out of six dimensions of EM, only three dimensions are significantly related with women-owned SMEs business performance, namely

resource orientation, reward philosophy and strategic orientation. The findings suggested that some of the EM dimensions used by the overall SMEs might not be relevant to the women-owned firms, further added to the existing literature.

Thirdly, in terms of EO, although there was a study being conducted among women-owned SMEs in Malaysia (Hanafi & Mahmood, 2013), the dimensions used were unidimensional as proposed by Covin and Slevin (1989), which was dissimilar from the current study that employed a multidimensional construct that was being used in majority of the studies related to the EO. Each dimension also was argued to effect performance independently as they are not co-vary, rather vary independently (Lumpkin & Dess, 1996). The finding also contributes to the literature by demonstrating that all the three dimensions of EO namely innovativeness, proactiveness and risk taking, and women-owned business performance are significantly related.

Fourthly, the previous studies on ethics were conducted in Malaysia particularly among the three ethnic groups (Malay, Indian, Chinese) (Furnham & Muhiudeen, 1984), Chief Executive Officers (CEOs), middle- or low-level managers of the organizations that were listed on the Kuala Lumpur Stock Exchange (Zabid & Alsagoff, 1993), Senior and junior level managers (J. L. Gupta & Sulaiman, 1996), and electrical and electronic company registered with SME Corp. (Khademfar et al., 2013). However, this thesis makes an attempt to study the ethics from the view of women owner-managers. The finding revealed that ethics among women owner-managers demonstrated a significant effect on their business performance, further

added to the literature supporting the fact that women entrepreneurs' personally held values or fundamental values that guide their actions as an entrepreneur and how they go about things in order to achieve their goals (Yusof, 2012) were believed to have a strong influence on their business success (Chee et al., 2012).

Fifthly, a major theoretical contribution of this study relates to the conceptual framework that was developed based on the literature gaps identified in the study and supported, and drawn on the platform of Resource-Based View (Barney, 1991). Consequently, the study incorporated ethics as the mediating mechanisms to explain better, and understand how the firm's intangible resources namely EM and EO influence the business performance of women-owned SMEs in Malaysia. In other words, this study enriched the existing theoretical models of the direct relationship between EM and performance (Barrett et al., 2007, Hortovanyi, 2010; Eliasson & Davidsson, 2003; Bradley et al., 2011; Kuhn et al., 2010; Gürbüz & Aykol, 2009; Abdul Majid et al., 2011), and EO and performance (Dafna, 2011; A. Y. S. Ali & Ali, 2013, 2014; Hanafi & Mahmood, 2013; Otache & Mahmood, 2015; Tantasuntisakul, 2015) by plugging in ethics as a mediating mechanism. Therefore, a further understanding of the relationships between these variables (EM, EO and business performance) adds new knowledge to leadership and entrepreneurship literature in the context of women-owned SMEs in Malaysia.

Finally, it was found that ethics is a mediator between EM, EO and women-owned businesses' outcomes. The final theoretical models, besides confirming the direct

relationships between the dimensions of EM (resource orientation, reward philosophy, and strategic orientation) and women-owned SMEs business performance, and between the dimensions of EO (innovativeness, proactiveness and risk taking) and women-owned SMEs business performance, also indicate that the presence of ethics fully mediates the direct relationships between the dimensions of EM (reward philosophy and strategic orientation), and partially mediates the direct relationships between EO (proactiveness and risk taking) and women-owned SMEs business performance. Figure 5.1 and 5.2 shows the values of  $R^2$  that provides an estimate of the strength of the relationships before (path c) and after (path c') ethics is being included in the regression model.

Figure 5.1  
*The Existence of Ethics in the Relationships between EM (Reward Philosophy and Strategic Orientation) and Women-owned SMEs Business Performance*

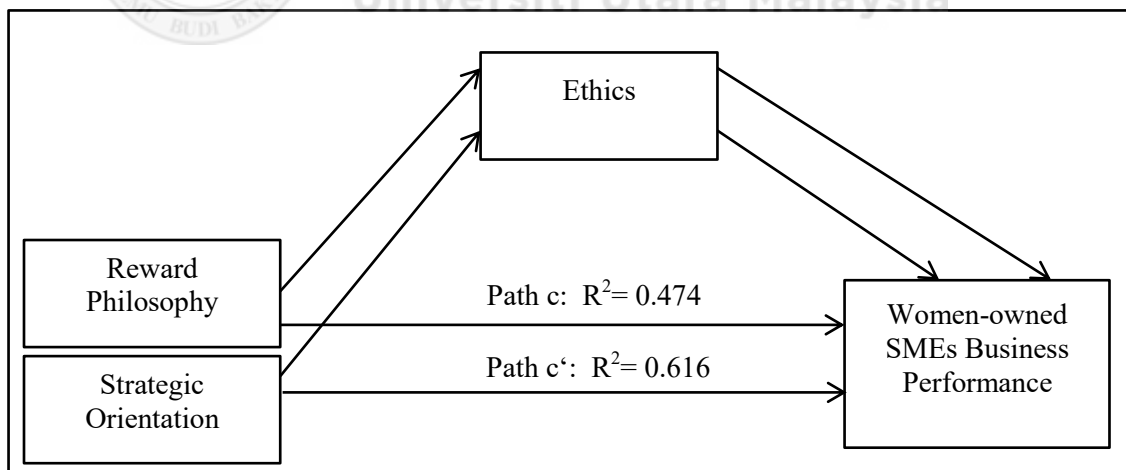


Figure 5.2  
*The Existence of Ethics in the Relationships between EO (Proactiveness and Risk Taking) and Women-owned SMEs Business Performance*

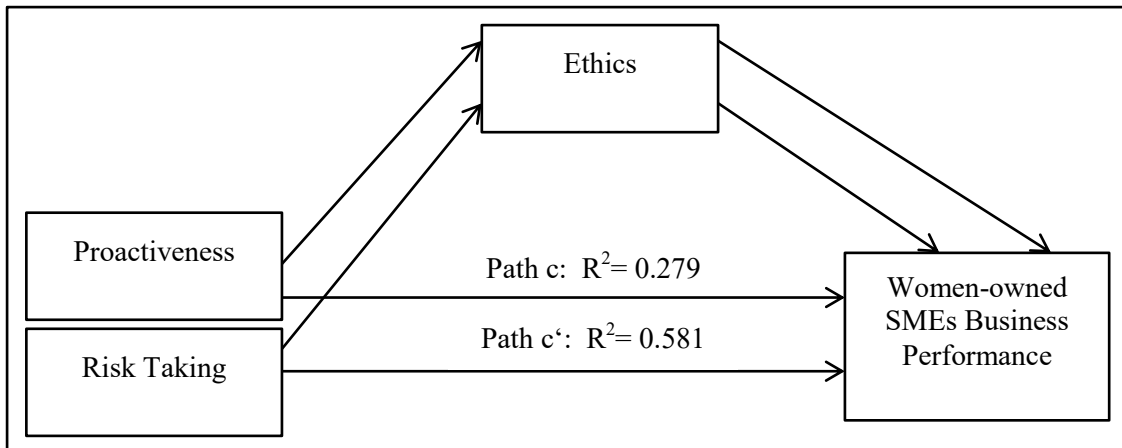


Figure 5.1 justifies that the existence of ethics in the relationships between the dimensions of EM, namely reward philosophy and strategic orientation, and women-owned SMEs business performance improve the research framework from 47.4 per cent to 61.6 per cent. Meanwhile, Figure 5.2 then proves that the relationships between the dimensions of EO, namely proactiveness and risk taking, and women-owned SMEs business performance improve the research framework from 27.9 per cent to 58.1 per cent in the presence of ethics.

These evidences provide the justifications that the additional predictor of ethics could increase the true explanatory power of the model. This also further signifies that women-owned organisation's strategies to expand the business and to earn more profits may be realised not only from EM and EO, but also through the development of ethics. A strong emphasis on ethics may effectively enhance the ability of EM and EO to effect performance, besides indicating that the factors of ethics are effectively

compatible with reward philosophy and strategic orientation of EM, and proactiveness and risk taking of EO.

#### **5.4.2 Practical Implications**

The core objective of conducting this study is to present outcomes which might be beneficial to and practical for women-owned SMEs. Consequently, the present study is also useful to the Malaysian government and its agencies (e.g., SME Corp.), business practitioners, as well as business and academic researchers in furthering our understanding on how intangible resources of this model influence SME performance in the country. In addition, using the findings of the present study, both government and owner-managers would be able to identify which of the aforementioned resources are relevant to their SME performance based on the empirical evidence.

Firstly, past studies revealed that the common problems of women-owned SMEs in Malaysia that hindered them from being successful included individual characteristics, management practices, goals and motivations, networking and finally EO (Teoh & Chong, 2007). Thus, the findings of this study confirmed that besides EM and EO, ethics of women owner-managers are important variables that effect their firms' performance.

Additionally, the effective display and practice of EM, particularly in the dimensions of resource orientation, reward philosophy and strategic orientation, and each factor

of EO, namely innovativeness, proactiveness and risk taking, are perceived to significantly effect the outcomes of the firms owned by women entrepreneurs. Thus, understanding in depth about the dimensions of EM (reward philosophy and strategic orientation) and EO (innovativeness, proactiveness and risk taking), as well as ethics, may help organisations to champion an entrepreneurial spirit to streamline business, promote the delegation of power and decision-making and develop individuals' creative ability. Not only that, but these measures could also further enhance an entrepreneurial culture and spirit among all members of the organisation.

Secondly, the findings of this study would be useful to the policy makers and practitioners especially in designing the future development of entrepreneurship programs for the current and future women entrepreneurs in Malaysia by focusing on ethics that was proven to strengthen of the relationships between the dimensions of EM (reward philosophy and strategic orientation), EO (innovativeness, proactiveness and risk taking) and women-owned SMEs business performance.

As mentioned in the previous chapter, ethical climate is one of the critical factors determining intra-organizational relationships and influencing employee attitudes (Elci & Alpan, 2009), furthermore contributing to the organizational performance (Choi et al., 2013; Karatepe, 2013; Khademfar et al., 2013; Moon & Choi, 2014; Arulrajah, 2015; Hijal-Moghrabi et al., 2015). In addition, women entrepreneurs who want to be successful must have high credibility which comes with high ethical and



moral standards, and they must be role models to their employees (Cheng & Md. Isa, 2011).

From the above explanation, it is clear that ethics contribute significantly within the women-owned SMEs particularly through the effective intra-organizational relationships that could create greater trust in interpersonal affairs and further improve their business performance. That is why it came as no surprise that ethics in this study have been proven to mediate the relationships between the dimensions of EM and EO, and women-owned SMEs business performance. Therefore, it is essential for the policy makers and practitioners to plan for the future development of women entrepreneurs in Malaysia by taking into account the element of ethics that is valued highly in pursuit of success neither in life nor work.

Thirdly, it is also hoped that the outcomes of this study will help to fill the gap in the understanding of the EM, EO and ethics of Malaysian business leaders, particularly in the context of women-owned SMEs. The study concludes that the women owner-managers of SMEs in Malaysia are practising and displaying EM and EO. These two variables were empirically tested and showed significant positive effects on business performance. Thus, owner-managers are encouraged to further develop their understanding of EM and EO.

Moreover, personal initiatives to learn and develop skills and knowledge in regard to these variables may benefit them and their firms, supported by the entrepreneurship education, training and development programs for entrepreneurs by SME Corp.

Malaysia, the governing body that oversees entrepreneurial development in Malaysia. Therefore, as mentioned earlier, since the dimensions of resource orientation, reward philosophy, strategic orientation, innovativeness, proactiveness, risk taking, as well as ethical climates of entrepreneurs are considered as crucial in determining the performance of women-owned SMEs, some knowledge and exposure to these dimensions or concepts should be included in the training syllabus or programs.

Fourthly, to further improve the performance of SMEs, women entrepreneurs in Malaysia need to develop their EM, specifically in the dimensions of resource orientation, reward philosophy and strategic orientation, and EO, namely innovativeness, proactiveness and risk taking. Continuing support and assistance from the government and financial institutions would definitely help these enterprises to fully engage in management, innovation and other proactive activities and thus allow them to venture into risky territory with a high potential for profits.

The final practical implication of this study pertains to the relevance of this study to women entrepreneurs in the other Asian countries. Due to having similar culture and values to Malaysia, neighbouring countries such as Thailand, Indonesia, Brunei, Vietnam and Cambodia could definitely benefit from the outcomes of this study. These results should be taken as an eye-opener for Malaysian women entrepreneurs to believe that they can compete locally and globally, on par with competitors from the other side of the world. The results from this study are consistent with those of

previous studies conducted in Western countries, particularly in the context of EO, an important attribute for an entrepreneurial firm. In order to achieve success as outlined by the government, SMEs in Malaysia need to have high ambition and be confident to expand their business and compete internationally.

To summarise, this study makes concrete contributions by providing an empirical framework and findings for understanding entrepreneurial behaviour in the context of women-owned SMEs in Malaysia. The integration of EM, EO and ethics as resources are found to provide positive increases in organisational outcomes. These clearly proved results may help these organisations to focus on what really matters to improve their performance.

## **5.5 Limitations and Recommendations for Future Research**

Despite the enormous contributions given by this study theoretically, as well as practically, as in many investigative studies, several limitations must be taken into cognizance. However, despite of their limitations, the findings of this study are believed to indicate directions for further research. The next subchapters will further elaborate on the limitations and recommendations for future research.

### **5.5.1 Limitations**

There are several limitations in regard to what has been compiled, analysed, presented and discussed in this study. These limitations are identified in this section

and it is hoped that the drawbacks could assist in generating new opportunities and agendas for future research.

The first limitation lies on the nature of the study that have been applied in a cross-sectional manner, indicating that the perceptions regarding the dimensions of EM, EO, ethics and business performance among women-owned SMEs are collected at a single point in time and conditions and influences can change over time. This is to say, cross-sectional study only provides a snapshot view of the researched phenomena where data on all measures were collected at the same time. In addition, based on Sekaran and Bougie (2010), one of the limitations of cross-sectional study is the restriction to prove the cause-effect relationship amongst the variables. Hence, the conclusions themselves must be treated as correlational rather than casual.

Secondly, while the empirical results are interesting, caution should be exerted when generalizing the findings beyond the scope of this study. This study only concerns with 9,000 women respondents who are active and identified through the websites of two non-government organizations (NGOs). This is small compared to a total of 126,910 women entrepreneurs as reported in the Census of Establishments and Enterprises by the Department of Statistics Malaysia (DOSM) (DOSM, 2011b). Therefore, the response rate received was also very low with a small portion of respondents from East Malaysia (Sabah, Sarawak, and Labuan) and also other races (Chinese, Indian, and other races). Hence, this fact coupled with the small-sample size limits the generalizability of the findings.

In fact, the language choice chosen for this study posed another limitation. The decision to translate the survey instruments only into Malay Language had attracted higher participations from Malay entrepreneurs. Thus, this study would have attracted more participation from Chinese and Indian owner-managers if the survey instruments were also available in Chinese and Indian. However, even though this limitation clearly imposes only to SME Chinese and Indian owner-managers who are not efficient neither in English nor Malay Language, this restriction might also be the cause of an irregular distribution of the responses received among the races due to the fact that most of the respondents in this study only finished their secondary school or at least obtained their diploma, which is considered low level of education as described by Ekpe (2011) that women entrepreneurs in most developing countries had low educational levels compared to their counterparts in developed countries. This notion is then supported by Tambunan (2009) and Yusuf (2012).

Fourthly, this study relied on self-reported data from single informant presents another limitation. All measures on EM, EO, ethics and business performance were evaluated solely depending on the owner-managers of the women-owned SMEs in Malaysia. Single-informant studies are susceptible to perceptual or attitudinal bias when interpreting results and they may have exaggerated their evaluation of their EM, EO, ethics and their subjective measures of the business performance. Furthermore, it is also beyond our control to make sure who actually completed the questionnaire since it was a mail survey. Even though the cover letters explaining the purpose of the survey and that their information is private and confidential, were

addressed to the owner-manager of the firm, it is possible that some would simply assigned their subordinate to respond, who may not have been well-versed on the entrepreneurial behaviour and their firm performance. Moreover, in relation to the low or conflicting response rate for mail survey or among women entrepreneurs in Malaysia, this study also encountered the drawback. Therefore, although no significant non-response bias was found in this study, it is still possible that those who did respond were disproportionately inclined to the competencies embodied in the standard.

Fifthly, this study adopted subjective measures that are similar to the drawback of the single-informant that might encourage performance evaluation bias. Otherwise, subjective measure also depends on the owner-managers' temporary state of mind or feeling at the time they responded to the questionnaire which is not very suitable if the study intends to evaluate on the financial performance of the firm.

Sixthly, several gaps still exist in the research of women entrepreneurs in terms of the questionnaire. One of the reasons for the low performance of the women-owned businesses might be due to the conflicting perceptions on the success itself. For instance, women entrepreneurs' performance mostly related to inner factors: their determination and hard work, their personal qualities (persistence and confidence), and their good management (Itani et al., 2011), or may be viewed as one's ability to achieve a necessary balance between all parts of their lives, including achieving balance in all areas of their life, helping others to achieve goals, and a sense of self-

fulfilment (Knotts et al., 2004). Also, the employed model of EM, EO and ethics of this study was less tested among women entrepreneurs.

Finally, this study is related to the measurement of ethics that was conducted as the unidimensional constructs. Ethics in this study employed the Ethical Climate Questionnaire (ECQ) as a unidimensional construct although previous studies revealed that five dimensions of ethical climates (instrumental, caring, independence, law and code, and rules) occurred most often (K. D. Martin & Cullen, 2011; Simha & Cullen, 2012).

### **5.5.2 Suggestions for Future Research**

The findings of this study provide several opportunities for future research. It is hoped that despite their limitations, the findings of this study will indicate directions for further research.

In relation to the first limitation in this study that concerns with its cross-sectional nature in which data were collected over a single period of time from a number of women-owned SMEs in Malaysia, the use of longitudinal data would provide a remedy for this constraint. In addition, caution should be exercised when drawing causal inferences and by employing longitudinal data, independent variables and dependent variables are measured at two or more points in time, so as to compare and contrast with the present study's findings and be able to draw cause-effect interference appropriately. Furthermore, longitudinal study would help future researcher to validate the findings

gathered from cross-sectional study since the EM and EO of the women entrepreneurs would change be based on for instance their motivations for starting a business, their perceptions on business performance and so on and so forth.

Next, to encounter the second limitation that is related to the generalization that was described in the previous subchapter, further research should use larger samples covering all the women-owned SMEs registered with the SME Corp. Malaysia. In addition, it is also essential if the same framework could be tested not only among women, but also in the whole SMEs population.

Thirdly, multilanguage questionnaire such as in Chinese, Indian, is suggested in the future research to be conducted among the Malaysian SMEs since Malaysia is a country of a multiracial. Therefore, developing a questionnaire in Chinese, Indian or various languages would be an advantage. Moreover, this could be one of the ways to attract the respondents to participate, further generalizing the distribution. Additionally, although the women owner-managers have low education level, it is suggested that the government and NGOs may invest in training and education for them. This is because although women were found to underperform compared to their male counterparts (Rosa et al., 1996; Rietz & Henrekson, 2000; Roddin et al., 2000; R. T. Harrison & Mason, 2007; R. . R. W. Fairlie et al., 2009; DOSM, 2011a, 2011b; Ekpe, 2011a; L. F. Klapper & Parker, 2011), they are conversely high in ethical behaviour when doing businesses (Still & Timms, 2000; Marta et al., 2008; Oumlil & Balloun, 2009; Abbasi et al., 2011; Cheng & Md. Isa, 2011; Riddle &



Ayyagari, 2011; Yusof, 2012; Tlaiss, 2014). Thus, managers have a more heightened awareness of the importance of ethical training and education in promoting good ethical practices as compared to other employees in the same organizations (Phatshwane, 2013). Therefore, enhancing ethics in the firms is parallel with the increment in the business performance (Hijal-Moghrabi et al., 2015).

The fourth suggestion on the limitation regarding to the self-report assessment, future research might consider utilizing a hybrid design. For instance, qualitative study conducted with the respondents might provide insights that reveal more of the fact components of the variables and hence, produce a more thorough understanding on the issues. The interview method might also be the alternative approach to mail survey although this approach will incur higher costs to the survey and the questionnaire has to be kept within an appropriate length (Malhotra, 2006; Sekaran & Bougie, 2010). Yet, although the response rate of this study is acceptable, the implication for this study could have been enhanced if the response rate had been higher and the results may vary depending on the changes of the respondents' population.

This is similar with the subjective measure of business performance mentioned in the fifth limitation where the use of subjective performance measures was argued to encourage performance evaluation bias. Yet, the results of this study were tested for the non-response bias and there did not seem to be a problem. However, future studies are suggested to extend the measurement of the firm performance including

objective measures although collecting objective data is very difficult as the owner-managers are not willing to disclose the firm's information to outsiders (Dess & Robinson, 1984; Aziz & Mahmood, 2011; Zulkiffli & Perera, 2011; Abdul Aziz et al., 2014).

In relation to the sixth limitation, a female-gendered measuring instrument is suggested to be developed or used for the future research. According to Moore (1990), the nature of the instruments used to collect data on the female entrepreneur deserves more serious consideration as they were based on male businesses and should be analysed whether or not women entrepreneurs have different value sets, needs or problems. Thus, more studies need to be conducted across the globe so as to reaffirm both the direct and indirect effects of this construct on performance in the context of women entrepreneurs.

For the final suggestion in this study, multidimensional dimensions of Ethical Climates Questionnaire (ECQ) that consists of instrumental, caring, independence, law and code, and rules is proposed to be used in the future research to determine a more detail results on ethics as one of the important components that contribute to the business performance of the women-owned SMEs and retrieve the components that might effect business performance independently.

## 5.6 Conclusions

The purpose of this study was to investigate the relationships between the dimensions of entrepreneurial management (EM), entrepreneurial orientation (EO) and the women-owned SMEs business performance in Malaysia. Besides that, this study also tested the possibility of ethics served as mediator to the relationships between the independent variables (EM and EO) and dependent variable (women-owned SMEs business performance).

The empirical findings supported twelve out of eighteen hypotheses developed, and rejected the rest six hypotheses; thereby answering all the research questions despite some identified limitations, and also supported the key theoretical positions upon which the present study has been drawn. In addition, the research findings are consistent with a number of previous empirical studies conducted in the domain of current research underpinning theories.

The findings of this study suggest that ethics is one of the most important elements for women-owned business performance. Thus, the owner-managers of the firms or organizations must first understand that the ethical value they display and practise has significant direct and indirect (through EM and EO) contributions to business performance. Furthermore, the empirical findings also indicated that when ethical value is practised, it exerts stronger effects on EM and EO on the business performance.

The research framework of this study contributes to the existing body of knowledge in women entrepreneurs' study and entrepreneurship literature. The theoretical contributions and practical implications are also significant findings for women owners-managers of SMEs and women entrepreneurial development in the country. Finally, some limitations are also acknowledged that indicate future research directions.



## REFERENCES

- Abbasi, A. S., Rehman, K. ur, & Bibi, A. (2011). Islamic work ethics: How it affects business performance. *Actual Problems of Economics*, 12, 312–322. doi:10.1108/00483481011075611
- Abdul Aziz, R., Mahmood, R., Tajudin, A., & Abdullah, M. H. (2014). The relationship between entrepreneurial orientation and business performance of SMEs in Malaysia. *International Journal of Management Excellence*, 2(3), 221–226. doi:10.0001%2Fijme.v2i3.96
- Abdul Bari, A. (2015). *Factors influencing women entrepreneurs business success of SMEs in Malaysia*. Unpublished doctoral thesis. Universiti Utara Malaysia, Malaysia.
- Abdul Karim, S., & Azmi, I. A. G. (2008). Muslim women entrepreneurs: A study on success factors. In *Seminar Keusahawanan Islam II Peringkat Kebangsaan* (pp. 1–14).
- Abdul Majid, I., Ismail, K., & Cooper, S. (2011). Prevalence of entrepreneurial management practices in technology-based firms in Malaysia. *African Journal of Business Management*, 5(6), 2075–2082.
- Abdul Mutalib, R., Arshad, R., Ismail, N. S. A., & Ahmad, Z. (2015). Women and entrepreneurship: An overview of women entrepreneurship programs in Malaysia. *Special Issue on Social Entrepreneurship*, 11(January), 15–28.
- Abu Bakar, H., Mahmood, R., & Ismail, N. N. H. (2015). Effects of knowledge management and strategic improvisation on SME performance in Malaysia. *Asian Social Science*, 11(9). doi:10.5539/ass.v11n9p207
- Abu Bakar, H., Mahmood, R., & Nik Ismail, N. N. H. (2015). Fostering small and medium enterprises through entrepreneurial orientation and strategic improvisation. *Mediterranean Journal of Social Sciences*, 6(4), 481–487. doi:10.5901/mjss.2015.v6n4p481
- Abu Bakar, L. J., & Ahmad, H. (2010). Assessing the relationship between firm resources and product innovation performance. *Business Process Management Journal*, 16(3), 420–435. doi:10.1108/14637151011049430
- Abu Bakar, T., Md Ali, A., Omar, R., Md Som, H., & Muktar, S. N. (2007). *Penglibatan kaum wanita dalam aktiviti keusahawanan di negeri Johor: Kajian terhadap faktor-faktor kritikal kejayaan dan kegagalan pengendalian perniagaan*.
- Ahl, H. (2006). Why research on women entrepreneurs needs new directions. *Entrepreneurship Theory and Practice*, 30(5), 595–621. doi:10.1111/j.1540-6520.2006.00138.x
- Ahl, H., & Nelson, T. (2015). How policy positions women entrepreneurs: A comparative analysis of state discourse in Sweden and the United States. *Journal of Business Venturing*, 30(2), 273–291. doi:10.1016/j.jbusvent.2014.08.002
- Ahmad, F. S., Mohd Osman, M. H., & Baharun, R. (2012). Branding in Malaysia's small and medium sized enterprises: perspective, practice and performance. *9th World Congress of the Academy for Global Business Advancement (AGBA)*, 9(1), 184–194.

- Ahmad, N. H., & Seet, P.-S. (2010). Gender variations in ethical and socially responsible consideration among SME entrepreneurs in Malaysia. *International Journal of Business and Society*, 11(1), 77–88.
- Ahmad, S., & Abdul Ghani, A. (2013). Orientasi keusahawanan dan prestasi perniagaan: Pengaruh penyederhana gaya kepemimpinan transformasi. *Jurnal Pengurusan*, 37, 115–123. Retrieved from <http://ejournals.ukm.my/pengurusan/article/viewFile/3633/2121>
- Ahmad, S. Z. (2011). Evidence of the characteristics of women entrepreneurs in the Kingdom of Saudi Arabia: An empirical investigation. *International Journal of Gender and Entrepreneurship*, 3(2), 123–143. doi:10.1108/17566261111140206
- Ahmad, S. Z., & Xavier, S. R. (2012). Entrepreneurial environments and growth: Evidence from Malaysia GEM data. *Journal of Chinese Entrepreneurship*, 4(1), 50–69. doi:<http://dx.doi.org/10.1108/17561391211200939>
- Ajayi, B. (2016). The impact of entrepreneurial orientation and networking capabilities on the export performance of Nigerian Agricultural SMEs. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 2(1), 1–23. doi:10.1177/2393957515619720
- Akinruwa, T. E., Awolusi, O. D., & Ibojo, B. O. (2013). Determinants of small and medium enterprises (SMEs) performance in Ekiti State, Nigeria: A business survey approach. *European Journal of Humanities and Social Science*, 27(1), 1397–1413.
- Al-Alak, B. A. M., & Al-Haddad, F. Y. S. (2010). Effect of gender on the success of women entrepreneurs in Jordan. *Interdisciplinary Journal Of Contemporary Research In Business*, 1(12), 42–63.
- Al-Lamky, A. (2007). Feminizing leadership in Arab societies: The perspectives of Omani female leaders. *Women In Management Review*, 22(1), 49–67. doi:10.1108/09649420710726229
- Al-Mahrouqi, A. (2010). *Attitudes towards and perceptions of women managers and their communication competencies in the Sultanate of Oman*. University of Waikato.
- Al-Sadi, R., Belwal, R., & Al-Badi, R. (2011). Woman entrepreneurship in the Al-Batinah Region of Oman: An identification of the barriers. *Journal of International Women's Studies*, 12(3), 58–75.
- Al-Swidi, A. K., & Mahmood, R. (2012). Total quality management, entrepreneurial orientation and organizational performance: The role of organizational culture. *African Journal of Business Management*, 6(13), 4717–4727. doi:10.5897/AJBM11.2016
- Al Arrayed, A. A. (2010). *Examining project management approaches to increase women entrepreneur rate of success in small business*. Open University Malaysia.
- Alam, S. S., Che Senik, Z., & Mohd Jani, F. (2012). An exploratory study of women entrepreneurs in Malaysia: Motivation and problems. *Journal of Management Research*, 4(4). doi:10.5296/jmr.v4i4.2377
- Alam, S. S., Mohd Jani, M. F., & Omar, N. A. (2011). An empirical study of success factors of women entrepreneurs in Southern Region in Malaysia. *International Journal of Economics and Finance*, 3(2), 166–175. doi:10.5539/ijef.v3n2p166
- Al Mamun, A. (2016). Access to credit, education and entrepreneurial competencies: A

- study among women micro-entrepreneurs in Malaysia. *The Journal of Business Perspective*, 20(3), 1–10. doi:10.1177/0972262916651510
- Al Mamun, A., Muniady, R. A., Permarupa, P. Y., Zainol, N. R. B., Nawati, N. B. C., & Malarvizhi, C. A. (2016). Social capital and entrepreneurial competencies: A study among women micro-entrepreneurs in Malaysia. *The Journal of Developing Areas*, 50(5), 363–370. doi:10.1353/jda.2016.0050
- Albert, E. (2011). Trends in entrepreneurship: Single Women Entrepreneurs. Retrieved December 27, 2014, from <http://www.isbdc.org/single-women-entrepreneurs/>
- Aldrich, H. E., & Martinez, M. A. (2001). Many are called, but few are chosen: An evolutionary perspective for the study of entrepreneurship. *Entrepreneurship: Theory & Practice*, 25(4), 41–56. doi:10.1007/978-3-540-48543-8\_14
- Ali, A. J., & Al-Owaidan, A. (2008). Islamic work ethic: a critical review. *Cross Cultural Management: An International Journal*, 15(1), 5–19. doi:10.1108/13527600810848791
- Ali, A. Y. S., & Ali, A. H. (2013). Entrepreneurial orientation and performance of women owned enterprises in Sub-Saharan African context: Case of Somalia. In *2nd International Seminar on Entrepreneurship and Business (ISEB 2013)*. Kelantan, Malaysia.
- Ali, A. Y. S., & Ali, A. H. (2014). Entrepreneurial orientation and performance of women owned and managed micro and small enterprises in Somalia. *ZENITH International Journal of Multidisciplinary Research*, 4(1), 25–36.
- Alias, A. (2004). *Entrepreneur and entrepreneurship, Fundamental of entrepreneurship*. (U.E.S. Group, Ed.). Selangor: Pearson/Prentice Hall.
- Aliyu, M. S., Rogo, H. B., & Mahmood, R. (2015). Knowledge management, entrepreneurial orientation and firm performance: The role of organizational culture. *Asian Social Science*, 11(23), 140–152. doi:10.5539/ass.v11n23p140
- Allen, I. E., Elam, A., Langowitz, N., & Dean, M. (2007). *Global entrepreneurship monitor 2007 report on women and entrepreneurship*.
- Allen, I. E., Langowitz, N., & Minniti, D. B. A. M. (2006). *Global entrepreneurship monitor 2006 report on women and entrepreneurship*.
- Allen, W. D. (2000). Social networks and self-employment. *The Journal of Socio-Economics*, 29, 487–501. doi:10.1016/S1053-5357(00)00086-X
- Ambad, S. N. A., & Abdul Wahab, K. (2013). Entrepreneurial orientation among large firms in Malaysia: Contingent effects of hostile environments. *International Journal of Business and Social Science*, 4(16), 96–107.
- American Express OPEN. (2012). *The state of women-owned businesses report*.
- American Express OPEN. (2015). *The 2015 state of women-owned businesses*.
- Amine, M. E. A., Chakor, A., & Alaoui, A. M. (2012). Ethics, relationship marketing and corporate performance: Theoretical analysis through the mediating variables. *International Business Research*, 5(8), 68–85. doi:10.5539/ibr.v5n8p68
- Aminu, M. I. (2015). *Relationships between organizational memory, intellectual capital,*

*entrepreneurial orientation, dynamic capabilities and firm performance in Nigeria.* Universiti Utara Malaysia.

- Andersén, J. (2010). A critical examination of the EO-performance relationship. *International Journal of Entrepreneurial Behaviour & Research*, 16(4), 309–328. doi:10.1108/13552551011054507
- Anderson, B. S., & Eshima, Y. (2013). The influence of firm age and intangible resources on the relationship between entrepreneurial orientation and firm growth among Japanese SMEs. *Journal of Business Venturing*, 28(3), 413–429. doi:10.1016/j.jbusvent.2011.10.001
- Anderson, D. R., Sweeney, D. J., & Williams, T. A. (2004). *Quantitative methods for business* (9th ed.). Mason, OH: Thomson SouthWestern Publication.
- Arasti, Z., & Kanani, A. (2011). Barriers to business financing by woman entrepreneurs in Iran. *The NIEW Journal*, 91–101.
- Arham, A. F. (2014). *The relationship between leadership behaviour, entrepreneurial orientation and organisational performance in Malaysian small and medium enterprises*. Published doctoral thesis. RMIT University.
- Armstrong, J. S., & Overton, T. S. (1977). Estimating non-response bias in mail survey. *Journal of Marketing Research*, 14, 396–402.
- Arnaud, A. (2010). Conceptualizing and measuring ethical work climate: Development and validation of the ethical climate index. *Business & Society*, 49(2), 345–358. doi:10.1177/0007650310362865
- Arshad, A. A. A. S., Rasli, A., Arshad, A. A. A. S., Mohd Zain, Z., Shafinaz, A., Rasli, A., ... Mohd, Z. (2014). The impact of entrepreneurial orientation on business performance: A study of technology-based SMEs in Malaysia. *Procedia - Social and Behavioral Sciences*, 130(1996), 46–53. doi:10.1016/j.sbspro.2014.04.006
- Arshad, D., Razalli, R., Julienti, L., Ahmad, H., & Mahmood, R. (2015). Exploring the incidence of strategic improvisation: Evidence from Malaysian government link corporations. *Asian Social Science*, 11(24), 105–112. doi:10.5539/ass.v11n24p105
- Arslan, M. (2000). A cross-cultural comparison of British and Turkish managers in terms of Protestant work ethic characteristics. *Business Ethics: A European Review*, 9(1), 13–19. doi:10.1111/1467-8608.00165
- Arulrajah, A. A. (2015). Contribution of human resource management in creating and sustaining ethical climate in the organisations. *Sri Lankan Journal of Human Resource Management*, 5(1), 31–44.
- Aspromourgos, T. (2012a). Entrepreneurship, risk and income distribution in Adam Smith. *The European Journal of the History of Economic Thought*, 21(1), 21–40. doi:10.1080/09672567.2012.683025
- Aspromourgos, T. (2012b). Entrepreneurship, risk and income distribution in Cantillon's Essai. In C. Gehrke, N. Salvadori, I. Steedman, & R. Sturn (Eds.), *Classical Political Economy and Modern Theory: Essays in Honour of Heinz Kurz* (pp. 105–119). London: Routledge.



- Aziz, S. A., & Mahmood, R. (2011). The relationship between business model and performance of manufacturing small and medium enterprises in Malaysia. *African Journal of Business Management*, 5(22), 8918–8932.
- Azmi, I. A. G., Basir, S. A., Che Hashim, R., & Al-Banna, M. H. (2014). Challenges of muslim women entrepreneurs in Malaysian SMEs. *International Journal of Innovation, Management and Technology*, 5(6), 428–433. doi:10.7763/IJIMT.2014.V5.553
- Azmi, I. A. G., Basir, S. A., Mukhazir, M. R. M. @, Che Hashim, R., & Al-Banna, M. H. (2014). Motivation of muslim women entrepreneurs in Malaysian SMEs. In *4th International Conference on Management* (pp. 217–228). Bali, Indonesia.
- Bakar, M. S., & Mahmood, R. (2014). Linking transformational leadership and corporate entrepreneurship to performance in the public higher education institutions in Malaysia. *Advances in Management & Applied Economics*, 4(3), 109–122. Retrieved from [http://www.scienpress.com/Upload/AMAE/Vol 4\\_3\\_8.pdf](http://www.scienpress.com/Upload/AMAE/Vol 4_3_8.pdf)
- Balamurugan, P. (2008). Women entrepreneurship in India-A gender perspective. In *Rathakrishnan.L, Empowerment of women through entrepreneurship* (pp. 53–60). New Delhi: Gyan Publishing House.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. doi:10.1177/014920639101700108
- Barney, J. B. (1995). Looking inside for competitive advantage. *Academy of Management Executive*, 9(4), 49–61.
- Barney, J. B. (2001a). Is the resource-based view a useful perspective for strategic management research? Yes. *Academy of Management Review*, 26(1), 41–56. Retrieved from [http://www.bus.tu.ac.th/usr/sab/Articles\\_pdf/Research\\_Articles/RBV\\_Barney\\_web.pdf](http://www.bus.tu.ac.th/usr/sab/Articles_pdf/Research_Articles/RBV_Barney_web.pdf)
- Barney, J. B. (2001b). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of Management*, 27(6), 643–650. doi:10.1177/014920630102700602
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–82. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/3806354>
- Barrett, H., Balloun, J., & Weinstein, A. (2007). How variation in management perceptions affects organizational performance. *Quality and Quantity*, 43(3), 451–461. doi:10.1007/s11135-007-9122-2
- Bartlett, J. E., Kotrlik, J. W. K. J. W., & Higgins, C. (2001). Organizational research: determining appropriate sample size in survey research appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, 19(1), 43.
- Baucus, M. S., & Cochran, P. L. (2009). An overview of empirical research on ethics in entrepreneurial firms within the United States. *African Journal of Business Ethics*, 4(2), 56–68.
- Baumgartner, H., & Steenkamp, J.-B. E. M. (2001). Response styles in marketing research:

- A cross-national investigation. *Journal of Marketing Research*, XXXVIII(May), 143–156.
- Berry, W. D., & Feldman, S. (1985). *Multiple regression in practice*. Beverly Hill CA: SAGE Publications.
- Bi, R., Davison, R. M., & Smyrnios, K. X. (2016). E-business and fast growth SMEs. *Small Business Economics*, 1–18. doi:10.1007/s11187-016-9788-8
- Biswas, A., & Soni, C. (2015). Empowerment of women in India: A reality or a myth. *Journal for Studies in Management and Planning*, 1(4), 260–273. Retrieved from <http://edupediapublications.org/journals/index.php/JSMaP/article/view/2081>
- Blaikie, N. (2003). *Analyzing quantitative data: From description to explanation*. London: SAGE Publications Ltd.
- Boohene, R., Sheridan, A., & Kotey, B. (2008). Gender, personal values, strategies and small business performance: A Ghanaian case study. *Equal Opportunities International*, 27(3), 237–257. doi:10.1108/02610150810860075
- Borden, K. S., & Abbott, B. B. (2011). *Research design and methods: A process approach* (8th ed.). New York, NY: McGraw-Hill.
- Bordens, K., & Abbott, B. (2002). *Research design and methods: A process approach . Pediatric Hematology-Oncology*. Retrieved from <http://informahealthcare.com/doi/abs/10.1080/08880010290057291%5Cnhttp://psycnet.apa.org/psycinfo/2001-18329-000>
- Bradley, S. W., Wiklund, J., & Shepherd, D. A. (2011). Swinging a double-edged sword: The effect of slack on entrepreneurial management and growth. *Journal of Business Venturing*, 26(5), 537–554. doi:10.1016/j.jbusvent.2010.03.002
- Brockhaus, R. H. (1980). Risk taking propensity of entrepreneurs. *Academy of Management Journal*, 23(3), 509–520. doi:10.5465/AMBPP.1976.4975934
- Brown, T. E., Davidsson, P., & Wiklund, J. (2001). An operationalization of Stevenson's conceptualization of entrepreneurship as opportunity-based firm behavior. *Strategic Entrepreneurship Journal*, 22(10), 953–968. doi:10.1002/smj.190
- Bruining, H., Verwaal, E., & Wright, M. (2011). Private equity and entrepreneurial management in management buy-outs. *Small Business Economics*. doi:10.1007/s11187-011-9386-8
- Brush, C. G. (1992). Research on women business owners: Past trends, a new perspective and future directions. *Entrepreneurship Theory and Practice*, 16(4), 5–30.
- Brush, C. G., & Vanderwerf, P. A. (1992). A comparison of methods and sources for obtaining estimates of new venture performance. *Journal of Business Venturing*, 7(2), 157–170.
- Buang, N. A. (2006). *Basics of entrepreneurship* (2nd.). Kuala Lumpur: Fajar Bakti Sdn. Bhd.
- Buang, N. A., & Agil, H. (2011). Level of business management practices of the Malay women entrepreneurs and its relationship with their business performance. *International Business Management*.

- Buang, N. A., & Idayu, L. (2011). Financial management skills of small scale business women: does education background matters? *International Business Management*, 5(5), 226–231. doi:10.3923/ibm.2011.226.231
- Butarbutar, I. D., Sendjaya, S., & Hartel, C. E. J. (2010). The mediating effects of ethical climate on the relationship between servant leadership and organizational citizenship behaviour. In *24th Annual Australian and New Zealand Academy of Management Conference* (pp. 1–22). Retrieved from file:///C:/Users/Asus/Downloads/ANZAM2010\_329\_hartel.pdf
- Buttner, E. H. (2001). Examining female entrepreneurs' management style: An application of a relational frame. *Journal of Business Ethics*, 29, 253–269.
- Buttner, E. H., & Moore, D. P. (1997). Women's organizational exodus to entrepreneurship: Self-reported motivations and correlates with success. *Journal of Small Business Management*, 35, 34–46.
- Byrne, B. M. (2010). *Structural Equation Modeling with AMOS Basic Concepts, Applications and Programming Second Edition*.
- Campbell, D. (2007). *Nonfinancial performance measures and promotion-based incentives*. Harvard Business School.
- Carliner, S. (2003). Ethics and the marketing of technology for training and performance improvement: A commentary. *Performance Improvement Quarterly*, 16(4), 94–106.
- Carter, S. L., & Shaw, E. (2008). *Women's business ownership: recent research and policy developments*. *Strathprints Institutional Repository* (Vol. 22). doi:10.1016/j.buildenv.2006.10.027
- Carter, S., & Shaw, E. (2006). *Women's business ownership: recent research and policy developments*.
- Casson, M. (1982). *The entrepreneur: An economic theory*. Oxford, UK: Rowman & Littlefield.
- Casson, M. (1987). Entrepreneur. In J. Eatwell, M. Milgate, & P. Newman (Eds.), *The New Palgrave: A Dictionary of Economics* (2nd ed.). London: MacMillan.
- Casson, M. (1998). An Entrepreneurial theory of the firm. *Department of Economics University of Reading*, (0), 1–42.
- Cavana, R. Y., Delahaye, B. L., & Sekaran, U. (2001). *Applied business research: qualitative and quantitative methods*. Milton, Queensland: John Wiley & Sons Australia.
- Cessna, J. M. (2014). Relationships between parenting self-efficacy and distress in parents with and without cancer. *ProQuest Dissertations and Theses*, (May), 47. Retrieved from <http://eserv.uum.edu.my/docview/1524707728?accountid=42599>
- Chandler, G. N., & Hanks, S. H. (1993). Measuring the performance of emerging businesses: A validation study. *Journal of Business Venturing*, 8(5), 391–408.
- Chandler, G. N., & Jansen, E. (1992). The founder's self-assessed competence and venture performance. *Journal of Business Venturing*, 7(3), 223–236. doi:10.1016/0883-9026(92)90028-P

- Che Ismail, H., Mohd. Shamsudin, F., & Chowdhury, M. S. (2012). An exploratory study of motivational factors on women entrepreneurship venturing in Malaysia. *Business and Economic Research*, 2(1), 1–13. doi:10.5296/ber.v2i1.1434
- Chee, H. H., Md Isa, F., Cheng, W. H., Hashim, N., Mohd Yunus, J., & Abdullah, H. H. (2012). Development of women entrepreneurs: The case of Malaysia. *World Journal of Social Sciences*, 2(6), 123–145.
- Chelliah, S., Sulaiman, M., & Mohd Yusoff, Y. (2010). Internationalization and performance: small and medium enterprises (SMEs) in Malaysia. *International Journal of Business and Management*, 5(6), 27–38. Retrieved from file:///C:/Users/Asus/Downloads/5606-19597-2-PB.pdf
- Cheng, W. H., & Md. Isa, F. (2011). Leadership styles , management styles and personality traits of successful women entrepreneurs in Malaysia. *Annual Summit on Business and Entrepreneurial Studies (ASBES 2011) Proceeding*, (Asbes), 907–917.
- Cheng, W. H., Md. Isa, F., & Hashim, N. (2012). A qualitative study of innovativeness, strategies and leadership styles of successful women entrepreneurs in Malaysia. *Knowledge Management International Conference (KMICe) 2012*, (July), 4–6.
- Choi, B. K., Moon, H. K., & Ko, W. (2013). An organization's ethical climate, innovation, and performance. *Management Decision*, 51(6), 1250–1275. doi:10.1108/MD-Sep-2011-0334
- Christie, P. M. J., Kwon, I. W. G., Stoeberl, P. A., & Baumhart, R. (2003). A cross-cultural comparison of ethical attitudes of business managers: India, Korea and the United States. *Journal of Business Ethics*, 46(3), 263–287. doi:10.1023/A:1025501426590
- Chu, P. (2000). The characteristics of Chinese female entrepreneurs: motivation and personality. *Journal of Enterprising Culture*, 8(1), 67–84. doi:10.1142/S021849580000005X
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Routledge.
- Cohen, L., Manion, L., & Morrison, K. (2004). *A guide to teaching practice: 5th edition* (5th ed.). Routledge.
- Cohoon, J. M., Wadhwa, V., & Mitchell, L. (2010). *The anatomy of an entrepreneur: are successful women entrepreneurs different from men?*
- Collins, L. M., Graham, J. J., & Flaherty, B. P. (1998). An alternative framework for defining mediation. *Multivariate Behavioral Research*, 33(2), 295–312.
- Commission, E. (2005). *The new SME definition user guide and model declaration*. Retrieved from [https://www.ffg.at/sites/default/files/downloads/page/benutzerhandbuch\\_en.pdf](https://www.ffg.at/sites/default/files/downloads/page/benutzerhandbuch_en.pdf)
- Comrey, A. L., & Lee, H. B. (1992). Interpretation and application of factor analytic results. In *A first course in factor analysis* (2nd ed., p. 442). Psychology Press.
- Congleton, R. D. (1991). The economic role of a work ethic. *Journal of Economic Behavior and Organization*, 15(3), 365–385. doi:10.1016/0167-2681(91)90052-Y
- Cooney, T., Manning, J., Arisha, A., & Smyth, P. (2011). *Muslim Entrepreneurship in*

Ireland.

- Cooper, A. C., & Artz, K. W. (1995). Determinants of satisfaction for entrepreneurs. *Journal of Business Venturing*, 10(6), 439–457. doi:10.1016/0883-9026(95)00083-K
- Cooper, D. R., & Schindler, P. S. (2014). *Business research methods*. McGraw-Hill/Irwin (12th ed.). New York City, NY: McGraw-Hill/Irwin.
- Covin, J. G., & Lumpkin, G. T. (2011). Entrepreneurial orientation theory and research: Reflections on a needed construct. *Entrepreneurship Theory and Practice*, 35(5), 855–872. doi:10.1111/j.1540-6520.2011.00482.x
- Covin, J. G., & Miles, M. P. (1999). Corporate entrepreneurship and the pursuit of competitive advantage. *Entrepreneurship Theory and Practice*, 23, 47–63. Retrieved from <https://www.highbeam.com/doc/1G1-56750656.html>
- Covin, J. G., & Miller, D. (2014). International entrepreneurial orientation: Conceptual considerations, research themes, measurement issues, and future research directions. *Entrepreneurship Theory and Practice*, 38(1), 11–44. doi:10.1111/etap.12027
- Covin, J. G., & Slevin, D. P. (1986). The development and testing of an organizational-level entrepreneurship scale. *Frontiers of Entrepreneurship Research*, 626–639.
- Covin, J. G., & Slevin, D. P. (1988). The influence of organization structure on the utility of an entrepreneurial top management style. *Journal of Management Studies*, 25(May), 321–334.
- Covin, J. G., & Slevin, D. P. (1989a). Empirical relationships among strategic posture environmental context variables, and new venture performance. In J. Robert H. Brockhaus, N. C. Churchill, J. A. Katz, B. A. Kirchoff, K. H. Vesper, & J. William E. Wetzel (Eds.), *Frontiers of Entrepreneurship Research* (pp. 370–382). Wellesley, MA: Babson College.
- Covin, J. G., & Slevin, D. P. (1989b). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10(1), 75–87. doi:10.1002/smj.4250100107
- Covin, J. G., & Slevin, D. P. (1990). New venture strategic posture, structure, and performance: An industry life cycle analysis. *Journal of Business Venturing*, 5(2), 123–135. doi:10.1016/0883-9026(90)90004-D
- Covin, J. G., & Slevin, D. P. (1991). A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship: Theory & Practice*, 16(1), 7–25. doi:10.42-2587-91-161
- Creswell, J. W. (2003). *Research design: qualitative, quantitative, and mixed method approaches* (2nd ed.). Thousand Oaks, CA: SAGE Publications.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). California: SAGE Publications.
- Cromie, S., & Hayes, J. (1988). Towards a typology of female entrepreneurs. *The Sociological Review*, 36(1), 87–113. doi:10.1111/j.1467-954X.1988.tb02936.x
- Cullen, J. B., Victor, B., & Bronson, J. W. (1993). The ethical climate questionnaire: An assessment of its development and validity. *Psychological Reports*, 73(2), 667–674. doi:10.2466/pr0.1993.73.2.667

- Dafna, K. (2008). *Managerial performance and business success: Gender differences in Canadian and Israeli entrepreneurs. Journal of Enterprising Communities: People and Places in the Global Economy* (Vol. 2). doi:10.1108/17506200810913890
- Dafna, K. (2011). Entrepreneurial orientations of women business founders from a push/pull perspective: Canadians versus non-Canadians - A multinational assessment. *Journal of Small Business & Entrepreneurship*, 24(3), 397–425. doi:10.1080/08276331.2011.10593546
- Dai, L., Maksimov, V., Gilbert, B. A., & Fernhaber, S. a. (2014). Entrepreneurial orientation and international scope: The differential roles of innovativeness, proactiveness, and risk-taking. *Journal of Business Venturing*, 29(4), 511–524. doi:10.1016/j.jbusvent.2013.07.004
- Dardas, L. A., & Ahmad, M. M. (2015). Coping strategies as mediators and moderators between stress and quality of life among parents of children with autistic disorder. *Stress and Health*, (August). doi:10.1002/smi.2513
- Davidsson, P. (1991). Continued entrepreneurship: Ability, need, and opportunity as determinants of small firm growth. *Journal of Business Venturing*, 6(6), 405–429. doi:10.1016/0883-9026(91)90028-C
- Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301–331. doi:10.1016/S0883-9026(02)00097-6
- Davis, D., & Cosenza, R. M. (1995). *Business Research for Decision Making* (4th ed.). Belmont, CA: Wadsworth Publishing Company.
- Davis, J. L. (2007). *Firm-level entrepreneurship and performance: An examination and extension of relationships and measurements of the entrepreneurial orientation construct*. Unpublished doctoral thesis, The University of Texas at Arlington.
- Davis, J. L., Bell, R. G., Payne, G. T., & Kreiser, P. M. (2010). Entrepreneurial orientation and firm performance: The moderating role of managerial power. *American Journal of Business*, 25(2), 41–54. doi:10.1108/19355181201000009
- Dawes, J. (1999). The relationship between subjective and objective company performance measures in market orientation research: Further empirical evidence. *Marketing Bulletin*, 10(1996), 65–75.
- De Clercq, D., Dimov, D., & Thongpapanl, N. (Tek). (2010). The moderating impact of internal social exchange processes on the entrepreneurial orientation-performance relationship. *Journal of Business Venturing*, 25(1), 87–103. doi:10.1016/j.jbusvent.2009.01.004
- De George, R. T. (1999). *Business ethics*. Englewood Cliffs, NJ: Prentice Hall.
- Dess, G. G., Lumpkin, G. T., & Covin, J. G. (1997). Entrepreneurial strategy making and firm performance: Tests of contingency and configurational models. *Strategic Management Journal*, 18(9), 677–695. doi:10.1002/(SICI)1097-0266(199710)18:9<677::AID-SMJ905>3.0.CO;2-Q
- Dess, G. G., & Robinson, R. B. (1984). Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate

- business unit. *Strategic Management Journal*, 5(3), 265–273.
- Dhaliwal, S. (2000). Entrepreneurship - a learning process: The experiences of Asian female entrepreneurs and women in business. *Education and Training*, 42(8), 445–453.
- Dickson, M. W., Smith, D. B., Grojean, M. W., & Ehrhart, M. (2001). An organizational climate regarding ethics: The outcome of leader values and the practices that reflect them. *Leadership Quarterly*, 12(2), 197–217. doi:10.1016/S1048-9843(01)00069-8
- Dillman, D. A. (2007). *Mail and internet surveys: the tailored design method 2007 update with new internet, visual, and mixed-mode guide* (2nd ed.). New Jersey, NJ: Wiley.
- Doi, N. (2015). *Factors influence women entrepreneur business success*. Universiti Utara Malaysia.
- Donaldson, T., & Dunfee, T. W. (1999). *Ties that bind: A social contracts approach to business ethics*. Boston: Harvard Business Review Press.
- DOSM. (2005). Usahawan Wanita. *SMEinfo*. Retrieved November 12, 2014, from [http://www.smeinfo.com.my/index.php?option=com\\_content&view=article&id=1154:profile-of-we-&catid=202:access-to-advisory-services-a-information&Itemid=1112&lang=ms](http://www.smeinfo.com.my/index.php?option=com_content&view=article&id=1154:profile-of-we-&catid=202:access-to-advisory-services-a-information&Itemid=1112&lang=ms)
- DOSM. (2010). Jadual 2: perangkaan utama tenaga buruh mengikut jantina, Malaysia, 1982–2010, 32.
- DOSM. (2011a). Economic census 2011. Profile of Small and Medium Enterprise. *Department of Statistics Malaysia*. Retrieved March 12, 2012, from [http://www.statistics.gov.my/portal/download\\_Others/files/PKS/BE2011-Profil\\_Perusahaan\\_Kecil\\_Sederhana.pdf](http://www.statistics.gov.my/portal/download_Others/files/PKS/BE2011-Profil_Perusahaan_Kecil_Sederhana.pdf)
- DOSM. (2011b). Economic Census Report 2011. Retrieved April 20, 2001, from <http://www.smeinfo.com.my/>
- Drucker, P. (1985). *Innovation and entrepreneurship, practice and principles*. New York: Harper and Row.
- Dzisi, S. (2008a). Entrepreneurial activities of indigenous African women: a case of Ghana. *Journal of Enterprising Communities: People and Places in the Global Economy*, 2(3), 254–264. doi:10.1108/17506200810897231
- Dzisi, S. (2008b). *Women entrepreneurs in small and medium enterprises (SMEs) in Ghana*.
- Easterby-Smith, M., Thorpe, R., & Lowe, A. (2001). *Management research: An introduction* (2nd ed.). London: SAGE Publications Ltd.
- Efron, B., & Tibshirani, R. J. (1993). *An introduction to the bootstrap*. New York: Chapman & Hall.
- Ehigie, B., & Umoren, U. (2013). Psychological factors influencing perceived entrepreneurial success among Nigerian women in small-scale businesses. *Journal of International Women's Studies*, 5(1), 78–95. Retrieved from <http://vc.bridgew.edu/jiws/vol5/iss1/5/>
- Ekpe, I. (2011a). Women entrepreneur and economic development in Nigeria: characteristics for success. *International Journal of Business and Social Science*, 2(1), 287–291.

- Ekpe, I. (2011b). Women entrepreneurs and economic development in Nigeria: Characteristics for success. *International Journal of Business and Social Science*, 2(1), 287–291.
- Ekpe, I., Mat, N., & Razak, R. C. (2011). A qualitative analysis of micro-credit group liability and women entrepreneur's performance. *Business and Management Review*, 1(5), 33–39.
- Elci, M., & Alpkın, L. (2009). The impact of perceived organizational ethical climate on work satisfaction. *Journal of Business Ethics*, 84(3), 297–311. doi:10.1007/s10551-008-9709-0
- Elci, M., Sener, I., & Alpkın, L. (2013). The impacts of ethical leadership on the antisocial behavior of employees: The mediating role of ethical climate. *Journal of Global Strategic Management*, 2(7), 57–66. doi:10.20460/JGSM.2013715667
- Eliasson, C., & Davidsson, P. (2003). Entrepreneurial management, corporate venturing, and financial performance. In *Frontiers of Entrepreneurship Research*.
- Ellis, A., Kirkwood, D., & Malhotra, D. (2010). *Economic Opportunities for Women in the East Asia and Pacific Region*. World Bank. Retrieved from <http://books.google.com.my/books?id=9FtkLIVXMPIC>
- Engelen, A., Gupta, V., Strenger, L., & Brettel, M. (2015). Entrepreneurial orientation, firm performance, and the moderating role of transformational leadership behaviors. *Journal of Management*, 41(4), 1069–1097. doi:10.1177/0149206312455244
- Ensari, M. Ş., & Karabay, M. E. (2016). The mediating effect of perceived ethical climate on organizational commitment, trust and turnover intention interactions: A research on insurance sector. *European Journal of Business and Social Sciences*, 5(1), 47–63.
- Ewoh, E. R. (2014). *Female Entrepreneurs performance: A systematic literature review of forces influencing the performance of African female entrepreneurs*. University of Jyväskylä.
- Fairlie, R. . R. W., Robb, Æ. A. M., & Robb, A. M. (2009). Gender differences in business performance: evidence from the characteristics of business owners survey. *Small Business Economics*, 375–395. doi:10.1007/s11187-009-9207-5
- Fairlie, R. W. (2009). *Kauffman Index of Entrepreneurial Activity (1996–2009)*.
- Fairoz, F. M., Takenouchi, H., & Tanaka, Y. (2010). Entrepreneurial orientation and business performance of small and medium scale enterprises of Hambantota District Sri Lanka. *Asian Social Science*, 6(3), 34–46.
- Fellnhofer, K., Puumalainen, K., & Sjogren, H. (2016). Entrepreneurial orientation and performance - are sexes equal? *International Journal of Entrepreneurial Behavior & Research*, 22(3).
- Ferreira, J. J., & Azevedo, S. G. (2007). *Entrepreneurial orientation as a main resource and capability on small firm's growth* (No. 5682). Retrieved from [https://mpra.ub.uni-muenchen.de/5682/1/MPRA\\_paper\\_5682.pdf](https://mpra.ub.uni-muenchen.de/5682/1/MPRA_paper_5682.pdf)
- Ferreira, J. J., Azevedo, S. G., & Ortiz, R. F. (2011). Contribution of resource-based view and entrepreneurial orientation on small firm growth. *Cuadernos de Gestión*, 11(1),



95–116. doi:10.5295/cdg.100185jf

- Field, A. (2009). *Discovering statistics using SPSS (Introducing Statistical Methods)* (3rd ed.). SAGE Publications Ltd.
- Fischer, E. (1992). Sex differences and small-business performance among Canadian retailers and service providers. *Journal of Small Business & Entrepreneurship*, 9(4), 2–13. doi:10.1080/08276331.1992.10600408
- Ford, R. C., & Richardson, W. D. (1994). Ethical decision making: A review of the empirical literature. *Journal of Business Ethics*, 13(3), 205–221. doi:10.1007/BF02074820
- Franck, A. K. (2012). Factors motivating women's informal micro-entrepreneurship. *International Journal of Gender and Entrepreneurship*, 4(1), 65–78. doi:10.1108/17566261211202981
- Frank, H., Kessler, A., & Fink, M. (2010). Entrepreneurial orientation and business performance – A replication study. *Schmalenbach Business Review*, (april), 175–198. Retrieved from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1604118](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1604118)
- Freeman, S., & Cavusgil, S. T. (2007). Toward a typology of commitment states among managers of born-global firms: A study of accelerated internationalization. *Journal of International Marketing*, 15(4), 1–40. doi:10.1509/jimk.15.4.1
- Fritz, J. M. H., Arnett, R. C., & Conkel, M. (1999). Organizational ethical standards and organizational commitment. *Journal of Business Ethics*, 20(4), 289–299. doi:10.1023/A:1005939325707
- Fritzsche, D. J. (1995). Personal values: Potential keys to ethical decision making. *Journal of Business Ethics*, 14(11), 909–922. doi:10.1007/BF00882069
- Fuad, N., & Bohari, A. M. (2011). Malay women entrepreneurs in the small and medium sized ICT-related business: A study on need for achievement. *International Journal of Business and Social Science*, 2(13), 272–278.
- Furnham, A., & Muhiudeen, C. (1984). The Protestant work ethic in Britain and Malaysia. *The Journal of Social Psychology*, 122(2), 157–161.
- Gadar, K., & Yunus, N. K. Y. (2009). The Influence of personality and socio-economic factors on female entrepreneurship motivations in Malaysia. *International Review of Business Research Papers*, 5(1), 149–162.
- Garba, A. S., Mansor, S. A., & Djafar, F. (2013). Assessing the factors that influence entrepreneurship in Nigeria. *Journal of Entrepreneurship and Management*, 1–11.
- Gartner, W. B. (1985). A conceptual framework for describing the phenomenon of new venture creation. *Academy of Management Review*, 10(4), 696–706. doi:10.5465/AMR.1985.4279094
- Gartner, W. B. (1988). “Who is an entrepreneur?” Is a question worth asking. *American Small Business Journal*, 12(3), 11–31.
- Gatewood, E. J., Brush, C. G., Carter, N. M., Greene, P. G., & Hart, M. M. (2008). Diana: a symbol of women entrepreneurs' hunt for knowledge, money, and the rewards of entrepreneurship. *Small Business Economics*, 32(2), 129–144. doi:10.1007/s11187-

008-9152-8

- Gelo, O., Braakmann, D., & Benetka, G. (2008). Quantitative and qualitative research: beyond the debate. *Integrative Psychological & Behavioral Science*, 42(3), 266–90. doi:10.1007/s12124-008-9078-3
- George, B. A., & Marino, L. (2011). The epistemology of entrepreneurial orientation: Conceptual formation, modeling, and operationalization. *Entrepreneurship Theory and Practice*, 35(5), 989–1024. doi:10.1111/j.1540-6520.2011.00455.x
- George, D., & Mallery, P. (2002). *SPSS for windows step by step: a simple guide and reference. 11.0 update (4th ed.)* (4th ed.). Allyn & Bacon.
- Giocalone, R. A., Jurkiewicz, C. L., & Deckop, J. R. (2008). On ethics and social responsibility: The impact of materialism, postmaterialism, and hope. *Human Relations*, 61(4), 483–514. doi:10.1177/0018726708091019
- Gill, I., Kharas, H., Tatucu, R., Haddad, M., Brahmbhatt, M., Rajan, R., ... Ozer, C. (2007). *An East Asian renaissance: Ideas for economic growth*. Washington, DC: World Bank.
- Goveas, S., & Aslam, N. (2011). A role and contributions of women in the Sultanate of Oman. *International Journal of Business and Management*, 6(3), 232–240.
- Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formation. *California Management Review*, 33(3), 114–135.
- Green, K. M., Covin, J. G., & Slevin, D. P. (2008). Exploring the relationship between strategic reactivity and entrepreneurial orientation: The role of structure–style fit. *Journal of Business Venturing*, 23(3), 356–383. doi:10.1016/j.jbusvent.2007.01.002
- Greer, T. V., Chuchinprakarn, N., & Seshadri, S. (2000). Likelihood of participating in mail survey research. *Industrial Marketing Management*, 29(2), 97–109. doi:10.1016/S0019-8501(98)00038-8
- Greve, A., & Salaff, J. W. (2003). Social networks and entrepreneurship. *Entrepreneurship Theory and Practice*, 28(1), 1–22.
- Grine, F., Fares, D., & Meguellati, A. (2015). Islamic spirituality and entrepreneurship: A case study of women entrepreneurs in Malaysia. *The Journal of Happiness & Well-Being*, 3(1), 41–56.
- Guiso, L., Sapienza, P., & Zingales, L. (2003). *People's opium? Religion and economic attitudes*. *Journal of Monetary Economics* (Vol. 50). doi:10.1016/S0304-3932(02)00202-7
- Gundry, L. K., & Welsch, H. P. (2001). The ambitious entrepreneur: high growth strategies of women-owned enterprises. *Journal of Business Venturing*, 453–470.
- Gupta, A. K., & Govindarajan, V. (1984). Business unit strategy, managerial characteristics, and business unit effectiveness at strategy implementation. *Academy of Management Journal*, 27(1), 25–41. doi:10.2307/255955
- Gupta, J. L., & Sulaiman, M. (1996). Ethical orientations of managers in Malaysia. *Journal of Business Ethics*, 15(7), 735–748.
- Gürbüz, G., & Aykol, S. (2009). Entrepreneurial management, entrepreneurial orientation

- and Turkish small firm growth. *Management Research News*, 32(4), 321–336. doi:10.1108/01409170910944281
- Gutiérrez, P. R., Fuentes, M. del M. F., & Ariza, L. R. (2014). Strategic capabilities and performance in women-owned businesses in Mexico. *Journal of Small Business Management*, 52(3), 541–554. doi:10.1111/jsbm.12048
- Hafeez, M. H., Mohd Shariff, M. N., & Mad Lazim, H. (2013). Does innovation and relational learning influence SME performance? An empirical evidence from Pakistan. *Asian Social Science*, 9(15), 204–213. doi:10.5539/ass.v9n15p204
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis seventh edition*.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., Black, B., & Tatham, R. L. (2006). *Multivariate Data Analysis* (6th ed.). New York, NY: Pearson/Prentice Hall.
- Haji Idris, N. A. (2008). *Wanita dan pembangunan ekonomi (Women and economic development)*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Hall, R. (1993). A framework linking intangible resources and capabilities to sustainable competitive advantage. *Strategic Management Journal*, 14(8), 607–618. doi:10.1002/smj.4250140804
- Hameed, I., & Ali, B. (2011). Impact of entrepreneurial orientation, entrepreneurial management and environmental dynamism on firm's financial performance. *Journal of Economics and Behavioral Studies*, 3(2), 101–114.
- Hammer, A., Jabara, C., Bloodgood, L., & Grossman, N. (2010). *Small and medium-sized enterprises: Overview of participation in U.S. exports*. U.S. International Trade Commission. doi:Investigation No. 332-508
- Hanafi, N., & Mahmood, R. (2013). Entrepreneurial orientation and business performance of women-owned small and medium enterprises in Malaysia : Competitive advantage as a mediator. *International Journal of Business and Social Science*, 4(1), 82–90.
- Hanson, S. (2009). Changing Places Through Women 's Entrepreneurship. *Economic Geography*, 85(3), 245–267.
- Harrison, J. S., & Freeman, R. E. (1999). Stakeholders, social responsibility, and performance: Empirical evidence and theoretical perspectives. *Academy of Management Journal*, 42(5), 479–485. doi:10.2307/256971
- Harrison, J. S., & Wicks, A. C. (2013). Stakeholder theory, value, and firm performance. *Business Ethics Quarterly*, 23(1), 97–124. doi:10.5840/beq20132314
- Harrison, R. T., & Mason, C. M. (2007). Does gender matter? Women business angels and the supply of entrepreneurial finance. *Entrepreneurship Theory and Practice*, 31(3), 445–472. doi:10.1111/j.1540-6520.2007.00182.x
- Hashim, M. K. (2008). *Strategic management: Test and cases* (2nd Editio.). Kuala Lumpur: Thomson Learning Publication.
- Hashim, R. A., & Mahmood, R. (2007). Transformational leadership style and academic staffs' commitment to service quality at Malaysian Universities.

- Hassan, F., Ramli, A., & Mat Desa, N. (2014). Rural women entrepreneurs in Malaysia: What drives their success? *International Journal of Business and Management*, 9(4), 10–21. doi:10.5539/ijbm.v9n4p10
- Hassan, I., & Mugambi, F. (2013). Determinants of growth for women owned and operated micro enterprises: The case of Garissa, Kenya. *International Journal of Business and Commerce*, 2(7), 45–55. Retrieved from <http://www.ijbcnet.com/2-7/IJBC-13-2801.pdf>
- Hassan, K. H., Abdullah, N., & Yusof, R. (2014). How to improve our businesses? A study on rural women entrepreneurs in two selected states in Malaysia. *International Conference on Economics, Education and Humanities*, 21–25. Retrieved from <http://icehm.org/siteadmin/upload/5301ED1214093.pdf>
- Hattab, H. W. (2010). The effect of environments' dimensions on the growth of female entrepreneurial projects in Jordan. *Journal of Small Business & Entrepreneurship*, 23(2), 211–223. doi:10.1080/08276331.2010.10593482
- Hickling, R. H., & Wu, M. A. (1995). *Conflict of laws in Malaysia*. Butterworth. Retrieved from <https://books.google.com.my/books?id=vRY-AQAAIAAJ>
- Hijal-Moghrabi, I., Sabharwal, M., & Berman, E. M. (2015). The importance of ethical environment to organizational performance in employment at Will States. *Administration & Society*, 9(1), 117–130. doi:10.1177/0095399715581043
- Hirschman, E. C. (1986). Humanistic inquiry in marketing research: Philosophy, method, and criteria. *Journal of Marketing Research*, 23(3), 237–249. doi:10.2307/3151482
- Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2010). *Entrepreneurship* (8th ed.). Madison, WI: McGraw-Hill.
- Hitt, M. a., Ireland, R. D., Camp, S. M., & Sexton, D. L. (2001). Strategic entrepreneurship: Entrepreneurial strategies for wealth creation. *Strategic Management Journal*, 22(6–7), 479–491. doi:10.1002/smj.196
- Hj. Ismail, A. Z., Mohd Zain, M. F., & Ahmed, E. M. (2006). A study of motivation in business start-ups among Malay entrepreneurs. *International Business & Economics Research Journal*, 5(2), 103–112.
- Hj Halipah, A. (2009). *Pengaruh kompetensi keusahawanan, struktur organisasi dan persekitaran luar terhadap prestasi perusahaan kecil dan sederhana*.
- Ho, R. (2006). *Handbook of univariate and multivariate data analysis and interpretation with SPSS*. CRC Press.
- Hortovanyi, L. (2010). *Entrepreneurial Management in Hungarian SMEs*. Unpublished doctoral thesis. Corvinus University of Budapest, Hungary. Retrieved from [http://phd.lib.uni-corvinus.hu/459/4/hortovanyi\\_lilla\\_eng.pdf](http://phd.lib.uni-corvinus.hu/459/4/hortovanyi_lilla_eng.pdf)
- Hossain, A., Naser, K., Zaman, A., & Nuseibeh, R. (2009). Factors influencing women business development in the developing countries: Evidence from Bangladesh. *International Journal of Organizational Analysis*, 17(3), 202–224. doi:10.1108/19348830910974923
- Huber, M., Lechner, M., & Mellace, G. (2016). The finite sample performance of estimators for mediation analysis under sequential conditional independence. *Journal of Business*

& *Economic Statistics*, 34(1), 139–160.

- Hughes, K. D. (2006). Exploring motivation and success among Canadian women entrepreneurs. *Journal of Small Business & Entrepreneurship*, 19(2), 107–120. doi:10.1080/08276331.2006.10593362
- Hunt, S. D., & Vitell, S. (1986). A general theory of marketing ethics. *Journal of Macromarketing*, 6(1), 5–16. doi:10.1177/027614678600600103
- Hussey, J., & Hussey, R. (1997). *Business research: a practical guide for undergraduate and postgraduate students*. London: MacMillan.
- Hutcheson, G. D., & Sofroniou, N. (1999). *The multivariate social scientist: Introductory statistics using generalized linear models* (Kindle edi.). SAGE Publications Ltd.
- Ibrahim, M. A., & Mohd Shariff, M. N. (2015). Mediating role of access to finance and moderating role of business environment on the relationship between strategic orientation attributes and performance of small and medium enterprises in Nigeria, (March).
- ICU PMO. (2012). *eKasih National Databank of Poverty Malaysia*. Retrieved from [http://www.icu.gov.my/pdf/artikel/ekasih\\_info.pdf](http://www.icu.gov.my/pdf/artikel/ekasih_info.pdf)
- Idar, R., & Mahmood, R. (2011). Entrepreneurial and marketing orientation relationship to performance: The SME perspective. *Interdisciplinary Review of Economics and Management*, 1(2), 1–8.
- Idris, A. (2008a). A profile of innovative women entrepreneurs. *International Business Research*, 1(2), 3–10.
- Idris, A. (2008b). Cultivating innovation through female leadership: The Malaysian perspective. *Asian Social Science*, 4(6), 3–10.
- Idris, A. (2009). Management styles and innovation in women-owned enterprises. *African Journal of Business Management*, 3(9), 416–425.
- Ismail, M. M. (2007). Fraud profiling in Malaysia. *Corporate Integrity Framework Research Monograph*, 21–23.
- Ismail, Z. (2004). *Faktor-faktor yang mendorong usahawan wanita Kelantan menceburi bidang perniagaan di Pasar Siti Khadijah Kelantan*. Universiti Teknologi Malaysia.
- Itani, H., Sidani, Y. M., & Baalbaki, I. (2011). United Arab Emirates female entrepreneurs: Motivations and frustrations. *Equality, Diversity and Inclusion: An International Journal*, 30(5), 409–424. doi:10.1108/02610151111150654
- Jafri, S. K. A., Ismail, K., Khurram, W., & Soehod, K. (2014). Impact of social capital and firms' innovative capability on sustainable growth of women owned technoprises (SMEs): A study in Malaysia. *World Applied Sciences Journal*, 29(10), 1282–1290. doi:10.5829/idosi.wasj.2014.29.10.2029
- Jahanshahi, A. A., Kachardas, B., & Nawaser, K. (2010). Issues and challenges for women entrepreneurs in global scene, with special reference to India. *Australian Journal of Basic and Applied Sciences*, 4(9), 4347–4356.
- Jamaluddin, J. (2010). *Kajian pemerolehan usahawan ibu tunggal di negeri Perlis*. Universiti

Utara Malaysia.

- Jamil, C. M., & Mohamed, R. (2011). —Performance measurement system (PMS) in small medium enterprises (SMES): A practical modified framework.” *World Journal of Social Sciences*, 1(3), 200–212.
- Jantunen, A., Puumalainen, K., Saarenketo, S., & Kylaheiko, K. (2005). Entrepreneurial orientation , dynamic capabilities and international performance. *Journal of International Entrepreneurship*, 3, 223–243.
- Javadian, G., & Singh, R. P. (2012). Examining successful Iranian women entrepreneurs: An exploratory study. *Gender in Management: An International Journal*, 27. doi:10.1108/17542411211221259
- Jennings, M. M. (2011). *Business ethics: Case studies and selected readings* (7th ed.). Mason, OH: South-Western College/West.
- Jensen, S. M., & Luthans, F. (2006). Entrepreneurs as authentic leaders: Impact on employees’ attitudes. *Leadership & Organization Development Journal*, 27(8), 646–666. doi:10.1108/01437730610709273
- Jiang, X., Yang, Y., Pei, Y.-L., & Wang, G. (2014). Entrepreneurial orientation, strategic alliances, and firm performance: Inside the black box. *Long Range Planning*, 1–14. doi:10.1016/j.lrp.2014.09.003
- June, S., & Mahmood, R. (2011). The relationship between role ambiguity, competency and person-jobfit with the job performance of employees in the service sector SMEs in Malaysia. *Business Management Dynamics*, 1(2), 79–98.
- Justo, R., Cruz, C., de Castro, J., & Coduras, A. (2006). *Entrepreneurs’ perceptions of success: examining differences across gender and family status* (No. WP06-07). Madrid, Spain: Instituto de Empresa Business School.
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31–36.
- Kalshoven, K., Den Hartog, D. N., & De Hoogh, A. H. B. (2012). Ethical leadership and follower helping and courtesy: Moral awareness and empathic concern as moderators. *Applied Psychology*, 62(2), 211–235. doi:10.1111/j.1464-0597.2011.00483.x
- Kamarudin, Z. (2011). Matrade to boost bumiputra contributions to country’s exports. *The Star Online*. Retrieved December 15, 2012, from <http://biz.thestar.com.my/news/story.asp?sec=busi&file=/2011/12/29/business/10171382>
- Karatepe, O. M. (2013). Inking perceived ethical climate to performance outcomes: The mediating role of job embeddedness. *Ekonomika Istrazivanja-Economic Research*, 26(4), 77–90.
- Kasim, H., Abd Hamid, M. T., & Abdullah, S. (2010). *Peranan dan cabaran usahawan wanita bumiputra di Melaka*.
- Kenny, D. A. (2014). Mediation. Retrieved from <http://davidakenny.net/cm/mediate.htm>
- Kenny, D. A., & Judd, C. M. (2010). Data analysis in social psychology: Recent and recurring issues. In *Handbook of social psychology*. doi:10.1002/9780470561119.socpsy001004

- Kerlinger, F. N. (1979). *Foundations of behavioral research*. New York: Holt, Rinehart And Winston New York.
- Khademfar, M., Idris, K., Omar, Z., Ismail, I. A., & Arabamiry, S. (2013). Ethical work climate and firm performance. *International Journal of Business and Social Science*, 4(11), 319–328.
- Khalizani, K., Omar, S. A. S., & Khalisanni, K. (2011). Graduate students' perceptions on business ethics and capitalism: a study in Malaysian universities. *International Journal of Education Administration and Policy Studies*, 3(6), 85–93.
- Khan, A. A. (2014). Factors affecting the performance of female entrepreneurship: evidence from Punjab, Pakistan. *SSRN Electronic Journal*. doi:10.2139/ssrn.2446036
- Khandwalla, P. N. (1976). Some top management styles, their context, and performance. *Organization and Administrative Sciences*, 7(4), 21–51.
- Khandwalla, P. N. (1977). *The design of organizations*. New York: Harcourt Brace Jovanovich.
- Kim, M. Y., Miao, Q., & Park, S. M. (2015). Exploring the relationship between ethical climate and behavioral outcomes in the Chinese Public Sector: The mediating roles of affective and cognitive responses. *International Journal of Business, Humanities and Technology*, 5(3), 88–103.
- Kim, P. L., Nathan, R. J., Khong, S. T., & Boon, B. C. (2010). Effect of innovation to the success of female entrepreneurs. *Journal of Innovation Management in Small and Medium Enterprise*, 2010, 1–14. doi:10.5171/2010.369877
- Klapper, L., Amit, R., Guillen, M. F., & Quesada, J. M. (2007). *Entrepreneurship and firm formation across countries*. *World Bank Policy Research*. Retrieved from <http://knowledge.wharton.upenn.edu/wp-content/uploads/2013/09/1345.pdf>
- Klapper, L. F., & Parker, S. C. (2011). Gender and the business environment for new firm creation. *World Bank Research Observer*, 26(2), 237–257. doi:10.1093/wbro/lkp032
- Knight, F. H. (1964). *Risk, uncertainty and profit (Reprints of economic classic)*. New York: Sentry Press. Retrieved from [https://mises.org/sites/default/files/Risk, Uncertainty, and Profit\\_4.pdf](https://mises.org/sites/default/files/Risk, Uncertainty, and Profit_4.pdf)
- Knight, G. A. (1997). Cross-cultural reliability and validity of a scale to measure firm entrepreneurial orientation. *Journal of Business Venturing*, 12(3), 213–225. doi:10.1016/S0883-9026(96)00065-1
- Knotts, T. L., Jones, S. C., & LaPreze, M. W. (2004). Effect of owners' gender on venture quality evaluation. *Women in Management Review*, 19(2), 74–87. doi:10.1108/09649420410525289
- Kraus, S., Rigtering, J. P. C., Hughes, M., & Hosman, V. (2011). Entrepreneurial orientation and the business performance of SMEs: A quantitative study from the Netherlands. *Review of Managerial Science*, 6(2), 161–182. doi:10.1007/s11846-011-0062-9
- Krauss, S. I., Frese, M., Friedrich, C., & Unger, J. M. (2005). Entrepreneurial orientation: A psychological model of success among Southern African small business owners. *European Journal of Work and Organizational Psychology*, 49(0), 43.

- Kreiser, P. M., Marino, L. D., Kuratko, D. F., & Weaver, K. M. (2013). Disaggregating entrepreneurial orientation: The non-linear impact of innovativeness, proactiveness and risk-taking on SME performance. *Small Business Economics*, 40(2), 273–291. doi:10.1007/s11187-012-9460-x
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607–610.
- Kruger, M. P., & Hanson, B. J. (1999). A value-based paradigm for creating truly healthy organizations. *Journal of Organizational Change Management*, 12(4), 302–317. doi:10.1108/09534819910282144
- Krosnick, J. A. (1991). Response strategies for coping with the cognitive demands of attitude measure in surveys. *Applied Cognitive Psychology*, 5, 213–236.
- Krosnick, J. A., & Fabrigar, L. R. (1997). Designing rating scales for effective measurement in surveys. In L. Lyberg, P. Biemer, M. Collins, E. De Leeuw, C. Dippo, N. Schwarz, & D. Trewin (Eds.), *Survey measurement and process quality* (Vol. 40, pp. 83–84). New York: Wiley. doi:10.1080/00401706.1998.10485505
- Krosnick, J. A., & Presser, S. (2010). Question and questionnaire design. In P. V Marsden & J. D. Wright (Eds.), *Handbook of Survey Research* (2nd ed., pp. 263–313). Bingley, UK: Emerald Group Publishing Limited.
- Kuhn, B., Sassmannshausen, S. P., & Zollin, R. (2010). —Entrepreneurial management” as a strategic choice in firm behavior: Linking it with performance. In *High technology Small Firms Conference (HTSF)*. University of Twente, NL.
- Kuppusamy, J., Ganesan, J., & Rosada, S. (2010). Leadership styles and management techniques: An analysis of Malaysian women entrepreneurs. *Communications of the IBIMA*, 2010, 1–10. doi:10.5171/2010.817881
- Kuzilwa, J. A. (2005). The role of credit for small business success: A study of the national entrepreneurship development fund in Tanzania. *Journal of Entrepreneurship*, 14(2), 131–161. doi:10.1177/097135570501400204
- Lambert, D. M., & Harrington, T. C. (1990). Measuring nonresponse bias in customer service mail surveys. *Journal of Business Logistics*, 11(2), 5–25. doi:Article
- Lang, I. H. (2010). *Targeting inequity: The gender gap in U.S. corporate leadership*. Retrieved from [http://www.jec.senate.gov/public/index.cfm?a=Files.Serve&File\\_id=90f0aade-d9f5-43e7-8501-46bbd1c69bb8](http://www.jec.senate.gov/public/index.cfm?a=Files.Serve&File_id=90f0aade-d9f5-43e7-8501-46bbd1c69bb8)
- Larson, P. D., & Poist, R. F. (2004). Improving response rates to mail surveys: a research note. *Transportation Journal*, 43(4), 67–74.
- Lassen, A. H., Gertsen, F., & Riis, J. O. (2006). The nexus of corporate entrepreneurship and radical innovation. *Creativity and Innovation Management*, 15(4), 359–372. doi:10.1111/j.1467-8691.2006.00406.x
- Lavoie, D. (1985). A new era for female entrepreneurship in the 80’s. *Journal of Small Business - Canada*, 2(3), 34–43. doi:10.1080/0820957X.1985.10600603
- Lechner, C., & Gudmundsson, S. V. (2014). Entrepreneurial orientation, firm strategy and



- small firm performance. *International Small Business Journal*, 32(1), 36–60. doi:10.1177/0266242612455034
- Lee, J. (1997). The motivation of women entrepreneurs in Singapore. *International Journal of Entrepreneurial Behaviour & Research*, 3(2), 93–110. doi:10.1108/13552559710175392
- Leedy, P. D., & Ormrod, J. E. (2005). *Practical Research: Planning and Design* (8th ed.). Upper Saddle River, NJ: Pearson.
- Leonidou, L. C., Kvasova, O., Leonidou, C. N., & Chari, S. (2012). Business unethically as an impediment to consumer trust: The moderating role of demographic and cultural characteristics. *Journal of Business Ethics*. doi:10.1007/s10551-012-1267-9
- Lewis, K. (2008). Small firm owners in New Zealand: In it —god life” or growth? *Small Enterprise Research*, 16(1), 61–70. Retrieved from [http://seipa.edu.pl/s/p/artykuly/91/913/Lifestyle vs growth.pdf](http://seipa.edu.pl/s/p/artykuly/91/913/Lifestyle_vs_growth.pdf)
- Liem, M. C., Melinda, T., & Aji, I. D. K. (2014). An explanatory study of women entrepreneurs: the key success factors to start-up a micro business. *International Journal of Financial Economics*, 3(3), 151–166.
- Lin, B. W., Li, P. C., & Chen, J. S. (2006). Social capital, capabilities, and entrepreneurial strategies: A study of Taiwanese high-tech new ventures. *Technological Forecasting and Social Change*, 73(2), 168–181. doi:10.1016/j.techfore.2004.12.001
- Lindner, J. R., Murphy, T. H., & Briers, G. E. (2001). The handling of nonresponse error in agricultural education. In *National Agricultural Education Research Conference (NAERC)*. New Orleans, LA.
- Lindsay, V., Ashill, N., Roxas, B., & Victorio, A. (2014). Entrepreneurial orientation and performance of microenterprises in an emerging economy. *Journal of Strategic Marketing*, 4488(June 2015), 1–26. doi:10.1080/0965254X.2014.914063
- Litz, R. A. (1996). A resource-based-view of the socially responsible firm: Stakeholder interdependence, ethical awareness, and issue responsiveness as strategic assets. *Journal of Business Ethics*, 15(12), 1355–1363. doi:10.1007/BF00411820
- Liu, Z., Prajogo, D., & Oke, A. (2016). Supply chain technologies: Linking adoption, utilization, and performance. *Journal of Supply Chain Management*, 52(4). doi:10.1111/jscm.12117
- Longenecker, J. G., Mckinney, J. A., & Moore, C. W. (1996). Ethical issues of entrepreneurs. In *International Conference for Small Business* (pp. 1–11).
- Longenecker, J. G., McKinney, J. A., & Moore, C. W. (1989). Ethics in small business. *Journal of Small Business Management*, 27(3), 19–21. Retrieved from <https://www.questia.com/read/1G1-7447665/ethics-in-small-business>
- Lovisky, G. E., Treviño, L. K., & Jacobs, R. R. (2007). Assessing managers’ ethical decision-making: An objective measure of managerial moral judgment. *Journal of Business Ethics*, 73(3), 263–285. doi:10.1007/s10551-006-9206-2
- Lucky, E. O. (2011). Entrepreneurial performance and firm performance. Are they synonymous: a PhD experience. *International Journal of Business and Management*

*Tomorrow, 1*(2), 1–6.

- Lukács, E. (2005). The economic role of SMEs in world economy, especially in Europe. *Journal of European Integration Studies, 4*(1), 3–12. Retrieved from <http://www.uni-miskolc.hu/uni/res/kozlemenyek/2005/EIS1.doc>
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review, 21*(1), 135–172. doi:10.5465/AMR.1996.9602161568
- Lumpkin, G. T., & Dess, G. G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing, 16*(5), 429–451. doi:10.1016/S0883-9026(00)00048-3
- MacKinnon, D. P. (2000). Contrasts in multiple mediator models. In *Multivariate applications in substance use research: New methods for new questions* (pp. 141–160).
- MacKinnon, D. P., Krull, J. L., & Lockwood, C. M. (2000). Equivalence of the mediation, confounding and suppression effect. *Society for Prevention Research*. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2819361/pdf/nihms-173346.pdf>
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods, 7*(1), 83–104. doi:10.1037/1082-989X.7.1.83
- Madura, J. (2007). *Introduction to business. 4th Ed. Thomson Higher Education* (4th Ed.). Mason, OH: Thomson Higher Education. Retrieved from <http://www.academiaworld.net/wp-content/uploads/2015/08/Introduction-to-Business-Jeff-Madura.pdf>
- Mahajar, A. J., & Mohd Yunus, J. (2012). Factors that encourage women involvement in SMEs in Pahang, Malaysia. *The Journal of Human Resource and Adult Learning, 8*(December), 33–41.
- Mahmood, R. (2005). Ethical perceptions of small business owners in Malaysia. *International Journal of Management and Entrepreneurship, 1*(2), 138–145.
- Mahmood, R., & Abdul Rahman, G. (2007). How bank managers assess small business borrowers? *Malaysian Management Review, 42*(1), 43–54.
- Mahmood, S. (2008). Corporate governance and business ethics for SMEs in developing countries: Challenges and way forward. In *The Fourth ISBEE World Congress*. Cape Town, South Africa. Retrieved from [kantakji.com/fiqh/Files/Companies/w111.pdf](http://kantakji.com/fiqh/Files/Companies/w111.pdf)
- Makhbul, Z. M., & Hasun, F. M. (2011). Entrepreneurial success: An exploratory study among entrepreneurs. *International Journal of Business and Management, 6*(1), 116–126.
- Malhotra, N. K. (2006). *Marketing research: an applied orientation*. Pearson/Prentice Hall.
- Malhotra, N. K., & Birks, D. F. (2008). *Marketing research: an applied approach* (3rd ed.). Trans-Atlantic Publications, Inc.
- Manroop, L., Singh, P., & Ezzedeen, S. (2014). Human resource systems and ethical climates: A resource-based perspective. *Human Resource Management, 53*(5), 795–

816. doi:10.1002/hrm.21593

- Mansor, N., & Che Mat, A. (2010). The significance of psychology and environment dimensions for Malaysian Muslim women entrepreneurs venturing. *International Journal of Human Sciences*, 7(1), 253–269.
- Marta, J., Singhapakdi, A., & Kraft, K. (2008). Personal characteristics underlying ethical decisions in marketing situations: A survey of small business managers. *Journal of Small Business Management*, 46(4), 589–606. doi:10.1111/j.1540-627X.2008.00258.x
- Martin-Raugh, M. P., Kell, H. J., & Motowidlo, S. J. (2016). Prosocial knowledge mediates effects of agreeableness and emotional intelligence on prosocial behavior. *Personality and Individual Differences*, 90, 41–49.
- Martin, E., & Polivka, A. E. (1995). Diagnostics for redesigning survey questionnaires: measuring work in the current population survey. *Public Opinion Quarterly*, 59(4), 547. doi:10.1086/269493
- Martin, K. D., & Cullen, J. B. (2011). Continuities and extensions of ethical climate theory: A meta-analytic review. *Journal of Business*, 69(2), 175–194.
- Mason, C., & Ibrahim, M. (2012). Challenges faced by Muslim women entrepreneurs: the Malaysian context. In *International Conference on Business and Economic Research* (pp. 2350–2359).
- Masuo, D., Fong, G., Yanagida, J., & Cabal, C. (2001). Factors associated with business and family success: A comparison of single manager and dual manager family business households. *Journal of Family and Economic Issues*, 22(1), 55–73. doi:10.1023/A:1009492604067
- Mat Rashid, K., Che Ngah, H., Mohamed, Z., & Mansor, N. (2015). Success factors among women entrepreneur in Malaysia. *International Academic Research Journal of Business and Technology*, 1(2), 28–36.
- Mat Rashid, K., Mohamad, Z., & Mansor, N. (2015). Key determinants of women entrepreneur success factor: Does demographic profile differ. *Australian Journal of Basic and Applied Sciences*, 9(34), 209–216.
- McAdam, M. (2013). *Female entrepreneurship*. New York, NY: Routledge.
- McClelland, D. C. (1961). *The achieving society*. New York: The Free Press.
- McDougall, P. P., & Robinson, R. B. J. (1988). New venture performance: Patterns of strategic behavior in different industries. In B. A. Kirchoff, W. A. Long, W. E. McMullan, K. H. Vesper, & W. E. J. Wetzel (Eds.), *Frontiers of entrepreneurship research 1988*. Wellesley, MA: Babson College.
- McInnis, E. D. (2006). *Nonresponse bias in student assessment surveys: a comparison of respondents and non-respondents of the national survey of student engagement at an independent comprehensive Catholic University*. Marywood University.
- McKay, R. (2001). Women entrepreneurs: moving beyond family and flexibility. *International Journal of Entrepreneurial Behaviour & Research*, 7(4), 148–165. doi:10.1108/EUM0000000005764
- Md Ali, A., Md Som, H., Bujang, S. M., & Abu Bakar, T. (2004). Aktiviti keusahawanan di

kalangan ibu tunggal di negeri Johor: kajian terhadap faktor penglibatan dan kejayaan dalam bidang perniagaan. *Jurnal Kemusiaan*, 53–71.

- Md Isa, F., Cheng, W. H., Hashim, N., Abdullah, H. H., Mohd Yunus, J., & Chee, H. H. (2011). *Kajian pembangunan kerangka model usahawan wanita*. Retrieved from <http://repo.uum.edu.my/8067/>
- Menzies, T. V., Diochon, M., & Gasse, Y. (2004). Examining venture-related myths concerning women entrepreneurs. *Journal of Developmental Entrepreneurship*, 9, 89–107.
- Messersmith, J. G., & Wales, W. J. (2011). Entrepreneurial orientation and performance in young firms: The role of human resource management. *International Small Business Journal*, 31(2), 115–136. doi:10.1177/0266242611416141
- Michael, S. C. (2007). Entrepreneurship, growth and Adam Smith. *Strategic Entrepreneurship Journal*, 1, 287–289. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8624.2007.01117.x/pdf>
- Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science*, 29(7), 770–791. doi:10.1287/mnsc.29.7.770
- Miller, D. (1987). Strategy making and structure: analysis and implications for performance. *Academy of Management Journal*, 30(1), 7–32. doi:10.2307/255893
- Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: Two models of strategic momentum. *Strategic Management Journal*, 3(1), 1–25. doi:10.1002/smj.4250030102
- Miller, M. J., Woehr, D. J., & Hudspeth, N. (2002). The meaning and measurement of work ethic: Construction and initial validation of a multidimensional inventory. *Journal of Vocational Behavior*, 60(3), 451–489. doi:10.1006/jvbe.2001.1838
- Minai, M. S., Olusegun, A. I., & Lucky, E. O. (2011). The moderating effect of culture on small firm performance: empirical evidence. *European Journal of Social Sciences*, 23(3), 418–431.
- Mitchelmore, S., & Rowley, J. (2013). Entrepreneurial competencies of women entrepreneurs pursuing business growth. *Journal of Small Business and Enterprise Development*, 20(1), 125–142. doi:10.1108/14626001311298448
- Mitonga-Monga, J. (2015). *The effects of ethical context and behaviour on job retention and performance-related factors*. University of South Africa. Retrieved from [http://uir.unisa.ac.za/bitstream/handle/10500/19882/thesis\\_mitonga-monga\\_j.pdf?sequence=1&isAllowed=y](http://uir.unisa.ac.za/bitstream/handle/10500/19882/thesis_mitonga-monga_j.pdf?sequence=1&isAllowed=y)
- Mobarakeh, S. K., & Ghorbani, H. (2015). The effect of organization's ethical climate on marketing operation with innovation's mediator role. *International Journal of Scientific Management and Development*, 3(10), 589–594.
- Moghadam, V. M. (2005). *The "feminization of poverty" and women's human rights*. UNESCO.
- Mohamad, S., Nor, N., & Subramaniam, G. (2010). *An insight into the challenges faced by Muslim women entrepreneurs in the hospitality and tourism industry in Malaysia*.

- Mohamed Isa, Z., & Jusoff, K. (2009). Opportunities to grab for Malaysian women entrepreneurs. *Canadian Social Science*, 5(5), 35–41.
- Mohammed, R. @ U., Guliling, H. H., & Henry, B. @ J. (2009). *Kajian awal: Penglibatan waita dalam bidang keusahawanan di kawasan bandaraya Kota Kinabalu*.
- Mohd. Nordin, N. A., Abdul Hamid, A. H., Chong, C. W., Azmin, N., Nordin, M., Woon, C. C., & Norizatun Azmin Mohd. Nordin, A. H. A. H. & C. C. W. (2011). Factors affecting profitability of women entrepreneurs business in Malaysia. In *Annual Summit on Business and Entrepreneurial Studies (ASBES 2011) Proceeding* (pp. 972–985). Sarawak, Malaysia.
- Mohd Rhouse, S. (2013). *Values and identities of women entrepreneurs: A study of Muslim women of Malay ethnicity in Malaysia*. Unpublished doctoral theses. University of Waikato.
- Mohd Salleh, N., Sh. Ahmad, F., Baharun, R., Ismail, K., Lim, F. Y., Tan, C. N., & Zulkifli, N. I. (2006). Women participation in business: A focus on franchising venture. *UTM*. Retrieved from <http://eprints.utm.my/2675/>
- Mohd Yusof, S. N. W. (2011). *Success factors in entrepreneurship: The case of Malaysia*.
- Moon, H. K., & Choi, B. K. (2014). How an organization's ethical climate contributes to customer satisfaction and financial performance. *European Journal of Innovation Management*, 17(1), 85–106. doi:10.1108/EJIM-03-2013-0020
- Moore, D. P. (1990). An examination of present research on the female entrepreneur—suggested research strategies for the 1990's. *Journal of Business Ethics*, 9(4–5), 275–281. doi:10.1007/BF00380327
- Moore, D. P., Moore, J. L., & Moore, J. W. (2011). Women entrepreneurs style of transformational leadership and performance outcomes: An interactive approach to building a climate of trust. In *USASBE Proceedings* (Vol. 26, pp. 62–79). doi:10.1108/17542411111130981
- Moore, H. L., & Moore, T. W. (2014). The effect of ethical climate on the organizational commitment of faculty members. *Journal of Academic and Business Ethics*, 9, 1–15.
- Mordi, C., Simpson, R., Singh, S., & Okafor, C. (2010). The role of cultural values in understanding the challenges faced by female entrepreneurs in Nigeria. *Gender in Management: An International Journal*, 25(1), 5–21. doi:10.1108/17542411011019904
- Morris, M. H., & Paul, G. W. (1987). The relationship between entrepreneurship and marketing in established firms. *Journal of Business Venturing*, 2(3), 247–259. doi:10.1016/0883-9026(87)90012-7
- Morris, M. H., & Sexton, D. L. (1996). The concept of entrepreneurial intensity: Implications for company performance. *Journal of Business Research*, 36(1), 5–13. doi:10.1016/0148-2963(95)00158-1
- Morrison, B. M. (2010). *A study of female entrepreneurs' management styles*.
- Mulira, F., Dawa, S., & Namatovu, R. (2010). Ugandan women entrepreneurs' attributes; A comparison of their motivation to women entrepreneurs in select developing economies. In *Conference on "Business and Entrepreneurship in Africa* (pp. 1–23).

Universite Laval, Quebec, Canada.

- Munoz, J. M., Welsh, D. H. B., Chan, S. H., & Raven, P. V. (2014). Microenterprises in Malaysia: A preliminary study of the factors for management success. *International Entrepreneurship and Management Journal*, 11(3), 673–694. doi:10.1007/s11365-014-0302-y
- Murphy, G. B., Trailer, J. W., & Hill, R. C. (1996). Measuring performance in entrepreneurship research. *Journal of Business Research*, 36(1), 15–23. doi:10.1016/0148-2963(95)00159-X
- Musa, D., Ghani, A. A., & Ahmad, S. (2014). Linking entrepreneurial orientation and business performance: The examination toward performance of cooperatives firms in Northern Region of Peninsular Malaysia. *International Journal of Business and Technopreneurship*, 4(2), 247–264.
- Mustapa, A. N., & Mahmood, R. (2016a). Knowledge management and job performance in the public sector: The mediating role of public service motivation. *Journal for Studies in Management and Planning*, 2(7), 144–164.
- Mustapa, A. N., & Mahmood, R. (2016b). Knowledge management and job performance in the public sector: The moderating role of public organizational commitment. *International Journal of Research in Business Studies and Management*, 3(7), 28–36.
- National SME Development Council. (2015). *SME Annual Report 2014/15*. Putrajaya. Retrieved from <http://www.smecorp.gov.my/index.php/my/sme-annual-report/book/7-annual-report-2014/2-annual-report>
- National SME Development Council. (2016). *SME Annual Report 2015/16*. Putrajaya. Retrieved from <http://www.smecorp.gov.my/images/Publication/Annual-report/SME AR 2015-16 English Final web.pdf>
- Ndubisi, N. O., & Agarwal, J. (2014). Quality performance of SMEs in a developing economy: Direct and indirect effects of service innovation and entrepreneurial orientation. *Journal of Business & Industrial Marketing*, 29(6), 454–468. doi:10.1108/JBIM-07-2013-0146
- Ndubisi, N. O., & Kahraman, C. (2005). Malaysian women entrepreneurs: Understanding the ICT usage behaviors and drivers. *Journal of Enterprise Information Management*, 18(6), 721–739. doi:10.1108/17410390510628418
- Neuman, W. L. (2009). *Social research methods: Qualitative and quantitative approaches* (7th ed.). Boston: Pearson.
- Ng, H. S., & Daisy, M. H. K. (2012). Development of intangible factors for SME success in a developing country. *International Journal of Academic Research in Business and Social Sciences*, 2(12), 198–214. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authy pe=crawler&jrnl=22226990&AN=89762330&h=69jTczrwQ+J638gS58zMOACRz3Hq/62TOl6QN9XcMNG6Lh5QWFywyQnAu9tWr6d2zv6GC3z+1zIwrDMFmJuBA=&crl=c>
- Nguyen, M. (2005). Women entrepreneurs: Turning disadvantages into advantages. Retrieved from

<http://www.preflightventures.com/resources/WomenEntrepreneursLitSurvey01-2005.htm>

- Nor, N., Mohd Noor, N., & Mohd Nor, A. (2011). Muslim woman entrepreneurs in the hospitality and tourism industry in Malaysia. *The NIEW Journal*, 3, 69–89.
- Nordin, M. K. (2009). Memantapkan Budaya Keusahawanan Di Kalangan Generasi Baru Melalui Sistem Pendidikan Nasional Dan Pengajian Agama: Gagasan dan Cabaran Merealisasikannya. In *Kongres Ekonomi Islam Ketiga* (pp. 12–15). Kuala Lumpur, Malaysia.
- Norusis, M. J. (1985). *SPSS X advanced statistics guide* (1st ed.). New York City: McGraw-Hill.
- Nunnally, J. C. (1978). *This Week 's Citation Classic. Psychometric theory*. McGraw-Hill.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill.
- Obadia, C., Bello, D. C., & Gilliland, D. I. (2015). Effect of exporter's incentives on foreign distributor's role performance. *Journal of International Business Studies*, 46(8), 960–983. doi:10.1057/jibs.2015.17
- OECD. (2012). Measuring women entrepreneurship. In *Entrepreneurship at a Glance 2012*. OECD Publishing.
- Ogunrinola, I. O. (2011). Social capital and earnings distribution among female micro-entrepreneurs in rural Nigeria. *African Journal of Economic and Management Studies*, 2(1), 94–113. doi:10.1108/20400701111110795
- Okafor, C., & Mordi, C. (2010). Women entrepreneurship development in Nigeria: The effect of environmental factors. *Economic Science Series*, LXII(4), 43–52.
- Okurut, F. N., & Ama, N. O. (2013). Assessing factors that affect women and youth micro-entrepreneurs in Botswana. *International Journal of Academic Research in Economics and Management Sciences*, 2(1), 306–332.
- Omar, K. (2009). Arab women managers and identity formation through clothing. *Gender in Management: An International Journal*, 24(6), 412–431. doi:10.1108/17542410910980397
- Omar, N. A., Nazri, M. A., & Che Wel, C. A. (2014). Entrepreneurial training of low-income women micro enterprises in the service sector in Malaysia: Understanding the problems and challenges. *Journal of Science and Development Science*, 5(4), 245–257. Retrieved from [http://www.researchgate.net/profile/Nor\\_Asiah\\_Omar/publication/270957663\\_Entrepreneurial\\_Training\\_of\\_Low-Income\\_Women\\_Micro\\_Enterprises\\_in\\_the\\_Service\\_Sector\\_in\\_Malaysia\\_Understanding\\_the\\_Problems\\_and\\_Challenges/links/54ba691d0cf253b50e2cea8d.pdf](http://www.researchgate.net/profile/Nor_Asiah_Omar/publication/270957663_Entrepreneurial_Training_of_Low-Income_Women_Micro_Enterprises_in_the_Service_Sector_in_Malaysia_Understanding_the_Problems_and_Challenges/links/54ba691d0cf253b50e2cea8d.pdf)
- Orhan, M., & Scott, D. (2001). Why women enter into entrepreneurship: an explanatory model. *Women in Management Review*, 16(5), 232–247. doi:10.1108/09649420110395719
- Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. (1957). *The measurement of meaning*. Urbana, IL: University of Illinois Press.

- Osman, I., Ahmad, N. H., Ahmad, Z. A., Husin, A., Abu Bakar, S., & Tanwir, N. D. (2010). Understanding motivation, empowerment and sustainability outcomes of women homestay entrepreneurs in West Malaysia. A preliminary analysis. *World Conference Cincinnati*, 1–27.
- Otache, I. (2015). *The performance of commercial banks: The role of organizational culture as a mediator and external environment as a moderator*. Unpublished doctoral theses. Universiti Utara Malaysia.
- Otache, I., & Mahmood, R. (2015). Entrepreneurial orientation and performance of Nigerian banks: The mediating effect of teamwork. *Mediterranean Journal of Social Sciences*, 6(3), 406–414. doi:10.5901/mjss.2015.v6n3p406
- Oumlil, A. Ben, & Balloun, J. L. (2009). Ethical decision-making differences between American and Moroccan managers. *Journal of Business Ethics*, 84(4), 457–478. doi:10.1007/s10551-008-9719-y
- Paige, R. C., & Littrell, M. A. (2002). Craft retailers' criteria for success and associated business strategies. *Journal of Small Business Management*, 40(4), 314–331. doi:10.1111/1540-627X.00060
- Painter-Morland, M., & Spence, L. J. (2009). Introduction: Business ethics in small and medium enterprises. *African Journal of Business Ethics*, 4(2), 1–6.
- Pallant, J. (2007). *SPSS Survival Manual: A Step by Step Guide to Data Analysis using SPSS for Windows* (3rd Ed.). Open University Press.
- Pappu, R., & Quester, P. G. (2016). How does brand innovativeness affect brand loyalty? *European Journal of Marketing*, 50(1/2), 2–28.
- Parboteeah, K. P., & Kapp, E. A. (2008). Ethical climates and workplace safety behaviors: An empirical investigation. *Journal of Business Ethics*, 80(3), 515–529. doi:10.1007/s10551-007-9452-y
- Parboteeah, K. P., Seriki, H. T., & Hoegl, M. (2014). Ethnic diversity, corruption and ethical climates in sub-Saharan Africa: recognizing the significance of human resource management. *Journal of Human Resource Management*, 25(7), 979–1001. doi:10.1080/09585192.2013.815251
- Pehrsson, A. (2016). Firm's strategic orientation, market context, and performance: Literature review and opportunities for international strategy research. *European Business Review*, 28(4). doi:10.1108/09574090910954864
- Peniagawati. (2012). Peniagawati website. Direktori Ahli. Retrieved November 12, 2012, from <http://peniagawati.org.my>
- Penrose, E. T. (1959). *The theory of the growth of the firm. Theory of the Growth of the Firm*. Oxford, UK: Oxford University Press.
- Perry, C. (1998). A structured approach for presenting theses. *Australasian Marketing Journal (AMJ)*, 6(1), 63–85. doi:10.1016/S1441-3582(98)70240-X
- Peterson, D. K. (2002). Deviant workplace behavior and the organization's ethical climate. *Journal of Business and Psychology*, 17(1), 47–61. doi:10.1023/A:1016296116093
- Phatshwane, P. M. D. (2013). Ethical perceptions of managers: A preliminary study of small



- and medium enterprises in Botswana. *American International Journal of Contemporary Research*, 3(2), 41–49.
- Pines, A. M., Lerner, M., & Schwartz, D. (2010). Gender differences in entrepreneurship: Equality, diversity and inclusion in times of global crisis. *Equality, Diversity and Inclusion: An International Journal*, 29(2), 186–198. doi:10.1108/02610151011024493
- Piperopoulos, P. (2012). Ethnic female business owners: more female or more ethnic entrepreneurs. *Journal of Small Business and Enterprise Development*, 19(2), 192–208. doi:10.1108/14626001211223856
- PMO. (2010). *Rancangan Malaysia Kesepuluh*. Retrieved from [http://www.pmo.gov.my/dokumenattached/RMK/RMK10\\_E.pdf](http://www.pmo.gov.my/dokumenattached/RMK/RMK10_E.pdf)
- PMO. (2013). *Government Transformation Plan Report 2013*. Retrieved from [https://www.pmo.gov.my/dokumenattached/NTP-Report-2013/GTP\\_2013\\_ENG\\_Report.pdf](https://www.pmo.gov.my/dokumenattached/NTP-Report-2013/GTP_2013_ENG_Report.pdf)
- Pratono, A. H., & Mahmood, R. (2015). Mediating effect of marketing capability and reward philosophy in the relationship between entrepreneurial orientation and firm performance. *Journal of Global Entrepreneurship Research*, 5(1), 5. doi:10.1186/s40497-015-0023-x
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891. doi:10.3758/BRM.40.3.879
- Putranta, M. P. (2008). *The relationships between ethical climates, ethical ideology, and organisational commitment*. University of Notre Dame Australia.
- Putranta, M. P., & Kingshott, R. P. J. (2011). The relationships between ethical climates, ethical ideologies and organisational commitment within Indonesian higher education institutions. *Journal of Academic Ethics*, 9(1), 43–60. doi:10.1007/s10805-010-9122-z
- Quinn, J. J. (1997). Personal ethics and business ethics: The ethical attitudes of owner/managers of small business. *Journal of Business Ethics*, 16, 119–127. doi:10.1023/A:1017901032728
- Qureshi, S., & Kratzer, J. (2011). An investigation of antecedents and outcomes of marketing capabilities in entrepreneurial firms: An empirical investigation of small technology-based firms in Germany. *Journal of Small Business and Entrepreneurship*, 24(1), 49–66. doi:10.1080/08276331.2011.10593525
- Rachagan, S., Terpstra-Tong, J., Terpesta, R., Mahenthrian, S., Tong, J., Terpstra, R., & Mahenthiran, S. (2013). Intangible factors influencing firm performance in developing countries: Malaysian evidence. *SSRN Electronic Journal*, 0–27. doi:10.2139/ssrn.2221367
- Rajah, D. (2006). People trust docs, teachers. *The Star*. Retrieved December 25, 2014, from <http://www.thestar.com.my/news/nation/2006/04/19/people-trust-docs-teachers/>
- Rajput, A. A., & Ali, M. (2009). A preliminary investigation of entrepreneurial women in Potohar region of Pakistan. *Journal of Chinese Entrepreneurship*, 1(3), 193–208. doi:10.1108/17561390910999498

- Raman, K., Anantharaman, R. N., & Ramanathan, S. (2013). Environmental, personality and motivational factors: A comparison study between women entrepreneurs and women non entrepreneurs in Malaysia. *International Journal of Business and Management*, 8(13), 15–24. doi:10.5539/ijbm.v8n13p15
- Raman, K., Anantharaman, R. N., & Jayasingam, S. (2008). Motivational factors affecting entrepreneurial decision: A comparison between Malaysian women entrepreneurs and women non entrepreneurs. *Communications of the IBIMA*, 2, 85–89.
- Rao, V., Venkatachalm, A., & Joshi, H. G. (2013). A study on entrepreneurial characteristics and success of women entrepreneurs operating fashion and apparel business. *Asian Journal of Management Sciences and Education*, 2(2), 1–12.
- Rauch, A., Wiklund, J., Frese, M., & Lumpkin, T. (2004). Entrepreneurial orientation and business performance: Cumulative empirical evidence. In *23rd Babson College Entrepreneurship Research Conference*. Glasgow, UK. Retrieved from [http://fusionmx.babson.edu/entrep/fer/fer\\_2004/web-content/Section VI/P1/VI-P1\\_Text.html](http://fusionmx.babson.edu/entrep/fer/fer_2004/web-content/Section_VI/P1/VI-P1_Text.html)
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: an assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice*, 33(3), 761–787. doi:10.1111/j.1540-6520.2009.00308.x
- Reaves, B. B. (2008). *Entrepreneurial success: a phenomenological study of the characteristics of successful female entrepreneurs*. ProQuest Dissertations and Theses. University of Phoenix, Ann Arbor. Retrieved from <http://eserv.uum.edu.my/docview/304315103?accountid=42599>
- Redzuan, M., Abd Rahman, A. R., & Muhamad Nasharudin, N. A. (2012). Pembentukan keupayaan individu dalam kalangan usahawan wanita industri kecil. *Akademika*, 82(1), 57–64.
- Reijonen, H. (2008). Understanding the small business owner: What they really aim at and how this relates to firm performance. *Management Research News*, 31(8), 616–629. doi:10.1108/01409170810892172
- Rejab, I. (1983). Implications for research on predictors of selected entrepreneurs. *Jurnal Pengurusan*, 2(7), 5–19.
- Revathi, S., & Krishnan, J. (2012). Problems and opportunities of women entrepreneurs faced in the globalized economy. *International Journal of Management*, 6502, 77–81.
- Reynolds, P. D., Bygrave, W. D., Autio, E., Cox, L. W., & Hay, M. (2002). *Global Entrepreneurship Monitor, 2002 Executive Report*. London. Retrieved from [http://www.esbri.se/gemglobalreport\\_2002.pdf](http://www.esbri.se/gemglobalreport_2002.pdf)
- Ricardo, D. (1966). *Economic essays*. (E. C. K. Gonner, Ed.). New York: Cass, 1966.
- Richard, O. C., Barnett, T., Dwyer, S., & Chadwick, K. (2004). Cultural diversity in management, firm performance, and the moderating role of entrepreneurial orientation dimensions. *Academy of Management Journal*, 47(2), 255–266. doi:10.2307/20159576
- Riddle, L., & Ayyagari, M. (2011). Contemporary cleopatras: The business ethics of female Egyptian managers. *Education, Business and Society: Contemporary Middle Eastern*

*Issues*, 4(3), 167–192. doi:10.1108/17537981111159957

- Rietz, A. Du, & Henrekson, M. (2000). Testing the female underperformance hypothesis. *Small Business Economics*, 14, 1–10.
- Riquelme, I. P., Román, S., & Iacobucci, D. (2016). Consumers' perceptions of online and offline retailer deception: A moderated mediation analysis. *Journal of Interactive Marketing*, 35, 16–26. doi:10.1016/j.intmar.2016.01.002
- Robb, A. M., & Watson, J. (2012). Gender differences in firm performance: Evidence from new ventures in the United States. *Journal of Business Venturing*, 27, 544–558. doi:10.1016/j.jbusvent.2011.10.002
- Robbins, D. (1999). Questionnaire construction. In G. Miller (Ed.), *Handbook of Research Methods in Public Administration* (2nd ed., pp. 87–97). New York, NY: M. Decker.
- Robbins, S. P., & Coulter, M. (2012). *Management Eleventh Edition* (Eleventh E.). Upper Saddle River, NJ: Pearson/Prentice Hall. Retrieved from <https://shankar9119.files.wordpress.com/2013/07/management-11th-edn-by-stephen-p-robbins-mary-coulter-pdf-qwerty80.pdf>
- Robinson, D. A. (2002). *A phenomenological study of how South African entrepreneurs experience and deal with ethical dilemmas*. Rhodes University.
- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal*, 38(2), 555–572.
- Roddin, R., Sultan Sidi, N. S., Yusof, Y., Mohamed, M., & Abdul Razzaq, A. R. (2000). Poverty alleviation among single mother in Malaysia: Building entrepreneurship capacity. *The Special Issue on Contemporary Issues in Business Studies*, 2(17), 92–99.
- Roomi, M. A., & Harrison, P. (2010). Behind the veil: women-only entrepreneurship training in Pakistan. *International Journal of Gender and Entrepreneurship*, 2(2), 150–172. doi:10.1108/17566261011051017
- Roomi, M. A., Harrison, P., & Beaumont-Kerridge, J. (2009). Women-owned small and medium enterprises in England: Analysis of factors influencing the growth process. *Journal of Small Business and Enterprise Development*, 16(2), 270–288. doi:10.1108/14626000910956056
- Roomi, M. A., & Parrott, G. (2008). Barriers to development and progression of women entrepreneurs in Pakistan. *Journal of Entrepreneurship*, 17(1), 59–72. doi:10.1177/097135570701700105
- Rosa, P., Carter, S., & Hamilton, D. (1996). Gender as a determinant of small business performance: Insights from a British study. *Small Business Economics*, 8(6), 463–478. doi:10.1007/BF00390031
- Rosenbusch, N., Brinckmann, J., & Bausch, A. (2011). Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs. *Journal of Business Venturing*, 26(4), 441–457. doi:10.1016/j.jbusvent.2009.12.002
- Roy, P. (2014). Analyzing female entrepreneurship in a global context -the challenges and the road ahead. *International Journal of Interdisciplinary and Multidisciplinary Studies*, 1(5), 332–336.

- Rozy, H. S. (2009). *A briefing on 24 June 2009 at National Association of Women Entrepreneurs of Malaysia*. Retrieved from <http://www.cedpa.org/images/docs/RozyHayateePresentation.doc>
- Runyan, R. C., Huddleston, P., & Swinney, J. (2006). Entrepreneurial orientation and social capital as small firm strategies: A study of gender differences from a resource-based view. *International Entrepreneurship and Management Journal*, 2(4), 455–477. doi:10.1007/s11365-006-0010-3
- Sabarwal, S., & Terrell, K. (2008). *Does gender matter for firm performance? Evidence from Eastern Europe and Central Asia* (No. 3758). Retrieved from <http://deepblue.lib.umich.edu/handle/2027.42/61180>
- Sachayansrisakul, N. (2008). Myths unfold: successful Asian women entrepreneurs in a western context. In *Regional Frontiers of Entrepreneurship Research 2008: 5th International Australian Graduate School of Entrepreneurship (AGSE) Entrepreneurship Research Exchange* (pp. 115–129). Melbourne, Australia.
- Sadler-Smith, E., Hampson, Y., Chaston, I., & Badger, B. (2003). Managerial behavior, entrepreneurial style, and small firm performance. *Journal of Small Business Management*, 41(1), 47–67. doi:10.1111/1540-627X.00066
- Saeed, S., Yousafzai, S. Y., & Engelen, A. (2014). On cultural and macroeconomic contingencies of the entrepreneurial orientation-performance relationship. *Entrepreneurship: Theory and Practice*, 38(2), 255–290. doi:10.1111/etap.12097
- Salkind, N. J. (1997). *Exploring research* (3rd ed.). Upper Saddle River, NJ: Prentice Hall.
- Salleh, Z., & Mohd Osman, M. H. (2007). Goal orientations and typology of women entrepreneurs. *Jurnal Kemanusiaan*, (10).
- Salman, A. (2009). *How to start a business: A guide for women*. Center for International Private Enterprise.
- Sanders, J. A., Verhulst, F., & Murdock, J. (2007). *Averaging methods in nonlinear dynamical systems* (2nd ed.). New York: Springer.
- Sapleton, N. (2009). Women non-traditional entrepreneurs and social capital. *International Journal of Gender and Entrepreneurship*, 1(3), 192–218. doi:10.1108/17566260910990892
- Sarker, S., & Palit, M. (2014). Determinants of success factors of women entrepreneurs in Bangladesh- A study based on Khulna Region. *Business and Economic Research*, 4(2), 237. doi:10.5296/ber.v4i2.6337
- Say, J.-B. (1971). *A Treatise on Political Economy*. Augustus M. Kelley (6th Ed.). New York: Augustus M. Kelley. doi:10.1017/CBO9781107415324.004
- Scarborough, N. M. (2011). *Effective Small Business Management: An Entrepreneurial Approach* (10th ed.). Upper Saddle River, NJ: Prentice Hall.
- Scarborough, N. M., Wilson, D. L., & Zimmerer, T. (2010). *Essentials of entrepreneurship and small business management* (6th ed.). New Jersey, NJ: Prentice Hall.
- Schminke, M., Ambrose, M. L., & Neubaum, D. O. (2005). The effect of leader moral development on ethical climate and employee attitudes. *Organizational Behavior and*

*Human Decision Processes*, 97(2), 135–151. doi:10.1016/j.obhdp.2005.03.006

- Schumpeter, J. A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle* (2nd editio.). Cambridge: Harvard University Press.
- Sekaran, U. (1999). *Research methods for business: A skill building approach*. (3rd ed.). John Willey & Sons.
- Sekaran, U., & Bougie, R. (2010). *Research methods for business: a skill building approach* (5th ed.). Hoboken, NJ: Wiley.
- Selamat, N. H., Abdul Razak, R. R., Abdul Gapor, S., & Sanusi, Z. A. (2011). Survival through entrepreneurship: Determinants of successful micro-enterprises in Balik Pulau, Penang Island, Malaysia. *British Journal of Arts and Social Sciences*, 3(1), 23–37. Retrieved from [http://www.bjournal.co.uk/paper/bjass\\_3\\_1/bjass\\_03\\_01\\_02.pdf](http://www.bjournal.co.uk/paper/bjass_3_1/bjass_03_01_02.pdf)
- Selznick, P. (1957). *Leadership in administration: A sociological interpretation*. Berkeley, CA: University of California Press.
- Sethi, J., & Saxena, A. (2013). *Lesson 3-Entrepreneurial competencies, motivation, performance and rewards*. Retrieved from [http://www.oneplanetventures.org/yproject/downloads/resources/Entrepreneurial\\_Competencies.pdf](http://www.oneplanetventures.org/yproject/downloads/resources/Entrepreneurial_Competencies.pdf)
- Sexton, D. L., & Landström, H. (2000). Remaining issues and research suggestions. In D. L. Sexton & H. Landström (Eds.), *The Blackwell handbook of entrepreneurship*. Oxford, UK: Blackwell.
- Shafie, L. A., Nayan, S., Mansor, M., Maesin, A., Mahadi, R., & Aziz Fadzillah, N. A. (2011). Trust attributes and female blogshop entrepreneurs in Malaysia. *Interdisciplinary Journal of Research in Business*, 1(8), 1–9.
- Shamsudin, A. S., Mohd Kassim, A. W., Hassan, M. G., & Johari, N. A. (2010). Preliminary insights on the effect of Islamic Work Ethic on relationship marketing and customer satisfaction. *The Journal of Human Resource and Adult Learning*, 6(June 2010), 106–114.
- Shane, S. A. (2003). *A general theory of entrepreneurship: The individual-opportunity nexus*. Northampton, MA: Edward Elgar Publishing.
- Shane, S., & Venkataraman, S. (2000). The Promise of Entrepreneurship as a Field of Research. *The Academy of Management Review*, 25(1), 217. doi:10.2307/259271
- Shehu, A. M., & Mahmood, R. (2014a). Influence of entrepreneurial orientation and business environment on small and medium firm performance: A PLS approach. *Advances in Management & Applied Economics*, 4(4), 101–114.
- Shehu, A. M., & Mahmood, R. (2014b). The mediating effect of organizational culture on the relationship between entrepreneurial orientation and firm performance in Nigeria. *Mediterranean Journal of Social Sciences*, 5(23), 480–488. doi:10.5901/mjss.2014.v5n23p480
- Shivani, S., Mukherjee, S. K., & Sharan, R. (2006). Socio-cultural influences on Indian entrepreneurs: the need for appropriate structural interventions. *Journal of Asian*

*Economics*, 17, 5–13. doi:10.1016/j.asieco.2006.01.002

- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7(4), 422–445. doi:10.1037//1082-989X.7.4.422
- Shukla, P. (2008). *Essentials of marketing research*. Retrieved from <http://dl.is.vnu.edu.vn/bitstream/123456789/246/1/marketing-research-exercisebook.pdf>
- Simha, A., & Cullen, J. B. (2012). Ethical climates and their effects on organizational outcomes – Implications from the past, and prophecies for the future. *Academy of Management Perspectives*, 26(4), 20–34.
- Singh, S., Simpson, R., Mordi, C., & Okafor, C. (2011). Motivation to become an entrepreneur: A study of Nigerian women's decisions. *African Journal of Economic and Management Studies*, 2(2), 202–219. doi:10.1108/20400701111165641
- Siu, N. Y. M., & Lam, K. C. J. (2009). A comparative study of ethical perceptions of managers and non-managers. *Journal of Business Ethics*, 88(SUPPL. 1), 167–183. doi:10.1007/s10551-008-9824-y
- Sivo, S. A., Saunders, C., Chang, Q., & Jiang, J. J. (2006). How low should you go? low response rates and the validity of inference in IS questionnaire research. *Journal of the Association for Information Systems*, 7(6), 351–413. doi:Article
- Slater, S. F., Olson, E. M., & Hult, G. T. M. (2006). The moderating influence of strategic orientation on the strategy formation capability–performance relationship. *Strategic Management Journal*, 27(12), 1221–1231. doi:10.1002/smj.569
- Sloane, P. (1999). *Islam, modernity and entrepreneurship among the Malays*. London: MacMillan.
- Small Medium Enterprise Administration. (2009). The definition of SMEs. *Ministry of Economic Affairs*. Retrieved from <http://www.moeasmea.gov.tw/ct.asp?xItem=70&CtNode=261&mp=2>
- Smallbone, D., & Welter, F. (2001). The distinctiveness of entrepreneurship in transition economies. *Small Business Economics*, 16(4), 249–262. doi:10.1023/A:1011159216578
- SME Corp. (2013). Small and Medium Enterprises (SMEs) definition. Retrieved from <http://www.smecorp.gov.my/index.php/en/policies/2015-12-21-09-09-49/sme-definition>
- SMEDAN. (2015). *National Policy on MSMEs*. Retrieved from [http://www.smedan.gov.ng/images/NBS2015/NATIONAL\\_POLICY\\_ON\\_MSMEsFinal\\_Copy.pdf](http://www.smedan.gov.ng/images/NBS2015/NATIONAL_POLICY_ON_MSMEsFinal_Copy.pdf)
- Smit, Y., & Watkins, J. A. (2012). A literature review of small and medium enterprises (SME) risk management practices in South Africa. *African Journal of Business Management*, 6(21), 6324–6330. doi:10.5897/AJBM11.2709
- Spence, L. J. (2007). CSR and small business in a European Policy context: The five “C” of CSR and small business research agenda. *Business and Society Review*, 112(4), 533–

- Spence, L. J., & Rutherford, R. (2001). Social responsibility, profit maximisation and the small firm owner-manager. *Journal of Small Business and Enterprise Development*, 8, 126–139. doi:10.1108/EUM0000000006818
- Spence, L. J., & Rutherford, R. (2003). Small business and empirical perspectives in business ethics: Editorial. *Journal of Business Ethics*, 47(1), 1–5. doi:10.1023/A:1026205109290
- Srinivasan, V. (2011). Business ethics in the South and South East Asia. *Journal of Business Ethics*, 104(SUPPL. 1), 73–81. doi:10.1007/s10551-012-1264-z
- Stanley, K. J. (2004). *Millionaire women next door: The many journeys of successful American businesswomen*. Kansas City, MO: Andrews McMeel.
- Starr, J., & Yudkin, M. (1996). *Women entrepreneurs: A review of current research*. Wellesley, MA.
- Steed, L. G., & Coakes, S. J. (2001). *SPSS: Analysis without anguish*. Brisbane: John Wiley & Sons Australia.
- Steenkamp, N., & Kashyap, V. (2010). Importance and contribution of intangible assets: SME managers' perceptions. *Journal of Intellectual Capital*, 11(3), 368–390. doi:10.1108/14691931011064590
- Stevenson, H. H. (1983). *A perspective on entrepreneurship* (No. 9).
- Stevenson, H. H., & Gumpert, D. (1985). The heart of entrepreneurship. *Harvard Business Review*, 63, 85–94. Retrieved from <https://hbr.org/1985/03/the-heart-of-entrepreneurship>
- Stevenson, H. H., & Jarillo, J. C. (1990). A paradigm of entrepreneurship: Entrepreneurial management. *Strategic Management Journal*, 11, 17–27. doi:10.1007/978-3-540-48543-8\_7
- Stevenson, H. H., & Jarrillo-Mossi, J. C. (1986). Preserving entrepreneurship as companies grow. *The Journal of Business Strategy*, 7(1), 10–23.
- Still, L. V., & Timms, W. (2000). Women's business: the flexible alternative workstyle for women. *Women in Management Review*, 15(5/6), 272–283. doi:10.1108/09649420010372931
- Subramaniam, P., & Islam, J. (2014). Innovation and the impact of technology on women entrepreneurs in small and medium enterprises in Singapore. *World Applied Sciences Journal*, 30, 238–246. doi:10.5829/idosi.wasj.2014.30.icmrp.31
- Sundqvist, S., Kyläheiko, K., Kuivalainen, O., & Cadogan, J. W. (2012). Kirznerian and Schumpeterian entrepreneurial-oriented behavior in turbulent export markets. *International Marketing Review*, 29(2), 203–219. doi:10.1108/02651331211216989
- Swaim, J. A., Maloni, M. J., Henley, A., & Campbell, S. (2016). Motivational influences on supply manager environmental sustainability behavior. *Supply Chain Management: An International Journal*, 21(3). doi:10.1108/SCM-07-2015-0283
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics* (6th ed.). Boston:

Pearson.

- Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics* (6th ed.). Upper Saddle River, NJ: Pearson Education.
- Tambunan, T. (2009). Women entrepreneurship in Asian developing countries: Their development and main constraints. *Journal of Development and Agricultural Economics*, 1(2), 27–40.
- Tambunan, T. T. H. (2011). Development of small and medium enterprises in a developing country: The Indonesian case. *Journal of Enterprising Communities: People and Places in the Global Economy*, 5(1), 68–82. doi:10.1108/17506201111119626
- Tang, Z., Kreiser, P. M., Marino, L., Dickson, P., & Weaver, K. M. (2008). A hierarchical perspective of the dimensions of entrepreneurial orientation. *International Entrepreneurship and Management Journal*, 5(2), 181–201. doi:10.1007/s11365-008-0097-9
- Tantasuntisakul, W. (2015). *Determinants of business performance among women entrepreneurs in Southern Thailand*. Universiti Utara Malaysia.
- Taormina, R. J., & Lao, S. K.-M. (2007). Measuring Chinese entrepreneurial motivation: Personality and environmental influences. *International Journal of Entrepreneurial Behaviour & Research*, 13(4), 200–221. doi:10.1108/13552550710759997
- Teece, D. J. (2000). Strategies for managing knowledge assets: The role of firm structure and industrial context. *Long Range Planning*, 33(1), 35–54. doi:10.1016/S0024-6301(99)00117-X
- Temitope, J. C. (2015). Challenges of women entrepreneurs in a developing economy: A case study of Abeokuta City of Ogun State, Nigeria. *Journal for Studies in Management and Planning*, 1(7), 380–388. Retrieved from <http://edupediapublications.org/journals/index.php/JSMaP/article/view/2622>
- Teoh, W. M.-Y., & Chong, S.-C. (2007). Theorising a framework of factors influencing performance of women entrepreneurs in Malaysia. *Journal of Asia Entrepreneurship and Sustainability*, 3(2), 1–17. Retrieved from <http://www.asiaentrepreneurshipjournal.com/AJESIII2Teoh.pdf>
- Teoh, W. M.-Y., & Chong, S. C. (2014). Towards strengthening the development of women entrepreneurship in Malaysia. *Gender in Management: An International Journal*, 29(7), 432–453. doi:10.1108/GM-10-2013-0122
- Thamaraiselvi. (2007). Women as entrepreneurs in India. Retrieved January 30, 2015, from <http://www.articlesbase.com/entrepreneurship-articles/women-as-entrepreneurs-in-india-212759.html>
- Thayammal, I. P. R. (2011). *A study on the development of women entrepreneurs in small scale industries in Tirunelveli District*. Unpublished doctoral theses. Manonmaniam Sundaranar University.
- Tlaiss, H. A. (2014). How Islamic business ethics impact women entrepreneurs: Insights from four Arab Middle Eastern Countries. *Journal of Business Ethics*. doi:10.1007/s10551-014-2138-3



- Toledo-López, A., Díaz-Pichardo, R., Jiménez-Castañeda, J. C., & Sánchez-Medina, P. S. (2012). Defining success in subsistence businesses. *Journal of Business Research*, 65(12), 1658–1664. doi:10.1016/j.jbusres.2012.02.006
- Tregear, A. (2003). Market orientation and the craftsperson. *European Journal of Marketing*, 37(11/12), 1621–1635. doi:10.1108/03090560310495384
- Tregear, A. (2005). Lifestyle, growth, or community involvement? The balance of goals of UK artisan food producers. *Entrepreneurship & Regional Development*, 17(1), 1–15. doi:10.1080/08985620420002497777
- Treviño, L. K., & Nelson, K. A. (2004). *Managing business ethics: Straight talk about how to do it right* (3rd ed.). New York: Wiley.
- Tundui, C. S., & Tundui, H. (2013a). An empirical analysis of social capital and enterprise performance in Tanzania: The case of women owned businesses. *International Journal of Developing Societies*, 2(1), 50–60. doi:10.11634/216817831302285
- Tundui, C. S., & Tundui, H. (2013b). Microcredit, micro enterprising and repayment myth: The case of micro and small women business entrepreneurs in Tanzania. *American Journal of Business and Management*, 2(1), 20–30. doi:10.11634/216796061302240
- U.S. Census Bureau. (2010). *Survey of business owners*.
- Uchenna, O. I., Loveline, A. A., & Karubi, N. P. (2014). Women entrepreneurship in Malaysia: An empirical evidence of the management strategies used by micro and small business owners in Kuching-Sarawak. *International Journal of Social Sciences and Entrepreneurship*, 1(10), 1–16.
- UNDP. (2008). *Malaysia nurturing women entrepreneurs*.
- UNDP. (2010a). *Power, voice and rights: A turning point for gender equality in Asia and the Pacific*.
- UNDP. (2010b). The millennium development goals report. *Development*, 17(1 Suppl), 80. doi:10.1177/1757975909358250
- United States Small Business Administration. (n.d.). Size standards. Retrieved September 14, 2015, from <https://www.sba.gov/contracting/getting-started-contractor/make-sure-you-meet-sba-size-standards>
- Usahanita. (2012). Usahanita. Retrieved November 12, 2012, from <http://usahanita.org.my/portal/>
- Valentine, S., Godkin, L., & Lucero, M. (2002). Ethical context, organizational commitment, and person-organization fit. *Journal of Business Ethics*, 41(4), 349–360.
- Vázquez-Carrasco, R., López-Pérez, M. E., & Centeno, E. (2011). A qualitative approach to the challenges for women in management: Are they really starting in the 21st century? *Quality and Quantity*, 46(5), 1337–1357. doi:10.1007/s11135-011-9449-6
- Venkatraman, N. (1989). Strategic orientation of business enterprises: The construct, dimensionality, and measurement. *Management Science*, 35(8), 942–962. doi:10.1287/mnsc.35.8.942
- Veríssimo, J. M. C., & Lacerda, T. M. C. (2015). Does integrity matter for CSR practice in

- organizations? the mediating role of transformational leadership. *Business Ethics*, 24(1), 34–51. doi:10.1111/beer.12065
- Verschoor, C. C. (1998). A study of the link between a corporation's financial performance and its commitment to ethics. *Journal of Business Ethics*, 1509–1516.
- Vesper, K. H. (1990). *New venture strategies (Revised Edition) (2nd Edition) (2nd ed.)*. Pearson.
- Victor, B., & Cullen, J. B. (1987). A theory and measure of ethical climate in organizations. *Research in Corporate Social Performance and Policy*, 9(1), 51–71.
- Victor, B., & Cullen, J. B. (1988). The organizational bases of ethical work climates. *Administrative Science Quarterly*, 33(1), 101–125. doi:10.2307/2392857
- Vyakarnam, S., Bailey, A., Myers, A., & Burnett, D. (1997). Towards an understanding of ethical behaviour in small firms. *Journal of Business Ethics*. doi:10.1023/A:1022452502299
- Wahab, A., Mahmood, R., & Bakar, S. Bin. (2015). How do self-efficacy and learning orientation affect performance of university leaders? *Journal for Studies in Management and Planning*, 1(5), 501–514.
- Wahjono, S. I., Abdul Hamid, H. H., Mohd Din, A., & Saleh, H. (2014). Management practices is not important for women entrepreneurs in family business while enhance their business performance: Evidence from Melaka, Malaysia. In *The 2nd International Conference on Business and Economics* (pp. 1–9). Padang, Indonesia. Retrieved from [http://eprints2.utm.edu.my/13746/1/Paper\\_Women\\_Entrepreneur\\_rev.pdf](http://eprints2.utm.edu.my/13746/1/Paper_Women_Entrepreneur_rev.pdf)
- Walker, E., & Webster, B. (2004). Gender issues in home-based businesses. *Women in Management Review*, 19(8), 404–412. doi:10.1108/09649420410570216
- Walker, E., & Webster, B. (2006). Management competencies of women business owners. *The International Entrepreneurship and Management Journal*, 2(4), 495–508. doi:10.1007/s11365-006-0009-9
- Walter, A., Auer, M., & Ritter, T. (2006). The impact of network capabilities and entrepreneurial orientation on university spin-off performance. *Journal of Business Venturing*, 21(4), 541–567. doi:10.1016/j.jbusvent.2005.02.005
- Wan Hussin, W. S. (2005). *Mengurus perniagaan melalui etika: Satu perspektif pembangunan usahawan yang berjaya*.
- Wan Mustapha, W. Z., Abd. Muin, N., & Nik Muhammad, N. M. (2011). *Identifying decision-making processes among Malay women entrepreneurs in a fishing area in Tok Bali, Pasir Puteh, Kelantan*.
- Wang, C. L. (2008). Entrepreneurial orientation, learning orientation, and firm performance. *Entrepreneurship Theory and Practice*, 32(4), 635–656.
- Washington, V. M. (2008). *A qualitative study of the characteristics of successful women entrepreneurs through home-based businesses*. Capella University.
- Weeks, J. R. (2009). Women business owners in the Middle East and North Africa: A five-country research study. *International Journal of Gender and Entrepreneurship*, 1(1), 77–85. doi:10.1108/17566260910942354

- Welsh, D. H. B., & Birch, N. J. (1997). The ethical orientation of U.S. small business decision makers: A preliminary study. *Journal of Small Business Strategy*, 8(2), 41–51.
- Welter, F., Smallbone, D., Isakova, N., Aculai, E., & Schakirova, N. (2004). *Social capital and women entrepreneurship in fragile environments: Does networking matter?*
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180. doi:10.1002/smj.4250050207
- Wikipedia. (n.d.-a). Ethics. Retrieved September 21, 2015, from <https://en.wikipedia.org/wiki/Ethics>
- Wikipedia. (n.d.-b). Small and medium-sized enterprises. Retrieved September 14, 2015, from [https://en.wikipedia.org/wiki/Small\\_and\\_medium-sized\\_enterprises#cite\\_note-8](https://en.wikipedia.org/wiki/Small_and_medium-sized_enterprises#cite_note-8)
- Wiklund, J. (1999). The sustainability of the entrepreneurial orientation performance relationship. *Entrepreneurship: Theory & Practice*, 24(1), 39–50.
- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: a configurational approach. *Journal of Business Venturing*, 20(1), 71–91. doi:10.1016/j.jbusvent.2004.01.001
- Wiklund, J., & Shepherd, D. a. (2011). Where to From Here? EO-as-Experimentation, Failure, and Distribution of Outcomes. *Entrepreneurship Theory and Practice*, 35(5), 925–946. doi:10.1111/j.1540-6520.2011.00454.x
- Wu, C. (2002). The relationship of ethical decision-making to business ethics and performance in Taiwan. *Journal of Business Ethics*, 163–176.
- Xavier, S. R., Ahmad, S. Z., & Perumal, S. (2011). The transition from corporate careers to business ownership: The case for women entrepreneurs in Malaysia. *International Journal of Business Administration*, 2(3), 148–159. doi:10.5430/ijba.v2n3p148
- Yahya, A. Z., Choong, K. F., Othman, A. S., Abdul Rahman, I., & Moen, J. (2011). Management skills and entrepreneurial success of small and medium enterprises (SMEs) in the services sector. *African Journal of Business Management*, 5(26), 10410–10418. doi:10.5897/AJBM11.636
- Yasa, I. G. W. M., Apriliani, P. D., & Nor, N. (2011). The gender perspective of entrepreneurship: Case study on SMEs in creative sector in Denpasar, Bali - Indonesia. *The NIEW Journal*, 3, 125–145.
- Yousef, D. A. (2001). Islamic work ethic – A moderator between organizational commitment and job satisfaction in a cross-cultural context. *Personnel Review*, 30(2), 152–169. doi:10.1108/00483480110380325
- Yusof, R. (2012). —Entrepreneurial traits ” and behaviours among Malay rural businesswomen from the District Of Pendang, Kedah, Malaysia. *3rd International Conference On Business And Economic Research (3rd ICBER 2012) Proceeding*, (March), 3031–3047.
- Yusuf, M. M. (2012). *Women and pensions in Malaysia: Assessing the impacts of disruptions in working life*. Unpublished doctoral theses. University of Southampton. Retrieved from <http://eprints.soton.ac.uk/341955/>
- Yusuff, Y. Z., Abu Bakar, A. A., & Ahmad, S. (2016). Microfinance and women

- entrepreneurs' business performance: The mediating role of social capital. *Journal for Studies in Management and Planning*, 2(6), 82–96.
- Yusuff, Y. Z., Bakar, A. A., & Ahmad, S. (2016). Determinant factors of women entrepreneurs' business performance: A conceptual framework. *Journal of Global Business and Social Entrepreneurship*, 1(1), 55–67.
- Zabid, A. R. M., & Alsagoff, S. K. (1993). Perceived ethical values of Malaysian managers. *Journal of Business Ethics*, 12(4), 331–337.
- Zahra, S. A. (1993a). A conceptual model of entrepreneurship as firm behavior: A critique and extension. *Entrepreneurship: Theory and Practice*. Retrieved from <https://www.highbeam.com/doc/1G1-14539037.html>
- Zahra, S. A. (1993b). Environment, corporate entrepreneurship and financial performance. *Journal of Business Venturing*, 8, 319–340.
- Zhang, M., Guo, L., Hu, M., & Liu, W. (2016). Influence of customer engagement with company social networks on stickiness: Mediating effect of customer value creation. *International Journal of Information Management*, 1–12. doi:10.1016/j.ijinfomgt.2016.04.010
- Zhang, X., & Qian, H. (2007). The factors influencing the performance of female entrepreneurs: Some new discoveries. In *International Conference on Enterprise and Management Innovation* (pp. 1065–1068). Retrieved from <http://www.seiofbluemountain.com/upload/product/200911/2007qyczhy6z1a19.pdf>
- Zhang, Y., & Zhang, X. (2012). The effect of entrepreneurial orientation on business performance: A role of network capabilities in China. *Journal of Chinese Entrepreneurship*, 4(2), 132–142. doi:10.1108/17561391211242744
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Mitch, G. (2009). *Business research methods* (8th ed.). Mason, OH: South-Western Cengage Learning.
- Zolin, R., Stuetzer, M., & Watson, J. (2013). Challenging the female underperformance hypothesis. *International Journal of Gender and Entrepreneurship*, 5(2), 116–129. doi:10.1108/17566261311328819
- Zulkiffli, S. N., Atikah, & Perera, N. (2011). A literature analysis on business performance for SMEs: Subjective or objective measures? *Society of Interdisciplinary Business Research (SIBR)*, 1–9.
- Zulkurnain, N. N. A., Khairushalimi, F. I., Azizan, N. H., & Ahmad, S. (2014). Research article empirical investigation of the factors influencing business performance among women entrepreneurs in small and medium enterprises (SMEs): First order Structural Equation Modeling. *Asian Journal of Science and Technology*, 5(12), 852–856.



**UUM**  

---

**Universiti Utara Malaysia**

## **APPENDICES**

### **APPENDIX 1**

#### **SURVEY ON THE EFFECT OF ENTREPRENEURIAL MANAGEMENT, ENTREPRENEURIAL ORIENTAION AND ETHICS ON WOMEN- OWNED SMEs PERFORMANCE IN MALAYSIA**

ASSALAMUALAIKUM DAN GOOD DAY,

YBhg Dato'/Datuk/Datin/Dr./Puan/Cik,,

For your information, I am a PhD candidate at Universiti Utara Malaysia (UUM). In order to complete my PhD thesis, I need to conduct a research regarding the effect of entrepreneurial management, entrepreneurial orientation and ethics on the women-owned business performance in Malaysia. Therefore, in order to gain the information needed for this study, your firm has been chosen to participate in this study.

I am writing to ask for your help to fill in this survey. By completing the enclosed survey, you will be helping us to better understand how entrepreneurial management, entrepreneurial orientation and ethics relate to the women-owned business performance in Malaysia. Completing the questionnaire will take you less than 30 minutes. Feedback from you is very important to ensure the success of this study. However, your response will remain anonymous and treated in the strictest confidential – it will be strictly use for academic purpose only. As a token of appreciation, I am pledging RM2 for every questionnaire completed to Rumah Hembusan Kasih, an orphanage centre in Kangar, Perlis.

Lastly, this survey is an important part of my dissertation research. If you have any enquiries regarding this survey, please do not hesitate to contact me or my supervisor, Prof. Dr. Rosli Mahmood at 04-9285074 or email [rosli@uum.edu.my](mailto:rosli@uum.edu.my).

Your cooperation is highly appreciated. Thank you very much.

Sincerely,

Umi Kartini binti Rashid  
Email: [kartini@uthm.edu.my](mailto:kartini@uthm.edu.my)  
H/phone: 010-5418775

## APPENDIX 2

### **SOAL SELIDIK IMPAK PENGURUSAN KEUSAHAWANAN, ORIENTASI KEUSAHAWANAN DAN ETIKA TERHADAP PRESTASI PERNIAGAAN MILIK WANITA DI MALAYSIA**

ASSALAMUALAIKUM DAN SALAM SEJAHTERA,

YBhg Dato'/Datuk/Datin/Dr./Puan/Cik,,

Saya merupakan calon PhD di Universiti Utara Malaysia (UUM). Bagi menyiapkan laporan tesis PhD, saya perlu melakukan kajian berkenaan dengan impak pengurusan keusahawanan, orientasi keusahawanan dan etika terhadap prestasi perniagaan milik wanita di Malaysia. Untuk tujuan tersebut, saya telah memilih firma puan untuk terlibat dalam kajian ini.

Sehubungan dengan itu, saya memohon dan merayu jasa baik pihak puan untuk mengisi borang soal selidik yang disertakan yang hanya akan mengambil masa kurang dari 30 minit. Maklumbalas dari puan amat penting untuk memastikan kejayaan kajian ini. Namun begitu, segala maklumat yang diperolehi akan dianggap rahsia dan sulit, dan akan digunakan untuk tujuan akademik semata-mata. Sebagai tanda penghargaan, saya akan menderma RM2 kepada Rumah Hembusan Kasih, rumah anak-anak yatim dan fakir miskin di Kangar, Perlis, dari setiap borang soal selidik yang telah diisi dan dikembalikan kepada saya melalui pos atau emel

Akhir kata, soal selidik ini merupakan bahagian penting dalam kajian PhD saya. Saya amat berharap agar puan akan membantu saya mengisi borang soal selidik ini. Sekiranya puan mempunyai sebarang soalan mengenai soal selidik ini, puan bolehlah menghubungi saya atau penyelia saya, Prof. Dr. Rosli Mahmood di talian 04-9285074 atau emel [rosli@uum.edu.my](mailto:rosli@uum.edu.my).

Kerjasama puan amat dihargai dan diucapkan jutaan terima kasih.

Yang benar,

Umi Kartini binti Rashid  
Emel: [kartini@uthm.edu.my](mailto:kartini@uthm.edu.my)  
Tel bimbit: 010-5418775

### APPENDIX 3

#### SECTION A (BAHAGIAN A): ENTREPRENEURIAL MANAGEMENT (PENGURUSAN KEUSAHAWANAN)

Please indicate the extent of your agreement with the following statement on scale 1 (strongly disagree) to 7 (strongly agree). Please circle your answer.

*(Sila nyatakan tahap persetujuan anda dengan kenyataan berikut pada skala 1 (amat tidak bersetuju) hingga 7 (amat bersetuju). Sila bulatkan jawapan anda.)*

1	2	3	4	5	6	7
Strongly Disagree <i>(Amat Tidak Bersetuju)</i>	Disagree <i>(Tidak Bersetuju)</i>	Quitely Disagree <i>(Agak Tidak Bersetuju)</i>	Neither Disagree Nor Agree <i>(Berkecuali)</i>	Quitely Agree <i>(Agak Bersetuju)</i>	Agree <i>(Bersetuju)</i>	Strongly Agree <i>(Amat Bersetuju)</i>

#### 1) STRATEGIC ORIENTATION (*ORIENTASI STRATEGIK*)

1	As we define our strategies, our major concern is how to best utilize the resources we control. <i>(Kebimbangan utama ketika menggariskan strategi kami adalah bagaimana untuk menggunakan sumber-sumber terkawal dengan sebaik-baiknya.)</i>	1	2	3	4	5	6	7
2	We limit the opportunities we pursue on the basis of our current resources. <i>(Kami menghadkan peluang-peluang yang dikejar berdasarkan sumber-sumber yang ada pada masa ini.)</i>	1	2	3	4	5	6	7
3	Opportunities control our business strategies. <i>(Strategi perniagaan kami</i>	1	2	3	4	5	6	7



	<i>ditentukan oleh peluang-peluang yang ada di sekeliling.)</i>							
--	---	--	--	--	--	--	--	--

## 2) RESOURCE ORIENTATION (*ORIENTASI SUMBER*)

4	Since our objective is to use our resources, we will usually invest heavily and rapidly. ( <i>Memandangkan matlamat kami adalah untuk menggunakan sumber-sumber sendiri, biasanya kami akan melabur dengan cepat dan dalam jumlah yang banyak.</i> )	1	2	3	4	5	6	7
5	All we need from resources is the ability to use them. ( <i>Yang paling penting tentang sumber adalah bagaimana kami boleh menggunakan dan memanfaatkan sumber tersebut.</i> )	1	2	3	4	5	6	7
6	We like to employ resources that we borrow or rent. ( <i>Kami suka menggunakan sumber-sumber yang dipinjam atau disewa.</i> )	1	2	3	4	5	6	7
7	In exploiting opportunities, access to money is more important than just having the idea. ( <i>Lebih penting mempunyai peluang untuk mendapatkan wang daripada sekadar memiliki idea untuk melakukan sesuatu.</i> )	1	2	3	4	5	6	7
8	We divide a project into several stages and decide about the required resources for each stage individually, before starting it. (multiple	1	2	3	4	5	6	7

	step commitment). ( <i>Kami membahagikan projek kepada beberapa peringkat dan membuat keputusan mengenai sumber-sumber yang diperlukan untuk setiap peringkat secara berasingan sebelum memulakan projek. (Komitmen di beberapa peringkat).</i> )							
9	Our managers are dedicated to the same projects with long term commitment. ( <i>Pengurus-pengurus kami dikhususkan kepada projek-projek yang sama dan perlu komited untuk jangka panjang.</i> )	1	2	3	4	5	6	7
10	To maximize our return, we invest as little resources as possible even though this strategy may increase the risk of failure. ( <i>Bagi memaksimumkan pulangan, kami menggunakan sumber kami seminimum mungkin walaupun strategi ini mungkin meningkatkan risiko kegagalan.</i> )	1	2	3	4	5	6	7
11	Borrowing, renting and contracting resources when we need them keep us up to the latest market developments and technologies. ( <i>Peminjaman, penyewaan dan pengambilan sumber secara kontrak apabila diperlukan membolehkan kami terus mengikuti perkembangan terbaru pasaran dan teknologi.</i> )	1	2	3	4	5	6	7
12	We prefer the stability and the rapid availability of							

	using resources that we own and are familiar with. <i>(Kami lebih suka menggunakan sumber-sumber yang dimiliki kerana kami telah biasa dengan sumber tersebut dan ia boleh didapatkan dengan cepat.)</i>	1	2	3	4	5	6	7
--	--	---	---	---	---	---	---	---

### 3) MANAGEMENT STRUCTURE (*STRUKTUR PENGURUSAN*)

13	We prefer tight control of funds and operations by means of sophisticated control and information systems. <i>(Kami lebih menyukai kawalan dana dan operasi yang ketat melalui penggunaan sistem kawalan dan sistem maklumat yang canggih.)</i>	1	2	3	4	5	6	7
14	We strongly emphasize getting things done even if this means disregarding formal procedure. <i>(Kami amat menekankan usaha untuk menyiapkan sesuatu tugas walaupun ini bermakna prosedur formal harus diketepikan.)</i>	1	2	3	4	5	6	7
15	We strongly emphasize holding to tried and true management principles and industry norms. <i>(Kami berpegang teguh kepada prinsip-prinsip pengurusan dan kebiasaan industri yang telah teruji dan terbukti.)</i>	1	2	3	4	5	6	7
16	Managers' operating styles are allowed to range freely from very formal to very informal. <i>(Pengurus boleh menggunakan apa jua cara</i>	1	2	3	4	5	6	7

	<i>operasi, daripada sangat formal hinggalah kepada sangat tidak formal.)</i>							
17	There is a strong emphasis on getting line and staff personnel to adhere closely to their formal job descriptions. <i>(Usaha agar semua kakitangan mematuhi huraian tugas rasmi mereka amat dititikberatkan.)</i>	1	2	3	4	5	6	7

#### 4) REWARD PHILOSOPHY (FALSAFAH GANJARAN)

18	Our employees are evaluated and compensated based on their responsibilities. <i>(Pekerja kami dinilai dan dibayar berdasarkan pada tanggungjawab mereka.)</i>	1	2	3	4	5	6	7
19	Our employees are usually rewarded by promotion and annual raises. <i>(Pekerja kami biasanya diberikan ganjaran melalui kenaikan pangkat dan kenaikan gaji tahunan.)</i>	1	2	3	4	5	6	7
20	An employee's standing is based on the values/he adds. <i>(Kedudukan seseorang pekerja adalah berdasarkan nilai yang dibawa atau ditambah olehnya kepada syarikat.)</i>	1	2	3	4	5	6	7
21	An employee's performance is evaluated by short-term profit targets. <i>(Prestasi pekerja dinilai melalui sasaran keuntungan jangka pendek.)</i>	1	2	3	4	5	6	7
22	Rewarding in our firm is							

	based on the employee's individual performance. <i>(Ganjaran di syarikat kami diberikan berdasarkan kepada prestasi individu pekerja.)</i>	1	2	3	4	5	6	7
23	We reward our employees by giving them more job flexibility and access to resources they might need to develop new ideas. <i>(Kami memberikan ganjaran kepada kakitangan dengan memberi mereka pekerjaan yang lebih fleksibel serta akses kepada sumber-sumber yang mungkin diperlukan bagi membangunkan idea-idea baru.)</i>	1	2	3	4	5	6	7

##### 5) GROWTH ORIENTATION (*ORIENTASI PERTUMBUHAN*)

24	It is generally known throughout the firm that growth is our top objective. <i>(Seluruh kakitangan syarikat umumnya mengetahui bahawa pertumbuhan adalah matlamat utama kami.)</i>	1	2	3	4	5	6	7
25	It is generally known throughout the firm that steady and sure growth is the best way to expand. <i>(Seluruh kakitangan syarikat umumnya mengetahui bahawa pertumbuhan yang stabil dan pasti adalah cara terbaik untuk mengembangkan perniagaan.)</i>	1	2	3	4	5	6	7

**6) ENTREPRENEURIAL CULTURE (BUDAYA KEUSAHAWANAN)**

26	We have many more promising ideas than we have time and the resources to pursue. <i>(Kami mempunyai lebih banyak idea-idea yang berpotensi berbanding dengan masa dan sumber untuk meneruskan perniagaan.)</i>	1	2	3	4	5	6	7
27	Changes in the society-at-large seldom lead to commercially promising ideas for our firm. <i>(Perubahan dalam masyarakat umum jarang menghasilkan idea yang boleh dikembangkan secara komersial untuk syarikat kami.)</i>	1	2	3	4	5	6	7
28	We never experience a lack of ideas that we can convert into profitable products/ services. <i>(Kami tidak pernah kekurangan idea yang boleh ditukarkan kepada produk/perkhidmatan yang menguntungkan.)</i>	1	2	3	4	5	6	7

**SECTION B (BAHAGIAN B): ENTREPRENEURIAL ORIENTATION  
(ORIENTASI KEUSAHAWANAN)**

Please indicate the extent of your agreement with the following statement on scale 1 (strongly disagree) to 7 (strongly agree). Please circle your answer.

*(Sila nyatakan tahap persetujuan anda dengan kenyataan berikut pada skala 1 (amat tidak setuju) hingga 7 (amat setuju). Sila bulatkan jawapan anda.)*

1	2	3	4	5	6	7
Strongly Disagree ( <i>Amat Tidak Bersetuju</i> )	Disagree ( <i>Tidak Bersetuju</i> )	Quitely Disagree ( <i>Agak Tidak Bersetuju</i> )	Neither Disagree Nor Agree ( <i>Berkecuali</i> )	Quitely Agree ( <i>Agak Bersetuju</i> )	Agree ( <i>Bersetuju</i> )	Strongly Agree ( <i>Amat Bersetuju</i> )

**1) INNOVATIVENESS (KEINOVASIAN)**

1	Our firm emphasizes on utilizing new technology. ( <i>Syarikat kami menekankan penggunaan teknologi baru.</i> )	1	2	3	4	5	6	7
2	Our firm encourages new idea from any workers regardless of his or her status in the firm. ( <i>Syarikat kami menggalakkan idea baru daripada mana-mana pekerja tanpa mengira pangkatnya dalam syarikat.</i> )	1	2	3	4	5	6	7
3	Our firm emphasizes on research and development. ( <i>Syarikat kami memberikan penekanan pada penyelidikan dan pembangunan.</i> )	1	2	3	4	5	6	7

## 2) PROACTIVENESS (*KEPROAKTIFAN*)

4	We initiate actions to which competitors then respond in using new technology. <i>(Kami memulakan sesuatu tindakan; pesaing pula bertindak balas melalui penggunaan teknologi baru.)</i>	1	2	3	4	5	6	7
5	We are the first to introduce new product or service. <i>(Syarikat kami menjadi peneraju dalam memperkenalkan produk atau perkhidmatan baru.)</i>	1	2	3	4	5	6	7
6	We always respond to unrelated opportunities. <i>(Kami sentiasa mengambil peluang yang ada walaupun ia tidak berkaitan.)</i>	1	2	3	4	5	6	7

## 3) RISK TAKING (*PENGAMBILAN RISIKO*)

7	We practice “wait and see” position to minimize risk. <i>(Kami menggunakan pendekatan “tunggu dan lihat” bagi mengurangkan risiko.)</i>	1	2	3	4	5	6	7
8	Our firm explore bravely and open minded to achieve goal. <i>(Syarikat kami berani meneroka dan berfikiran terbuka bagi mencapai matlamat.)</i>	1	2	3	4	5	6	7
9	We always invest in unexplored technologies. <i>(Kami sentiasa melabur dalam teknologi yang belum diterokai.)</i>	1	2	3	4	5	6	7



**SECTION C (BAHAGIAN C): ETHICS (ETIKA)**

Please indicate the extent of your agreement with the following statement on scale 1 (strongly disagree) to 7 (strongly agree). Please circle your answer.

*(Sila nyatakan tahap persetujuan anda dengan kenyataan berikut pada skala 1 (amat tidak setuju) hingga 7 (amat setuju). Sila bulatkan jawapan anda.)*

1	2	3	4	5	6	7
Strongly Disagree <i>(Amat Tidak Bersetuju)</i>	Disagree <i>(Tidak Bersetuju)</i>	Quitely Disagree <i>(Agak Tidak Bersetuju)</i>	Neither Disagree Nor Agree <i>(Berkecuali)</i>	Quitely Agree <i>(Agak Bersetuju)</i>	Agree <i>(Bersetuju)</i>	Strongly Agree <i>(Amat Bersetuju)</i>

1	What is best for everyone in the company is the major consideration here. <i>(Perkara utama yang dipertimbangkan di syarikat ini adalah apa yang terbaik untuk semua orang di sini.)</i>	1	2	3	4	5	6	7
2	The most important concern is the good of all the people in the company as a whole. <i>(Perkara paling utama yang menjadi perhatian kami adalah kualiti atau sifat baik dalam diri setiap orang di syarikat ini secara keseluruhannya.)</i>	1	2	3	4	5	6	7
3	Our major concern is always what is best for the other person. <i>(Perkara utama yang menjadi perhatian di syarikat kami adalah apa yang terbaik untuk orang</i>	1	2	3	4	5	6	7

	<i>lain.)</i>							
4	In this company, it is expected that you will always do what is right for the customers and public. <i>(Di syarikat ini, anda dikehendaki sentiasa melakukan apa sahaja yang betul untuk pelanggan dan orang ramai.)</i>	1	2	3	4	5	6	7
5	The most efficient way is always the right way in this company. <i>(Di syarikat ini, jika sesuatu cara itu sangat berkesan, cara itulah yang paling tepat dan sesuai untuk digunakan.)</i>	1	2	3	4	5	6	7
6	In this company, each person is expected above all to work efficiently. <i>(Di syarikat ini, setiap orang dijangka melakukan kerja dengan cekap.)</i>	1	2	3	4	5	6	7
7	People are expected to comply with the law and professional standards over and above other considerations. <i>(Setiap orang dijangka mematuhi undang-undang dan standard profesional melebihi pertimbangan lain.)</i>	1	2	3	4	5	6	7
8	In this company, the law or ethical code of their profession is the major consideration. <i>(Di syarikat ini, undang-undang atau kod etika pekerjaan masing-masing menjadi</i>	1	2	3	4	5	6	7

	<i>pertimbangan utama.)</i>							
9	In this company, people are expected to strictly follow legal or professional standards. <i>(Di syarikat ini, setiap orang dijangka mematuhi sepenuhnya standard perundangan atau profesional.)</i>	1	2	3	4	5	6	7
10	In this company, the first consideration is whether a decision violates any law. <i>(Di syarikat ini, pertimbangan pertama adalah sama ada keputusan yang dibuat melanggar mana-mana undang-undang.)</i>	1	2	3	4	5	6	7
11	It is very important to follow the company's rules and procedures here. <i>(Pematuhan kepada peraturan dan prosedur syarikat amat dipentingkan di sini.)</i>	1	2	3	4	5	6	7
12	Everyone is expected to stick by company rules and procedures. <i>(Setiap orang dijangka mematuhi peraturan dan prosedur syarikat.)</i>	1	2	3	4	5	6	7
13	Successful people in this company go by the book. <i>(Pekerja yang berjaya di syarikat ini biasanya adalah orang yang benar-benar mematuhi peraturan.)</i>	1	2	3	4	5	6	7
14	People in this company strictly obey the company policies. <i>(Pekerja syarikat ini benar-benar mematuhi</i>	1	2	3	4	5	6	7

	<i>dasar syarikat.)</i>							
15	In this company, people protect their own interests above all else. <i>(Pekerja syarikat ini melindungi kepentingan mereka sendiri melebihi perkara lain.)</i>	1	2	3	4	5	6	7
16	In this company, people are mostly out for themselves. <i>(Kebanyakan pekerja syarikat ini mementingkan diri mereka sendiri.)</i>	1	2	3	4	5	6	7
17	There is no room for one's own personal morals or ethics in this company. <i>(Tiada ruang untuk moral peribadi atau etika sendiri di syarikat ini.)</i>	1	2	3	4	5	6	7
18	People are expected to do anything to further the company's interests, regardless of the consequences. <i>(Pekerja dijangka melakukan apa sahaja untuk meningkatkan kepentingan syarikat, walau apapun akibatnya.)</i>	1	2	3	4	5	6	7
19	People here are concerned with the company's interests -to the exclusion of all else. <i>(Pekerja di sini prihatin dengan kepentingan syarikat sehingga menyetepikan perkara lain.)</i>	1	2	3	4	5	6	7
20	Work is considered substandard only when it	1	2	3	4	5	6	7

	hurts the company's interests. ( <i>Kerja dianggap kurang bermutu hanya apabila ia menjejaskan kepentingan syarikat.</i> )							
21	The major responsibility of people in this company is to control costs. ( <i>Tanggungjawab utama pekerja syarikat ini adalah untuk mengawal kos.</i> )	1	2	3	4	5	6	7
22	In this company, people are expected to follow their own personal and moral beliefs. ( <i>Pekerja syarikat ini dijangka mengikut kepercayaan peribadi dan moral masing-masing.</i> )	1	2	3	4	5	6	7
23	Each person in this company decides for themselves what is right and wrong. ( <i>Setiap orang di syarikat ini membuat keputusan mereka sendiri tentang perkara yang betul atau salah.</i> )	1	2	3	4	5	6	7
24	The most important concern in this company is each person's own sense of right and wrong. ( <i>Perkara paling utama yang menjadi perhatian di syarikat ini adalah pertimbangan sendiri setiap orang dalam menentukan perkara yang betul atau salah.</i> )	1	2	3	4	5	6	7
25	In this company, people are guided by their own personal ethics. ( <i>Pekerja syarikat ini bertindak</i>	1	2	3	4	5	6	7

	<i>berpandukan etika mereka sendiri.)</i>							
--	---	--	--	--	--	--	--	--

**SECTION D (BAHAGIAN D): FIRM/BUSINESS PERFORMANCE  
(PRESTASI FIRMA/PERNIAGAAN)**

With reference to **your firm's business performance** in the **past three (3) years (or since you became the owner / manager of this firm if you have been involved with it for less than three years)**, please indicate the extent of your agreement with the following statement on a 7-point scale. Please circle your answer.

*(Pernyataan-pernyataan berikut merujuk kepada prestasi perniagaan firma anda berdasarkan kepada rekod tiga (3) tahun lepas (atau semenjak anda menjadi pengusaha/pengurus sekiranya anda terlibat dengan syarikat ini kurang dari tiga (3) tahun) . Sila jawab semua soalan tersebut dengan membulatkan antara nombor 1 (prestasi yang tersangat rendah) hingga 7 (prestasi yang tersangat tinggi) bagi menggambarkan situasi firma anda.)*

1	2	3	4	5	6	7
Very Low (Tersangat Rendah)	Low (Sangat Rendah)	Quite Low (Agak Rendah)	Neither Low Nor High (Statik/Tiada Perubahan)	Quite High (Agak Tinggi)	High (Tinggi)	Very High (Sangat Tinggi)

1	Cash Flow (Aliran tunai)	1	2	3	4	5	6	7
2	Gross Profit Margin (Margin untung kasar)	1	2	3	4	5	6	7
3	Net Profit From Operation (Untung bersih dari operasi)	1	2	3	4	5	6	7
4	Sales Growth (Pertumbuhan jualan)	1	2	3	4	5	6	7
5	Return on Sales	1	2	3	4	5	6	7

	<i>(Pulangan terhadap jualan)</i>							
6	Return on Investment <i>(Pulangan terhadap pelaburan)</i>	1	2	3	4	5	6	7
7	Profit to Sales Ratio <i>(Nisbah untung ke atas jualan)</i>	1	2	3	4	5	6	7
8	Return to Shareholder Equity <i>(Pulangan terhadap ekuiti pemegang saham)</i>	1	2	3	4	5	6	7
9	Ability to Fund Business Growth From Profit <i>(Keupayaan untuk membiayai perniagaan dari keuntungan)</i>	1	2	3	4	5	6	7

### SECTION E (BAHAGIAN E): DEMOGRAPHIC (DEMOGRAFI)

Please tick (✓) at the most appropriate answer where applicable. *(Sila tandakan (✓) di kotak yang berkenaan.)*

1.	Your current age group <i>(Umur sekarang) (tahun)</i>	<input type="checkbox"/> 25 and below <i>(25 dan bawah)</i> <input type="checkbox"/> 26 - 30 <input type="checkbox"/> 31 - 35 <input type="checkbox"/> 36 - 40 <input type="checkbox"/> 41 - 45 <input type="checkbox"/> 46 - 50 <input type="checkbox"/> Above 50 <i>(Atas 50)</i>
2.	Your age group when you started owning/ managing this business. <i>(Umur semasa mula memiliki/mengurus perniagaan ini (tahun)).</i>	<input type="checkbox"/> 25 and below <i>(25 dan bawah)</i> <input type="checkbox"/> 26 - 30 <input type="checkbox"/> 31 - 35 <input type="checkbox"/> 36 - 40 <input type="checkbox"/> 41 - 45 <input type="checkbox"/> 46 - 50 <input type="checkbox"/> Above 50 <i>(Atas 50)</i>

3.	Marital Status ( <i>Taraf Perkahwinan</i> )	<input type="checkbox"/> Single ( <i>Bujang</i> ) <input type="checkbox"/> Married ( <i>Berkahwin</i> ) <input type="checkbox"/> Widow ( <i>Janda</i> ) <input type="checkbox"/> Others, please state ( <i>Lain-lain, sila nyatakan.</i> )
4.	Race ( <i>Bangsa</i> )	<input type="checkbox"/> Malay ( <i>Melayu</i> ) <input type="checkbox"/> Chinese ( <i>Cina</i> ) <input type="checkbox"/> Indian ( <i>India</i> ) <input type="checkbox"/> Others, please state ( <i>Lain-lain, sila nyatakan.</i> )
5.	No. of Children ( <i>Bilangan Anak</i> )	Please State ( <i>Sila Nyatakan</i> ):
6.	Location (State) ( <i>Lokasi</i> )( <i>Negeri</i> )	Please State ( <i>Sila Nyatakan</i> ):
7.	Education Level ( <i>Tahap Pengajian</i> )	<input type="checkbox"/> Primary ( <i>Sekolah rendah</i> ) <input type="checkbox"/> Secondary ( <i>Sekolah menengah</i> ) <input type="checkbox"/> Diploma ( <i>Diploma</i> ) <input type="checkbox"/> First Degree ( <i>Ijazah Pertama</i> ) <input type="checkbox"/> Master ( <i>Sarjana</i> ) <input type="checkbox"/> PhD ( <i>PhD</i> ) <input type="checkbox"/> Others, please state. ( <i>Lain-lain, sila nyatakan.</i> )
8.	Total Years of Experience ( <i>Jumlah Pengalaman Kerja (tahun)</i> ).	<input type="checkbox"/> Less than 1 ( <i>Kurang dari 1</i> ) <input type="checkbox"/> 1 - 5 <input type="checkbox"/> 6 - 10 <input type="checkbox"/> 11 - 15 <input type="checkbox"/> 16 - 20 <input type="checkbox"/> Above 20 ( <i>Atas 20</i> )
9.	Total Years of Experience With This Firm/Company. ( <i>Jumlah Pengalaman Dengan Firma/Syarikat Ini (tahun)</i> ).	<input type="checkbox"/> Less than 1 ( <i>Kurang dari 1</i> ) <input type="checkbox"/> 1 - 5 <input type="checkbox"/> 6 - 10 <input type="checkbox"/> 11 - 15 <input type="checkbox"/> 16 - 20 <input type="checkbox"/> Above 20 ( <i>Atas 20</i> )

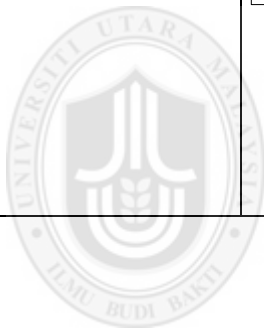


**SECTION F (BAHAGIAN F): FIRM/COMPANY (FIRMA/PERNIAGAAN)**

Please fill in the information relating to your company background or tick (✓) at the most appropriate answer where applicable. *(Sila isikan maklumat berkaitan dengan latar belakang syarikat anda atau tandakan (✓) di kotak yang berkenaan.)*

1.	Ways of owning this business <i>(Kaedah memiliki syarikat ini.)</i>	<input type="checkbox"/> Start-up <i>(Membuka sendiri)</i> <input type="checkbox"/> Succession <i>(Mewarisi)</i> <input type="checkbox"/> Management Buy In <i>(Pengurusan Beli Alih)</i> <input type="checkbox"/> Joined as Partner <i>(Masuk Sebagai Rakan Kongsi)</i> <input type="checkbox"/> Take-over <i>(Ambil alih)</i> <input type="checkbox"/> Others, please state. <i>(Lain-lain, sila nyatakan.)</i>
2.	Your firm age (in years). <i>(Umur syarikat anda (tahun)).</i>	<input type="checkbox"/> Less than 5 <i>(Kurang dari 5)</i> <input type="checkbox"/> 5 - 10 <input type="checkbox"/> 11 - 15 <input type="checkbox"/> 16 - 20 <input type="checkbox"/> 21 - 25 <input type="checkbox"/> Above 25 <i>(Atas 25)</i>
3.	Ownership structure <i>(Struktur pemilikan syarikat anda.)</i>	<input type="checkbox"/> Sole proprietorships <i>(Pemilikan Tunggal)</i> <input type="checkbox"/> Partnership <i>(Perkongsi)</i> <input type="checkbox"/> Private Limited <i>(Syarikat Sendirian Berhad)</i>
4.	Are you actively involved in the operations of this business? <i>(Adakah anda terlibat di dalam operasi perniagaan ini secara aktif?)</i>	<input type="checkbox"/> Yes <i>(Ya)</i> <input type="checkbox"/> No <i>(Tidak)</i>
5.	How many employees are there in your business organization? <i>(Jumlah pekerja tetap di dalam firma/ perniagaan anda (orang))</i>	Please State <i>(Sila Nyatakan):</i>  _____

6.	Please specify in what sub-sector industry your company involved? ( <i>Sub-sektor industri di mana syarikat anda terlibat.</i> )	<input type="checkbox"/> Manufacturing (e.g. Food & Beverages, Textile, Electrical & Components, Spare Parts & Accessories, and etc.). Please state <hr/> <i>Pembuatan (contoh: makanan &amp; minuman, tekstil, produk elektrik &amp; komponen, alat ganti &amp; aksesori dll)</i> <i>Sila nyatakan</i> _____  <input type="checkbox"/> Service (e.g. Hotel, Restaurant, Education, Professional, Transportation & Communication, Telecommunication, and etc.). Please state <hr/> <i>Perkhidmatan (contoh: hotel, restoran, pendidikan, profesional, pengangkutan &amp; komunikasi dll)</i> <i>Sila nyatakan</i> _____  <input type="checkbox"/> Agricultural (e.g. Cultivation of Crops, Animal Husbandry, Logging, Fish Farming, and etc.). Please state <hr/> <i>Pertanian (contoh: penanaman tanaman, penternakan haiwan, pembalakan, penangkapan ikan dll)</i> <i>Sila nyatakan</i> _____
----	--	---



Universiti Utara Malaysia

**THANK YOU FOR YOUR COOPERATION**  
**(TERIMA KASIH DI ATAS KERJASAMA ANDA)**

## APPENDIX 4

### Reliability Analysis for Variables

#### 1) Entrepreneurial Culture

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.686	.782	3

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
EM(entrepreneurial_culture)26	10.71	2.801	.605	.430	.541
EMecrecode	11.60	1.200	.565	.320	.758
EM(entrepreneurial_culture)28	10.98	3.022	.618	.433	.576

#### 2) Growth Orientation

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.919	.925	2

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
EM(growth_orientation)24	6.04	1.134	.860	.740	.
EM(growth_orientation)25	6.07	.836	.860	.740	.

3) Management Structure

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.822	.834	5

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
EM(mgmt_structure)13	22.73	10.245	.654	.503	.783
EM(mgmt_structure)14	22.31	11.946	.547	.344	.810
EM(mgmt_structure)15	22.16	12.453	.737	.622	.760
EM(mgmt_structure)16	22.13	13.073	.608	.399	.791
EM(mgmt_structure)17	21.96	12.953	.612	.454	.789

4) Resource Orientation

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.851	.850	9

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
EM(resource_orientation)4	43.78	41.677	.348	.447	.857
EM(resource_orientation)5	42.24	41.962	.451	.508	.846
EM(resource_orientation)6	44.58	38.613	.521	.365	.841
EM(resource_orientation)7	41.87	43.345	.393	.512	.851
EM(resource_orientation)8	42.69	36.265	.802	.779	.811
EM(resource_orientation)9	42.80	35.891	.759	.832	.814
EM(resource_orientation)10	43.27	33.473	.712	.710	.820
EM(resource_orientation)11	43.29	36.710	.650	.790	.826
EM(resource_orientation)12	42.16	41.407	.529	.433	.840

5) Reward Philosophy

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.760	.788	6

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
EM(reward_philosophy)18	27.40	12.245	.547	.543	.721
EM(reward_philosophy)19	27.62	10.240	.577	.607	.704
EM(reward_philosophy)20	27.67	9.455	.811	.729	.632
EM(reward_philosophy)21	28.67	13.273	.160	.187	.818
EM(reward_philosophy)22	27.47	11.891	.729	.659	.692
EM(reward_philosophy)23	28.07	11.427	.408	.257	.754

6) Strategic Orientation

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.864	.883	3

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
EM(strategic_orientation)1	11.36	4.553	.848	.757	.714
EM(strategic_orientation)2	11.78	3.904	.699	.522	.896
EM(strategic_orientation)3	11.31	5.583	.752	.676	.825

7) Innovativeness

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.668	.685	3

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
EO(innovativeness)1	10.96	2.225	.529	.289	.504
EO(innovativeness)2	10.47	3.664	.421	.189	.690
EO(innovativeness)3	11.29	1.756	.596	.356	.414

8) Proactiveness

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.813	.816	3

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
EO(proactiveness)4	10.44	3.389	.713	.509	.692
EO(proactiveness)5	10.60	3.473	.646	.423	.767
EO(proactiveness)6	9.76	4.098	.646	.429	.768

9) Risk-taking

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.722	.725	3

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
EO(risk-taking)7	10.38	1.877	.476	.234	.714
EO(risk-taking)8	10.16	1.634	.562	.338	.616
EO(risk-taking)9	11.07	1.155	.632	.405	.532

10) Ethics

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.929	.945	25



**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Ethics1	128.93	286.564	.693	.	.925
Ethics2	128.98	284.204	.721	.	.924
Ethics3	129.09	281.992	.700	.	.924
Ethics4	128.91	288.856	.697	.	.925
Ethics5	128.91	286.401	.737	.	.924
Ethics6	128.91	286.583	.634	.	.925
Ethics7	129.20	287.118	.780	.	.924
Ethics8	129.11	286.283	.818	.	.924
Ethics9	129.16	285.543	.812	.	.924
Ethics10	129.09	288.583	.718	.	.925
Ethics11	129.00	285.364	.774	.	.924
Ethics12	128.89	290.646	.707	.	.925
Ethics13	129.00	285.727	.717	.	.924
Ethics14	129.20	284.300	.735	.	.924
Ethics15	131.36	278.053	.531	.	.927
Ethics16	132.40	304.382	.068	.	.934
Ethics17	133.07	328.564	-.418	.	.944
Ethics18	131.16	300.043	.144	.	.934
Ethics19	130.60	279.473	.576	.	.926
Ethics20	129.87	282.255	.610	.	.925
Ethics21	129.36	270.780	.806	.	.922
Ethics22	129.89	272.737	.723	.	.923
Ethics23	130.40	265.109	.773	.	.922
Ethics24	130.02	274.795	.699	.	.924
Ethics25	130.31	272.583	.659	.	.925

## 11) Business Performance

### Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.958	.959	9

### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Performance1	43.05	27.719	.711	.890	.959
Performance2	43.25	25.308	.890	.928	.950
Performance3	43.20	24.957	.929	.955	.948
Performance4	43.00	27.535	.748	.920	.957
Performance5	43.05	26.323	.791	.888	.955
Performance6	43.23	25.017	.884	.944	.950
Performance7	43.20	25.050	.874	.941	.951
Performance8	43.41	25.271	.747	.652	.959
Performance9	43.16	25.021	.910	.950	.949

## APPENDIX 5

### Independent-Samples T Test of Study Variable

Group Statistics					
	Response	N	Mean	Std. Deviation	Std. Error Mean
Strategic Orientation	Early	59	6.0395	.57096	.07433
	Late	148	6.1216	.57030	.04688
Resource Orientation	Early	59	5.8098	.41730	.05433
	Late	148	5.8078	.46811	.03848
Management Structure	Early	59	5.2678	.46329	.06031
	Late	148	5.3527	.59172	.04864
Reward Philosophy	Early	59	5.7090	.54280	.07067
	Late	148	5.6453	.59897	.04923
Growth Orientation	Early	59	6.3390	.75681	.09853
	Late	148	6.3108	.76132	.06258
Entrepreneurial Culture	Early	59	5.7740	.46913	.06108
	Late	148	5.7545	.49542	.04072
Innovativeness	Early	59	5.4407	.28662	.03731
	Late	148	5.4505	.34964	.02874
Proactiveness	Early	59	5.4520	.33769	.04396
	Late	148	5.4842	.34412	.02829
Risk Taking	Early	59	5.4689	.31634	.04118
	Late	148	5.5203	.32583	.02678
Ethics	Early	59	5.9085	.54845	.07140
	Late	148	5.8786	.18828	.01548
Performance	Early	59	5.6516	.49924	.06500
	Late	148	5.6186	.31644	.02601

**Independent Samples Test**

		Levene's Test for		t-test for Equality of Means						
		Equality of Variances		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.						Lower	Upper
Strategic Orientation	Equal variances assumed	.253	.616	-.934	205	.351	-.08207	.08784	-.25525	.09110
	Equal variances not assumed			-.934	106.655	.352	-.08207	.08788	-.25629	.09215
Resource Orientation	Equal variances assumed	1.674	.197	.028	205	.977	.00199	.06995	-.13593	.13990
	Equal variances not assumed			.030	118.974	.976	.00199	.06657	-.12984	.13381
Management Structure	Equal variances assumed	5.015	.026	-.988	205	.325	-.08491	.08597	-.25441	.08460
	Equal variances not assumed			-	135.375	.275	-.08491	.07748	-.23814	.06833
Reward Philosophy	Equal variances assumed	.984	.322	.710	205	.479	.06377	.08986	-.11340	.24094
	Equal variances not assumed			.740	117.090	.461	.06377	.08613	-.10680	.23434
Growth Orientation	Equal variances assumed	.071	.790	.241	205	.810	.02817	.11702	-.20255	.25889
	Equal variances not assumed			.241	107.342	.810	.02817	.11672	-.20321	.25955
Entrepreneurial Culture	Equal variances assumed	.079	.779	.260	205	.795	.01951	.07516	-.12867	.16768
	Equal variances not assumed			.266	112.281	.791	.01951	.07341	-.12594	.16495
Innovativeness	Equal variances assumed	5.163	.024	-.191	205	.849	-.00977	.05127	-.11086	.09132
	Equal variances not assumed			-.207	129.276	.836	-.00977	.04710	-.10296	.08341
Proactiveness	Equal variances assumed	.193	.661	-.612	205	.541	-.03226	.05271	-.13617	.07166

Risk Taking	Equal variances not assumed			-.617	108.617	.539	-.03226	.05228	-.13587	.07136
	Equal variances assumed	.764	.383	-	205	.303	-.05134	.04976	-.14945	.04676
	Equal variances not assumed			-	109.691	.298	-.05134	.04913	-.14870	.04602
	Equal variances assumed	108.053	.000	.583	205	.561	.02983	.05119	-.07109	.13075
Ethics	Equal variances not assumed			.408	63.522	.684	.02983	.07306	-.11615	.17580
	Equal variances assumed	44.146	.000	.568	205	.571	.03298	.05808	-.08154	.14750
Performance	Equal variances not assumed			.471	77.285	.639	.03298	.07001	-.10641	.17238



**UUM**  
Universiti Utara Malaysia

## APPENDIX 6

### Missing Value

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Strategic Orientation	207	100.0%	0	0.0%	207	100.0%
Resource Orientation	207	100.0%	0	0.0%	207	100.0%
Management Structure	207	100.0%	0	0.0%	207	100.0%
Reward Philosophy	207	100.0%	0	0.0%	207	100.0%
Growth Orientation	207	100.0%	0	0.0%	207	100.0%
Entrepreneurial Culture	207	100.0%	0	0.0%	207	100.0%
Innovativeness	207	100.0%	0	0.0%	207	100.0%
Proactiveness	207	100.0%	0	0.0%	207	100.0%
Risk Taking	207	100.0%	0	0.0%	207	100.0%
Ethics	207	100.0%	0	0.0%	207	100.0%
Performance	207	100.0%	0	0.0%	207	100.0%

## APPENDIX 7

### Descriptive Statistics – Frequencies: Respondents' Profile

**Current Age**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<25	9	4.3	4.3
	26-30	17	8.2	12.6
	31-35	24	11.6	24.2
	36-40	46	22.2	46.4
	41-45	33	15.9	62.3
	46-50	32	15.5	77.8
	>50	46	22.2	100.0
	Total	207	100.0	100.0

**Age Joined Business**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<25	28	13.5	13.5
	26-30	43	20.8	34.3
	31-35	47	22.7	57.0
	36-40	47	22.7	79.7
	41-45	28	13.5	93.2
	46-50	11	5.3	98.6
	>50	3	1.4	100.0
	Total	207	100.0	100.0

**Marital Status**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Single	24	11.6	11.6	11.6
Valid Married	159	76.8	76.8	88.4
Valid Widow	24	11.6	11.6	100.0
Total	207	100.0	100.0	

**Race**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Malay	189	91.3	91.3	91.3
Valid Chinese	11	5.3	5.3	96.6
Valid Indian	5	2.4	2.4	99.0
Valid Others	2	1.0	1.0	100.0
Total	207	100.0	100.0	

**Education Level**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Primary	8	3.9	3.9	3.9
Valid Secondary	54	26.1	26.1	30.0
Valid Diploma	50	24.2	24.2	54.1
Valid First Degree	71	34.3	34.3	88.4
Valid Master	12	5.8	5.8	94.2
Valid PhD	4	1.9	1.9	96.1
Valid Others	8	3.9	3.9	100.0
Total	207	100.0	100.0	



**Child**

	Frequency	Percent	Valid Percent	Cumulative Percent
0	26	12.6	12.6	12.6
1	13	6.3	6.3	18.8
2	46	22.2	22.2	41.1
3	39	18.8	18.8	59.9
4	32	15.5	15.5	75.4
5	27	13.0	13.0	88.4
6	10	4.8	4.8	93.2
7	4	1.9	1.9	95.2
8	6	2.9	2.9	98.1
10	3	1.4	1.4	99.5
12	1	.5	.5	100.0
Total	207	100.0	100.0	

**State**

	Frequency	Percent	Valid Percent	Cumulative Percent
Johor	18	8.7	8.7	8.7
Kedah	5	2.4	2.4	11.1
Kelantan	21	10.1	10.1	21.3
Melaka	11	5.3	5.3	26.6
Negeri Sembilan	14	6.8	6.8	33.3
Pahang	9	4.3	4.3	37.7
Pulau Pinang	13	6.3	6.3	44.0
Perak	14	6.8	6.8	50.7
Perlis	19	9.2	9.2	59.9
Sabah	1	.5	.5	60.4
Sarawak	1	.5	.5	60.9
Selangor	32	15.5	15.5	76.3
Terengganu	7	3.4	3.4	79.7
Kuala Lumpur	38	18.4	18.4	98.1
Labuan	1	.5	.5	98.6
Putrajaya	3	1.4	1.4	100.0
Total	207	100.0	100.0	

**Total Experience**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1-5	24	11.6	11.6	11.6
6-10	55	26.6	26.6	38.2
11-15	45	21.7	21.7	59.9
16-20	30	14.5	14.5	74.4
Above 20	53	25.6	25.6	100.0
Total	207	100.0	100.0	

**Experience With Firm**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1-5	88	42.5	42.5	42.5
6-10	71	34.3	34.3	76.8
11-15	24	11.6	11.6	88.4
16-20	10	4.8	4.8	93.2
Above 20	14	6.8	6.8	100.0
Total	207	100.0	100.0	

## APPENDIX 8

### Descriptive Statistics – Frequencies: Firms' Profile

#### Ways of Owning

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Start-up	127	61.4	61.4	61.4
Succession	38	18.4	18.4	79.7
Management Buy In	6	2.9	2.9	82.6
Joined As Partner	22	10.6	10.6	93.2
Take-over	14	6.8	6.8	100.0
Total	207	100.0	100.0	

#### FirmAge

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than 5	36	17.4	17.4	17.4
5-10	92	44.4	44.4	61.8
11-15	37	17.9	17.9	79.7
16-20	18	8.7	8.7	88.4
21-25	5	2.4	2.4	90.8
Above 25	19	9.2	9.2	100.0
Total	207	100.0	100.0	

#### Ownership

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Sole Proprietorships	127	61.4	61.4	61.4
Partnership	22	10.6	10.6	72.0
Private Limited	58	28.0	28.0	100.0
Total	207	100.0	100.0	

**Involvement**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	206	99.5	99.5	99.5
No	1	.5	.5	100.0
Total	207	100.0	100.0	

**Employee**

	Frequency	Percent	Valid Percent	Cumulative Percent
1	23	11.1	11.1	11.1
2	35	16.9	16.9	28.0
3	16	7.7	7.7	35.7
4	22	10.6	10.6	46.4
5	20	9.7	9.7	56.0
6	15	7.2	7.2	63.3
7	5	2.4	2.4	65.7
8	8	3.9	3.9	69.6
9	1	.5	.5	70.0
10	20	9.7	9.7	79.7
12	6	2.9	2.9	82.6
13	1	.5	.5	83.1
Valid 15	4	1.9	1.9	85.0
16	4	1.9	1.9	87.0
17	1	.5	.5	87.4
18	3	1.4	1.4	88.9
20	5	2.4	2.4	91.3
21	2	1.0	1.0	92.3
24	1	.5	.5	92.8
25	3	1.4	1.4	94.2
26	1	.5	.5	94.7
28	2	1.0	1.0	95.7
30	1	.5	.5	96.1
31	1	.5	.5	96.6
33	1	.5	.5	97.1

38	1	.5	.5	97.6
40	1	.5	.5	98.1
45	1	.5	.5	98.6
50	1	.5	.5	99.0
122	1	.5	.5	99.5
5000	1	.5	.5	100.0
Total	207	100.0	100.0	

#### Industry

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Manufacturing	55	26.6	26.6	26.6
Service	136	65.7	65.7	92.3
Agricultural	16	7.7	7.7	100.0
Total	207	100.0	100.0	

#### Subsector

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Food & Beverage	42	20.3	20.3	20.3
Textile	6	2.9	2.9	23.2
Manufacturing(Others)	7	3.4	3.4	26.6
Hotel	8	3.9	3.9	30.4
Restaurant	21	10.1	10.1	40.6
Education	22	10.6	10.6	51.2
Professional	3	1.4	1.4	52.7
Transportation & Communication	4	1.9	1.9	54.6
Service(Others)	78	37.7	37.7	92.3
Cultivation of Crops	9	4.3	4.3	96.6
Animal Husbandry	4	1.9	1.9	98.6
Logging	2	1.0	1.0	99.5
Fish Farming	1	.5	.5	100.0
Total	207	100.0	100.0	

## APPENDIX 9

### Descriptive Analysis

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
EMso1	207	5	7	6.36	.564
EMso2	207	5	7	5.99	.721
EMso3	207	4	7	6.02	.727
Valid N (listwise)	207				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
EMro4	207	4	7	5.87	.688
EMro5	207	5	7	6.08	.695
EMro6	207	3	6	4.68	.810
EMro7	207	4	7	6.57	.657
EMro8	207	4	7	5.83	.999
EMro9	207	4	7	5.73	.986
EMro10	207	3	7	5.87	.863
EMro11	207	2	7	5.63	.946
EMro12	207	4	7	6.25	.740
Valid N (listwise)	207				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
EMms13	207	3	7	5.67	.908
EMms14	207	2	7	4.44	1.184
EMms15	207	4	7	5.66	.956
EMms16	207	3	7	5.79	.699
EMms17	207	4	7	6.06	.786
Valid N (listwise)	207				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
EMrp18	207	4	7	6.01	.727
EMrp19	207	3	7	5.99	.839
EMrp20	207	4	7	5.94	.798
EMrp21	207	3	7	4.72	1.036
EMrp22	207	5	7	5.97	.682
EMrp23	207	3	7	5.49	.858
Valid N (listwise)	207				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
EMgo24	207	4	7	6.26	.842
EMgo25	207	5	7	6.39	.742
Valid N (listwise)	207				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
EMec26	207	4	7	5.92	.709
EMec27	207	4	7	5.68	.611
EMec28	207	4	7	5.71	.531
Valid N (listwise)	207				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
EOi1	207	2	5	4.04	.652
EOi2	207	2	5	3.99	.700
EOi3	207	2	5	4.10	.697
Valid N (listwise)	207				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
EOp4	207	2	5	3.71	.813
EOp5	207	1	5	3.93	.806
EOp6	207	1	5	3.94	.755
Valid N (listwise)	207				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
EOrt7	207	2	5	3.80	.720
EOrt8	207	2	5	4.02	.649
EOrt9	207	3	5	4.12	.631
Valid N (listwise)	207				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
ET1	207	2	5	4.10	.697
ET2	207	2	5	3.71	.813
ET3	207	5	7	5.97	.682
ET4	207	3	7	5.49	.858
ET5	207	4	7	6.26	.842
ET6	207	4	7	6.02	.727
ET7	207	3	6	4.68	.810
ET8	207	2	7	4.44	1.184
ET9	207	3	7	5.99	.839
ET10	207	3	6	4.68	.810
ET11	207	4	7	6.57	.657
ET12	207	5	7	5.99	.721
ET13	207	4	7	6.02	.727
ET14	207	3	7	5.78	.870
ET15	207	1	5	3.94	.755
ET16	207	2	5	3.80	.720
ET17	207	2	5	4.02	.649
ET18	207	3	7	5.91	.834
ET19	207	2	7	5.56	.993



ET20	207	3	7	5.86	.842
ET21	207	3	7	5.95	.902
ET22	207	1	7	5.58	.909
ET23	207	1	7	5.55	1.060
ET24	207	1	7	5.62	.987
ET25	207	1	7	5.22	1.119
Valid N (listwise)	207				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
P1	207	5	7	6.36	.564
P2	207	5	7	6.08	.695
P3	207	5	7	5.57	.619
P4	207	4	7	6.25	.740
P5	207	5	7	5.62	.656
P6	207	3	7	5.99	.839
P7	207	1	5	3.94	.755
P8	207	2	5	3.80	.720
P9	207	3	7	5.95	.902
Valid N (listwise)	207				

## APPENDIX 10

### Factor Analysis – Entrepreneurial Management

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.871
Bartlett's Test of Sphericity    Approx. Chi-Square	3797.892
df	351
Sig.	.000

#### Anti-image Matrices

		EMs	EMs	EMs	EMr	EMr	EMr	EMr	EMr	EMro	EMro	EMro	EMm	EMm	EMm	EMm	EMm	EMrp	EMrp	EMrp	EMrp	EMrp	EMrp	EMg	EMg	EMe	EMe	EMe		
		o1	o2	o3	o5	o6	o7	o8	o9	10	11	12	s13	s14	s15	s16	s17	18	19	20	21	22	23	o24	o25	c26	c27	c28		
Anti-image Covariance	EMso 1	.397	-	-	.119	.035	.047	.037	-	-.029	-.021	.025	-	.049	.067	.035	-.050	.011	.040	-.010	-.027	-.040	.004	.062	-.052	-.122	-.087	-.004		
			.141	.025						.034				2.823																
														E-6																
	EMso 2	-.141	.222	-	-	-	-	-	-	-	-.029	-.076	-.045	-.007	-.077	-.045	.027	.006	.005	-.027	.008	.006	.025	.024	-.039	.048	.020	-.001	.038	
				.104	.097	.085	.016	.019	.005																					
	EMso 3	-.025	-	.273	.023	.058	-	-	.001	.009	-.009	-.050	-.015	-.002	.020	-.003	-.063	.002	-.050	.021	-.018	.021	.013	-.008	.032	-.086	.006	.052	-.014	
		.104			.018	.003																								
EMro 5	.119	-	.023	.561	.068	-	-	-	-.011	-.024	.046	-.007	.011	.069	.000	-.055	.026	.033	.038	.063	-.047	-.011	.036	-.043	-.138	-.015	.008			
		.097			.064	.038	.085																							
EMro 6	.035	-	.058	.068	.754	-	-	-	.077	-.025	.049	.029	.047	.057	-.026	-.041	.030	-.021	.001	-.030	.001	.031	-.027	.025	-.001	-.029	-.008			
		.085			.079	.061	.020																							

EMro	.047	-	-	-	-	.547	-	.050	-.032	.044	-.109	-.032	-.041	.022	.001	-.027	-.008	-.043	.034	.041	-.010	-.013	.034	-.058	-.043	-.047	.027
7		.016	.018	.064	.079		.018																				
EMro	.037	-	-	-	-	-	.227	-	-.097	.011	.009	-.022	.033	-.012	-.031	.024	-.032	.018	-.040	-.019	-.034	.077	-.014	.020	.019	-.065	-.024
8		.019	.003	.038	.061	.018		.080																			
EMro	-.034	-	.001	-	-	.050	-	.263	.000	-.030	-.048	-.010	-.084	-.052	.046	.021	-.020	-.059	.024	-.079	.034	-.005	-.003	-.039	.009	.032	-.018
9		.005		.085	.020		.080																				
EMro	-.029	.029	.009	-	.077	-	-	.000	.684	-.052	-.010	-.059	-.060	.001	.037	.013	.013	-.029	-.012	.009	.056	-.037	.040	-.001	-.070	-.068	.067
10				.011	.032	.097																					
EMro	-.021	.076	-	-	-	.044	.011	-	-.052	.736	-.011	-.022	-.004	-.103	.034	.038	.003	-.030	.055	-.044	-.037	.033	-.046	.049	-	-.001	-.030
11			.050	.024	.025		.030																			2.631	
																										E-5	
EMro	.025	-	-	.046	.049	-	.009	-	-.010	-.011	.305	-.120	.013	.009	-.132	-.017	.054	.034	.031	.102	-.103	-.001	.012	.018	-.001	-.041	-.077
12		.045	.015		.109		.048																				
EMm	-	-	-	-	.029	-	-	-	-.059	-.022	-.120	.332	.009	-.031	.045	.004	-.062	-.018	.004	-.108	-.024	.048	-.003	.026	-.043	.085	.006
s13	2.82	.007	.002	.007	.032	.022	.010																				
	3E-6																										
EMm	.049	-	.020	.011	.047	-	.033	-	-.060	-.004	.013	.009	.784	.102	-.061	.017	.004	.081	-.062	.085	-.021	-.073	-.037	.043	.053	.041	-.064
s14		.077			.041		.084																				
EMm	.067	-	-	.069	.057	.022	-	-	.001	-.103	.009	-.031	.102	.192	-.028	-.064	-.017	.047	-.054	.046	.014	-.015	.014	-.019	-.041	-.028	.019
s15		.045	.003			.012	.052																				
EMm	.035	.027	-	.000	-	.001	-	.046	.037	.034	-.132	.045	-.061	-.028	.548	-.036	-.004	-.063	.014	-.153	.053	.041	.013	-.010	-.118	-.040	.116







EMrp	.123	-	.079	.086	-	-	.074	-	-.068	-.068	.122	-.060	.179	.211	-.166	-.064	-.096	.891 <sup>a</sup>	-.411	.317	-.125	.060	-.115	-.053	.117	.139	-.294	
19		.112			.048	.114		.226																				
EMrp	-.040	.041	-	.128	.004	.116	-	.118	-.038	.162	.142	.019	-.177	-.314	.049	-.251	.129	-.411	.900 <sup>a</sup>	-.156	-.299	-.161	.042	-.091	-.221	.073	.063	
20			.090					.213																				
EMrp	-.054	.018	.050	.106	-	.070	-	-	.014	-.066	.235	-.238	.122	.134	-.264	-.088	.278	.317	-.156	.415 <sup>a</sup>	-.066	-.105	-.077	-.039	.125	-.036	-.170	
21					.044		.051	.197																				
EMrp	-.119	.097	.047	-	.003	-	-	.123	.126	-.081	-.348	-.077	-.044	.057	.133	-.007	-.163	-.125	-.299	-.066	.922 <sup>a</sup>	-.188	-.061	-.032	.208	.034	-.011	
22				.118		.026	.132																					
EMrp	.009	.080	-	-	.056	-	.252	-	-.069	.059	-.003	.128	-.128	-.053	.086	.105	-.106	.060	-.161	-.105	-.188	.896 <sup>a</sup>	-.296	.041	-.161	.036	-.085	
23			.024	.022		.028		.017																				
EMgo	.281	-	.177	.137	-	.131	-	-	.138	-.152	.060	-.013	-.120	.090	.051	-.263	-.140	-.115	.042	-.077	-.061	-.296	.838 <sup>a</sup>	-.651	-.197	-.314	.334	
24		.240			.089		.083	.017																				
EMgo	-.195	.241	-	-	.067	-	.099	-	-.002	.135	.078	.106	-.113	-.101	-.031	.234	.145	-.053	-.091	-.039	-.032	.041	-.651	.843 <sup>a</sup>	.108	.043	-.202	
25			.385	.134		.185		.179																				
EMec	-.361	.078	.022	-	-	-	.076	.034	-.159	-	-.005	-.139	.111	-.177	-.297	.178	-.069	.117	-.221	.125	.208	-.161	-.197	.108	.850 <sup>a</sup>	.202	-.360	
26				.344	.002	.109				5.73																		
										5E-5																		
EMec	-.239	-	.173	-	-	-	-	.106	-.143	-.002	-.128	.254	.080	-.110	-.093	.106	-.261	.139	.073	-.036	.034	.036	-.314	.043	.202	.837 <sup>a</sup>	-.429	
27		.004		.033	.058	.109	.234																					
EMec	-.009	.132	-	.018	-	.059	-	-	.132	-.056	-.224	.017	-.117	.069	.253	-.086	.090	-.294	.063	-.170	-.011	-.085	.334	-.202	-.360	-.429	.788 <sup>a</sup>	
28			.045		.014		.081	.057																				

**Communalities**

	Initial	Extraction
EMso1	1.000	.689
EMso2	1.000	.770
EMso3	1.000	.736
EMro5	1.000	.420
EMro6	1.000	.752
EMro7	1.000	.592
EMro8	1.000	.766
EMro9	1.000	.682
EMro10	1.000	.445
EMro11	1.000	.532
EMro12	1.000	.675
EMms13	1.000	.676
EMms14	1.000	.553
EMms15	1.000	.819
EMms16	1.000	.428
EMms17	1.000	.749
EMrp18	1.000	.777
EMrp19	1.000	.690
EMrp20	1.000	.813
EMrp21	1.000	.594
EMrp22	1.000	.669
EMrp23	1.000	.703
EMgo24	1.000	.842
EMgo25	1.000	.724
EMec26	1.000	.689
EMec27	1.000	.639
EMec28	1.000	.656

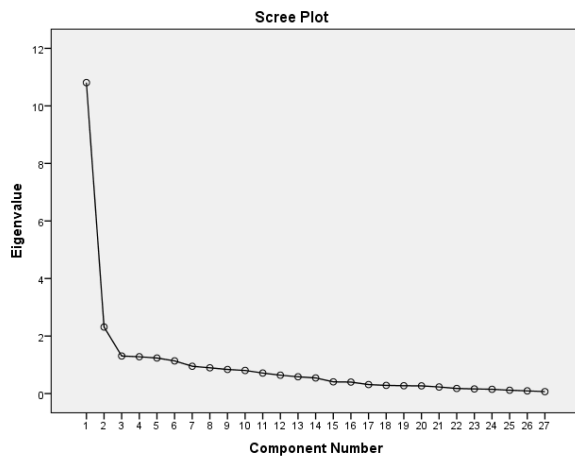
Extraction Method: Principal  
Component Analysis.



**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared			Rotation Sums of Squared		
				Loadings			Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.808	40.030	40.030	10.808	40.030	40.030	7.503	27.790	27.790
2	2.313	8.567	48.597	2.313	8.567	48.597	3.802	14.083	41.873
3	1.307	4.840	53.437	1.307	4.840	53.437	2.611	9.672	51.545
4	1.280	4.743	58.179	1.280	4.743	58.179	1.552	5.748	57.293
5	1.236	4.579	62.758	1.236	4.579	62.758	1.319	4.885	62.178
6	1.136	4.208	66.966	1.136	4.208	66.966	1.293	4.788	66.966
7	.951	3.521	70.486						
8	.896	3.317	73.803						
9	.839	3.108	76.912						
10	.804	2.979	79.891						
11	.714	2.644	82.535						
12	.640	2.372	84.907						
13	.583	2.161	87.068						
14	.544	2.016	89.084						
15	.409	1.515	90.598						
16	.400	1.483	92.081						
17	.313	1.160	93.241						
18	.285	1.057	94.298						
19	.274	1.014	95.311						
20	.268	.991	96.303						
21	.230	.851	97.154						
22	.178	.658	97.811						
23	.163	.602	98.413						
24	.149	.552	98.965						
25	.117	.432	99.397						
26	.094	.349	99.747						
27	.068	.253	100.000						

Extraction Method: Principal Component Analysis.



**UUM**  
Universiti Utara Malaysia

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

	Component					
	1	2	3	4	5	6
EMso1			.735			
EMso2	.462		.642			
EMso3	.537		.615			
EMro5		.526				
EMro6		.850				
EMro7		.593				
EMro8		.515				
EMro9		.614				
EMro10		.612				
EMro11		.601				
EMro12		.733				
EMms13	.603					
EMms14	.725					
EMms15	.760					
EMms16	.472					
EMms17	.786					
EMrp18				.793		
EMrp19				.789		
EMrp20				.861		
EMrp21				.723		
EMrp22				.754		
EMrp23				.678		
EMgo24						.867
EMgo25						.710
EMec26		.451			.512	
EMec27				.400	.496	
EMec28					.557	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

## APPENDIX 11

### Factor Analysis – Entrepreneurial Orientation

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.790
Bartlett's Test of Sphericity    Approx. Chi-Square	1004.200
df	36
Sig.	.000

#### Anti-image Matrices

		EOi1	EOi2	EOi3	EOp4	EOp5	EOp6	EOrt7	EOrt8	EOrt9
Anti-image Covariance	EOi1	.472	-.107	-.190	.027	-.057	.054	-.039	.017	.025
	EOi2	-.107	.408	-.136	-.089	-.003	-.020	-.054	-.014	-.016
	EOi3	-.190	-.136	.355	-.066	-.014	.023	.032	-.038	-.089
	EOp4	.027	-.089	-.066	.501	-.148	-.025	-.112	.059	.028
	EOp5	-.057	-.003	-.014	-.148	.355	-.203	.113	.024	-.006
	EOp6	.054	-.020	.023	-.025	-.203	.300	-.090	-.137	.055
	EOrt7	-.039	-.054	.032	-.112	.113	-.090	.514	-.144	-.065
	EOrt8	.017	-.014	-.038	.059	.024	-.137	-.144	.375	-.194
	EOrt9	.025	-.016	-.089	.028	-.006	.055	-.065	-.194	.598
Anti-image Correlation	EOi1	.790 <sup>a</sup>	-.243	-.465	.055	-.139	.144	-.078	.041	.047
	EOi2	-.243	.886 <sup>a</sup>	-.357	-.197	-.007	-.057	-.117	-.035	-.033
	EOi3	-.465	-.357	.808 <sup>a</sup>	-.156	-.040	.071	.074	-.104	-.193
	EOp4	.055	-.197	-.156	.849 <sup>a</sup>	-.349	-.064	-.221	.137	.051
	EOp5	-.139	-.007	-.040	-.349	.706 <sup>a</sup>	-.622	.264	.065	-.013
	EOp6	.144	-.057	.071	-.064	-.622	.717 <sup>a</sup>	-.229	-.409	.129
	EOrt7	-.078	-.117	.074	-.221	.264	-.229	.805 <sup>a</sup>	-.328	-.118
	EOrt8	.041	-.035	-.104	.137	.065	-.409	-.328	.772 <sup>a</sup>	-.410
	EOrt9	.047	-.033	-.193	.051	-.013	.129	-.118	-.410	.802 <sup>a</sup>

a. Measures of Sampling Adequacy(MSA)

**Communalities**

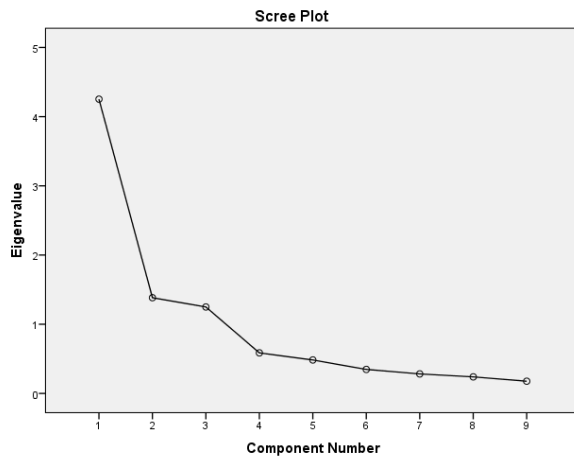
	Initial	Extraction
EOi1	1.000	.784
EOi2	1.000	.747
EOi3	1.000	.822
EOp4	1.000	.684
EOp5	1.000	.823
EOp6	1.000	.856
EOrt7	1.000	.651
EOrt8	1.000	.815
EOrt9	1.000	.704

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.253	47.258	47.258	4.253	47.258	47.258	2.392	26.572	26.572
2	1.383	15.368	62.626	1.383	15.368	62.626	2.261	25.123	51.695
3	1.249	13.882	76.507	1.249	13.882	76.507	2.233	24.812	76.507
4	.586	6.512	83.019						
5	.483	5.372	88.391						
6	.347	3.857	92.248						
7	.282	3.132	95.380						
8	.239	2.661	98.041						
9	.176	1.959	100.000						

Extraction Method: Principal Component Analysis.



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

	Component		
	1	2	3
EOi1	.878		
EOi2	.755		
EOi3	.853		
EOp4		.714	
EOp5		.880	
EOp6		.820	
EOrt7			.750
EOrt8			.843
EOrt9			.787

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

a. Rotation converged in 5 iterations.

## APPENDIX 12

### Factor Analysis – Ethics

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.798
Approx. Chi-Square	1375.297
Bartlett's Test of Sphericity	df
Sig.	.000

#### Anti-image

#### Matrices

		Ethic	Ethic	Ethic	Ethic	Ethic	Ethic	Ethic	Ethic	Ethic	Ethics	Ethics	Ethics	Ethics	Ethics	Ethics	Ethics	Ethics	Ethics	Ethics	Ethics	Ethics	Ethics	Ethics	Ethics	
		s1	s2	s3	s4	s5	s6	s7	s8	s9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Covariance	Ethics	.727	-.088	-.036	-.087	-.021	-.114	-.119	.015	-.011	.002	.038	-.010	-.032	.014	.041	.022	-.057	.014	-.019	.010	-.083	-.002	.009	-.053	.015
	Anti-image	-.088	.674	-.173	.100	-.128	.007	-.015	-.050	-.094	-.044	.019	.084	-.092	-.054	-.030	-.030	.088	-.017	.040	.010	-.028	.031	-.061	.069	.007
	Ethics	-.036	-.173	.667	-.165	.017	-.041	.075	-.029	-.119	-.062	-.023	-.022	-.034	.007	.023	.017	-.065	.013	-.010	-.038	.014	-.015	.003	.026	-.042





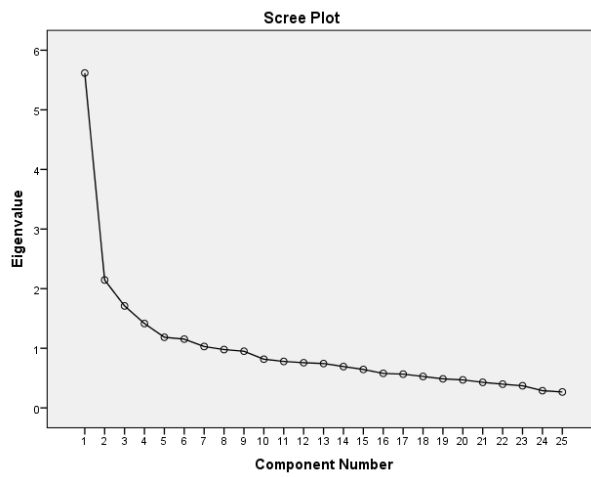
Ethics	.014	-.054	.007	-.065	.060	-.123	-.046	-.122	-.095	-.006	.038	-.026	-.130	.639	.002	-.023	-.070	.046	-.104	-.008	.018	-.048	.122	-.032	-.087
14																									
Ethics	.041	-.030	.023	-.059	.097	-.094	-.125	-.062	-.018	.089	-.030	.021	.018	.002	.533	-.225	-.237	-.056	.005	.044	-.077	-.069	-.003	-.007	.042
15																									
Ethics	.022	-.030	.017	.015	-.112	.016	-.064	.030	-.020	-.108	.009	-.041	.064	-.023	-.225	.655	-.032	-.053	.046	-.062	.052	.089	.011	-.041	.013
16																									
Ethics	-.057	.088	-.065	.033	-.040	.061	.096	.029	-.058	-.010	-.029	-.008	-.066	-.070	-.237	-.032	.677	-.021	.007	.023	-.034	.127	-.026	-.012	.052
17																									
Ethics	.014	-.017	.013	-.093	.061	.026	.035	-.084	-.018	-.067	-.025	.021	.024	.046	-.056	-.053	-.021	.715	-.243	-.095	.061	.059	.022	.058	-.041
18																									
Ethics	-.019	.040	-.010	.020	-.041	-.013	.036	.059	-.045	-.062	.028	.003	.015	-.104	.005	.046	.007	-.243	.659	-.140	-.006	-.035	-.111	.077	-.038
19																									
Ethics	.010	.010	-.038	.067	.021	.005	-.044	-.018	.001	.055	.006	.015	-.052	-.008	.044	-.062	.023	-.095	-.140	.568	-.231	.051	-.056	-.087	.051
20																									
Ethics	-.083	-.028	.014	-.026	-.054	.029	.013	-.017	.037	-.039	-.043	-.067	-.034	.018	-.077	.052	-.034	.061	-.006	-.231	.500	-.058	.023	-.074	-.068
21																									
Ethics	-.002	.031	-.015	.029	-.082	.036	.011	.033	-.059	-.042	.017	.000	-.074	-.048	-.069	.089	.127	.059	-.035	.051	-.058	.675	-.141	-.116	.025
22																									
Ethics	.009	-.061	.003	-.131	.012	.046	-.039	-.045	.053	.097	-.060	.003	-.011	.122	-.003	.011	-.026	.022	-.111	-.056	.023	-.141	.518	-.098	-.195
23																									

Anti-image Correlation	Ethics 24	-.053	.069	.026	.028	-.019	.070	.000	-.037	-.050	-.086	-.053	.023	.032	-.032	-.007	-.041	-.012	.058	.077	-.087	-.074	-.116	-.098	.544	-.143
	Ethics 25	.015	.007	-.042	.046	.017	-.110	-.062	.006	-.020	.014	.022	.037	.001	-.087	.042	.013	.052	-.041	-.038	.051	-.068	.025	-.195	-.143	.582
	Ethics 1	.891 <sup>a</sup>	-.126	-.052	-.124	-.033	-.170	-.163	.021	-.015	.003	.053	-.014	-.046	.020	.065	.033	-.081	.019	-.027	.015	-.138	-.003	.015	-.084	.024
	Ethics 2	-.126	.792 <sup>a</sup>	-.258	.149	-.210	.010	-.022	-.073	-.132	-.063	.028	.119	-.138	-.083	-.049	-.045	.131	-.025	.059	.017	-.048	.046	-.103	.115	.012
	Ethics 3	-.052	-.258	.848 <sup>a</sup>	-.247	.028	-.064	.107	-.042	-.169	-.090	-.033	-.032	-.052	.011	.039	.025	-.097	.019	-.015	-.062	.024	-.022	.005	.042	-.068
	Ethics 4	-.124	.149	-.247	.771 <sup>a</sup>	-.271	-.033	-.040	.053	-.007	-.084	.019	-.094	.014	-.099	-.099	.022	.049	-.135	.030	.109	-.046	.043	-.223	.046	.074
	Ethics 5	-.033	-.210	.028	-.271	.797 <sup>a</sup>	-.325	-.082	-.089	-.013	.136	-.095	-.049	-.046	.101	.179	-.187	-.065	.097	-.068	.037	-.103	-.134	.023	-.035	.031
	Ethics 6	-.170	.010	-.064	.033	-.325	.795 <sup>a</sup>	-.015	.045	.028	-.033	-.073	-.126	-.018	-.196	-.163	.024	.094	.038	-.020	.009	.053	.055	.082	.120	-.182
Ethics 7	-.163	-.022	.107	-.040	-.082	-.015	.858 <sup>a</sup>	-.079	-.029	-.094	.001	.042	-.020	-.068	-.201	-.093	.136	.048	.052	-.068	.021	.015	-.063	.000	-.095	
Ethics 8	.021	-.073	-.042	.053	-.089	.045	-.079	.854 <sup>a</sup>	.017	-.217	-.059	-.205	.044	-.183	-.103	.045	.042	-.120	.088	-.029	-.029	.048	-.076	-.061	.009	



Ethics 19	-0.27	.059	-.015	.030	-.068	-.020	.052	.088	-.064	-.090	.041	.004	.023	-.160	.009	.071	.010	-.354	.708 <sup>a</sup>	-.229	-.011	-.052	-.191	.128	-.061
Ethics 20	.015	.017	-.062	.109	.037	.009	-.068	-.029	.002	.086	.010	.023	-.084	-.013	.080	-.101	.037	-.149	-.229	.759 <sup>a</sup>	-.433	.082	-.104	-.157	.088
Ethics 21	-.138	-.048	.024	-.046	-.103	.053	.021	-.029	.060	-.064	-.073	-.110	-.059	.031	-.149	.090	-.058	.101	-.011	-.433	.842 <sup>a</sup>	-.100	.046	-.142	-.126
Ethics 22	-.003	.046	-.022	.043	-.134	.055	.015	.048	-.083	-.061	.024	-.001	-.111	-.073	-.115	.133	.188	.086	-.052	.082	-.100	.790 <sup>a</sup>	-.238	-.192	.039
Ethics 23	.015	-.103	.005	-.223	.023	.082	-.063	-.076	.085	.158	-.100	.004	-.018	.213	-.006	.019	-.044	.035	-.191	-.104	.046	-.238	.747 <sup>a</sup>	-.184	-.355
Ethics 24	-.084	.115	.042	.046	-.035	-.120	.000	-.061	-.078	-.136	-.087	.037	.053	-.054	-.013	-.068	-.019	.092	.128	-.157	-.142	-.192	-.184	.829 <sup>a</sup>	-.254
Ethics 25	.024	.012	-.068	.074	.031	-.182	-.095	-.009	-.031	.021	.035	.057	-.002	-.143	.075	.021	.082	-.063	-.061	.088	-.126	.039	-.355	-.254	.797 <sup>a</sup>

a. Measures  
of Sampling  
Adequacy(M  
SA)



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

[Redacted]

a. Only one component was extracted. The solution cannot be rotated.



**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.950	64.736	64.736	2.950	64.736	64.736
2	.991	3.699	68.435			
3	.978	3.289	71.724			
4	.938	3.172	74.896			
5	.914	2.998	77.894			
6	.893	2.641	80.535			
7	.836	2.432	82.967			
8	.811	2.119	85.086			
9	.795	1.841	86.927			
10	.742	1.745	88.672			
11	.710	1.544	90.216			
12	.689	1.325	91.541			
13	.654	1.290	92.831			
14	.611	1.178	94.009			
15	.597	1.101	95.110			
16	.579	.946	96.056			
17	.566	.882	96.938			
18	.527	.699	97.637			
19	.487	.545	98.182			
20	.469	.442	98.624			
21	.429	.326	98.950			
22	.398	.319	99.269			
23	.371	.299	99.568			
24	.289	.234	99.802			
25	.267	.198	100.000			

Extraction Method: Principal Component Analysis.

## APPENDIX 13

### Factor Analysis – Business Performance

#### KMO and Bartlett's Test

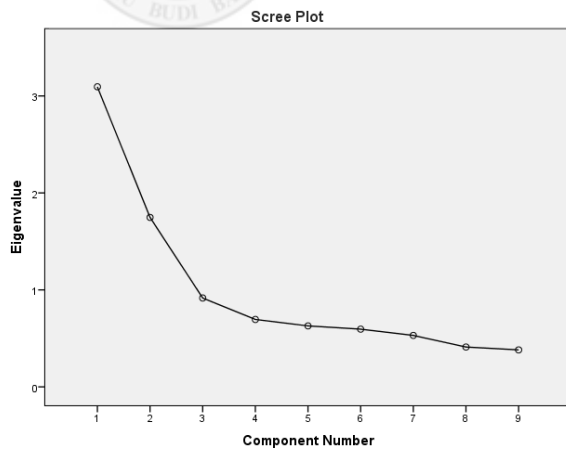
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.765
Approx. Chi-Square	467.172
Bartlett's Test of Sphericity	df
	36
	Sig.
	.000

#### Anti-image Matrices

	Perform ance1	Perform ance2	Perform ance3	Perform ance4	Perform ance5	Perform ance6	Perform ance7	Perform ance8	Perform ance9
Perform ance1	.617	-.269	-.110	-.057	-.043	.040	-.031	.078	-.076
Perform ance2	-.269	.617	-.086	.002	-.024	.031	.068	-.049	-.159
Perform ance3	-.110	-.086	.722	-.046	.009	.042	-.131	-.148	-.127
Perform ance4	-.057	.002	-.046	.674	-.165	-.194	-.032	.022	-.028
Perform ance5	-.043	-.024	.009	-.165	.609	-.046	-.200	-.063	-.108
Perform ance6	.040	.031	.042	-.194	-.046	.619	-.172	-.198	-.057
Perform ance7	-.031	.068	-.131	-.032	-.200	-.172	.625	-.026	.009
Perform ance8	.078	-.049	-.148	.022	-.063	-.198	-.026	.802	.103
Perform ance9	-.076	-.159	-.127	-.028	-.108	-.057	.009	.103	.702
Perform ance1	.733 <sup>a</sup>	-.436	-.164	-.089	-.070	.065	-.050	.111	-.116

Correlation	Performance2	-.436	.697 <sup>a</sup>	-.129	.003	-.040	.051	.110	-.069	-.242
	Performance3	-.164	-.129	.804 <sup>a</sup>	-.066	.014	.064	-.194	-.194	-.178
	Performance4	-.089	.003	-.066	.815 <sup>a</sup>	-.257	-.301	-.050	.030	-.040
	Performance5	-.070	-.040	.014	-.257	.810 <sup>a</sup>	-.075	-.324	-.090	-.165
	Performance6	.065	.051	.064	-.301	-.075	.737 <sup>a</sup>	-.277	-.281	-.087
	Performance7	-.050	.110	-.194	-.050	-.324	-.277	.774 <sup>a</sup>	-.036	.014
	Performance8	.111	-.069	-.194	.030	-.090	-.281	-.036	.668 <sup>a</sup>	.137
	Performance9	-.116	-.242	-.178	-.040	-.165	-.087	.014	.137	.807 <sup>a</sup>

a. Measures of Sampling Adequacy(MSA)





**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
		% of Variance	Cumulative %		% of Variance	Cumulative %		% of Variance	Cumulative %
	Total			Total			Total		
1	2.000	68.011	68.011	2.000	68.011	68.011	1.767	63.429	63.429
2	.961	7.201	75.212						
3	.920	6.112	81.324						
4	.864	5.765	87.089						
5	.806	4.283	91.372						
6	.750	3.329	94.701						
7	.690	2.662	97.363						
8	.585	1.432	98.795						
9	.461	1.205	100.000						

Extraction Method: Principal Component Analysis.

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

	Component
	1
P1	.673
P2	.640
P3	.793
P4	.675
P5	.777
P6	.649
P7	.839
P8	.871
P9	.925

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. 1 component extracted.

## APPENDIX 14

### Normality

#### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	
strategic_orientation	207	4.67	7.00	6.1224	.58205	.059	.169	-.650	.337
resource_orientation	207	4.71	7.00	5.9938	.55334	-.022	.169	-.751	.337
management_structure	207	4.00	7.00	5.7947	.66837	-.064	.169	-.210	.337
reward_philosophy	207	4.50	7.00	5.8466	.66898	-.311	.169	-.805	.337
growth_orientation	207	4.50	7.00	6.3261	.75440	-.745	.169	-.706	.337
entrepreneurial_culture	207	4.67	6.67	5.7713	.49189	-.537	.169	-.696	.337
innovativeness	207	2.67	5.00	4.0403	.58384	-.011	.169	-.133	.337
proactiveness	207	2.00	5.00	3.8615	.68355	-.341	.169	-.104	.337
risk_taking	207	2.67	5.00	3.9823	.54288	-.152	.169	-.253	.337
ethics	207	4.72	6.76	5.8947	.31798	-.177	.169	1.776	.337
performance	207	5.00	6.78	5.6248	.37148	.307	.169	-.468	.337
Valid N (listwise)	207								

## Multicollinearity

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	.689	.282		2.447	.015		
strategic_orientation	.139	.032	.245	4.336	.000	.459	2.177
resource_orientation	.189	.039	.316	4.828	.000	.341	2.932
management_structure	-.007	.034	-.014	-.196	.844	.305	3.274
reward_philosophy	.083	.035	.167	2.364	.019	.292	3.424
growth_orientation	-.059	.028	-.134	-	.039	.347	2.881
entrepreneurial_culture	.046	.040	.068	1.135	.258	.409	2.443
innovativeness	-.028	.027	-.050	-	.292	.652	1.533
proactiveness	.107	.025	.222	4.319	.000	.554	1.805
risk_taking	.182	.029	.299	6.259	.000	.642	1.557
ethics	.251	.042	.241	6.036	.000	.915	1.093

a. Dependent Variable: performance

## APPENDIX 15

### Correlation

		Correlations						
		perfor mance	strategic_o rientation	resource_o rientation	management _structure	reward_ph ilosopy	growth_ori entation	entrepreneur al_culture
performance	Pears on Corre lation Sig. (2- tailed ) N	1	.582**	.629**	.539**	.485**	.391**	.551**
		207	207	207	207	207	207	207
strategic_ori entation	Pears on Corre lation Sig. (2- tailed ) N	.582**	1	.628**	.673**	.541**	.541**	.609**
		207	207	207	207	207	207	207
resource_ori entation	Pears on Corre lation Sig. (2- tailed ) N	.629**	.628**	1	.736**	.553**	.500**	.708**
		207	207	207	207	207	207	207
management _structure	Pears on	.539**	.673**	.736**	1	.692**	.584**	.619**
		207	207	207	207	207	207	207

	Correlation							
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	207	207	207	207	207	207	207
reward_philosophy	Pearson Correlation	.485**	.541**	.553**	.692**	1	.786**	.585**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	207	207	207	207	207	207	207
growth_orientation	Pearson Correlation	.391**	.541**	.500**	.584**	.786**	1	.564**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	207	207	207	207	207	207	207
entrepreneurial_culture	Pearson Correlation	.551**	.609**	.708**	.619**	.585**	.564**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	207	207	207	207	207	207	207

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

**Correlations**

		performance	innovativeness	proactiveness	risk_taking
performance	Pearson Correlation	1	.162*	.413**	.481**
	Sig. (2-tailed)		.020	.000	.000
	N	207	207	207	207
innovativeness	Pearson Correlation	.162*	1	.549**	.423**
	Sig. (2-tailed)	.020		.000	.000
	N	207	207	207	207
proactiveness	Pearson Correlation	.413**	.549**	1	.559**
	Sig. (2-tailed)	.000	.000		.000
	N	207	207	207	207
risk_taking	Pearson Correlation	.481**	.423**	.559**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	207	207	207	207

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

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

**Correlations**

		performance	ethics
performance	Pearson Correlation	1	.430**
	Sig. (2-tailed)		.000
	N	207	207
ethics	Pearson Correlation	.430**	1
	Sig. (2-tailed)	.000	
	N	207	207

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

## APPENDIX 16

### Regression Analysis of Entrepreneurial Management on Business Performance

**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	entrepreneurial_culture, growth_orientation, strategic_orientation, management_structure, resource_orientation, reward_philosophy	.	Enter

a. All requested variables entered.

b. Dependent Variable: performance

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.689 <sup>a</sup>	.474	.458	.24323	1.351

a. Predictors: (Constant), entrepreneurial\_culture, growth\_orientation, strategic\_orientation, management\_structure, resource\_orientation, reward\_philosophy

b. Dependent Variable: performance

**ANOVA<sup>b</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	10.674	6	1.779	30.070	.000 <sup>a</sup>
Residual	11.832	200	.059		
Total	22.506	206			

a. Predictors: (Constant), entrepreneurial\_culture, growth\_orientation, strategic\_orientation, management\_structure, resource\_orientation, reward\_philosophy

b. Dependent Variable: performance

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.721	.218		12.453	.000		
	strategic_orientation	.161	.043	.284	3.779	.000	.465	2.150
	resource_orientation	.220	.052	.368	4.228	.000	.348	2.876
	management_structure	-.028	.046	-.056	-.604	.546	.309	3.234
	reward_philosophy	.108	.047	.219	2.321	.021	.296	3.384
	growth_orientation	-.064	.038	-.147	-1.706	.090	.356	2.807
	entrepreneurial_culture	.072	.053	.107	1.347	.180	.415	2.408

a. Dependent Variable: performance



**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions						
				(Constant)	strategic_orientation	resource_orientation	management_structure	reward_philosophy	growth_orientation	entrepreneurial_culture
1	1	6.973	1.000	.00	.00	.00	.00	.00	.00	.00
	2	.010	27.031	.15	.02	.02	.00	.10	.18	.01
	3	.006	33.019	.31	.02	.03	.27	.00	.10	.00
	4	.004	43.727	.07	.77	.05	.04	.11	.09	.01
	5	.003	46.285	.36	.04	.15	.15	.09	.09	.32
	6	.002	53.895	.09	.11	.08	.14	.53	.52	.21
	7	.002	61.250	.01	.05	.67	.39	.17	.02	.45

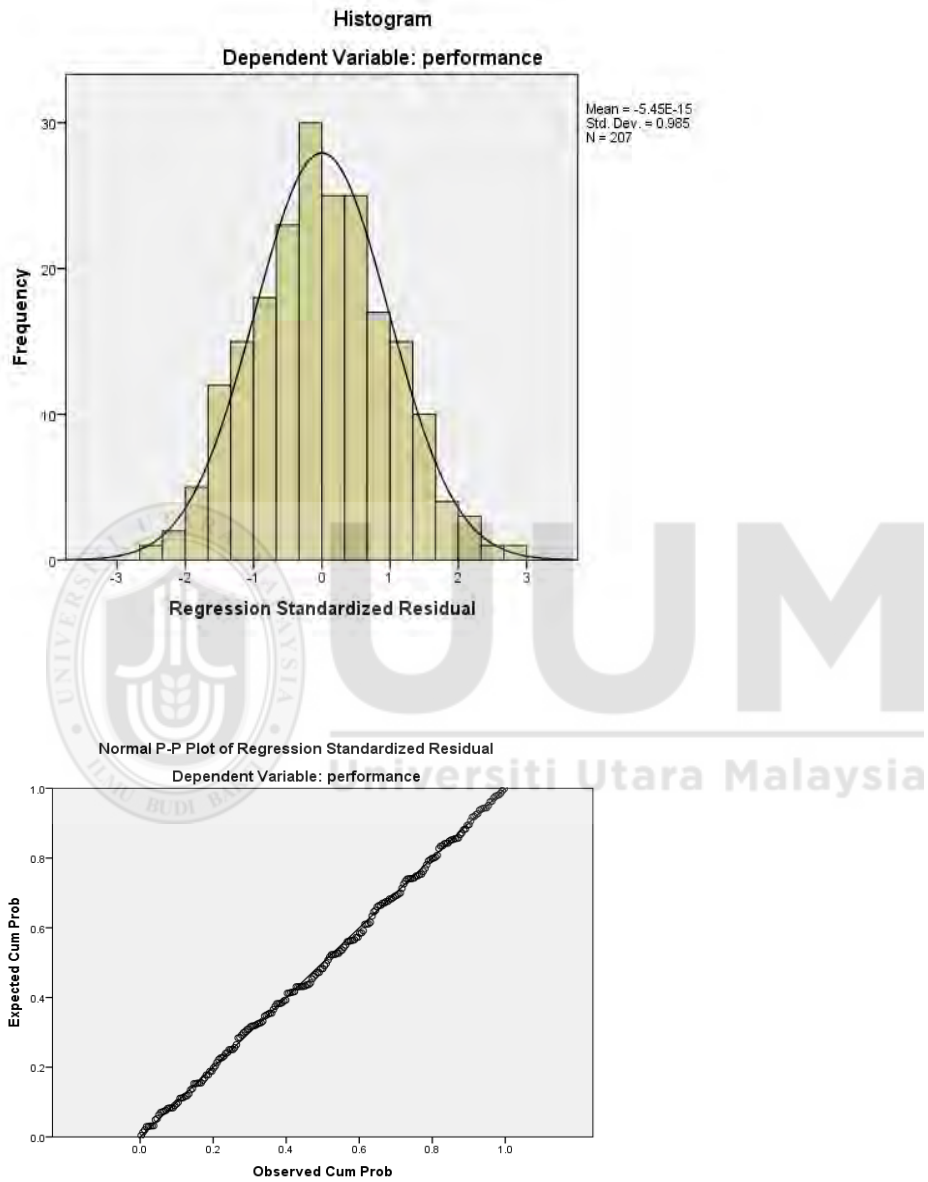
a. Dependent Variable: performance

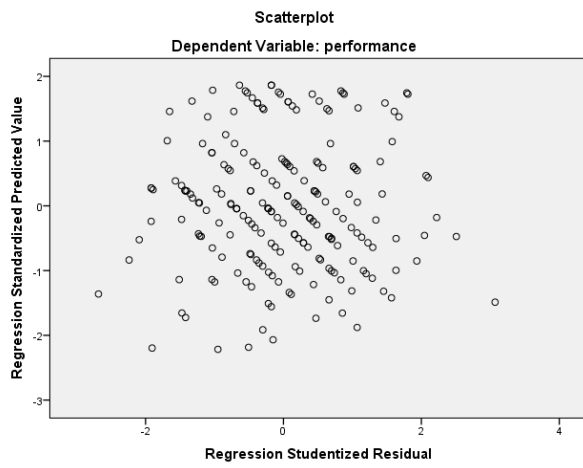
**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	5.0024	5.9309	5.5067	.22763	207
Std. Predicted Value	-2.216	1.864	.000	1.000	207
Standard Error of Predicted Value	.022	.070	.044	.010	207
Adjusted Predicted Value	5.0146	5.9349	5.5066	.22830	207
Residual	-.64128	.72093	.00000	.23966	207
Std. Residual	-2.636	2.964	.000	.985	207
Stud. Residual	-2.683	3.069	.000	1.003	207
Deleted Residual	-.66402	.77306	.00008	.24846	207
Stud. Deleted Residual	-2.726	3.136	.000	1.008	207
Mahal. Distance	.700	16.115	5.971	3.243	207
Cook's Distance	.000	.097	.005	.009	207
Centered Leverage Value	.003	.078	.029	.016	207

a. Dependent Variable: performance

## Charts





**UUM**  
Universiti Utara Malaysia

## APPENDIX 17

### Regression Analysis of Entrepreneurial Orientation on Business Performance

**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	risk_taking, innovativeness, proactiveness		Enter

- a. All requested variables entered.  
b. Dependent Variable: performance

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.528 <sup>a</sup>	.279	.268	.28281	1.762

- a. Predictors: (Constant), risk\_taking, innovativeness, proactiveness  
b. Dependent Variable: performance

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.270	3	2.090	26.130	.000 <sup>a</sup>
	Residual	16.236	203	.080		
	Total	22.506	206			

- a. Predictors: (Constant), risk\_taking, innovativeness, proactiveness  
b. Dependent Variable: performance

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.395	.168		26.179	.000		
	innovativeness	-.089	.041	-.157	-2.177	.031	.679	1.473
	proactiveness	.136	.038	.282	3.561	.000	.568	1.759
	risk_taking	.238	.044	.390	5.354	.000	.669	1.496

a. Dependent Variable: performance

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	innovativeness	proactiveness	risk_taking
1	1	3.966	1.000	.00	.00	.00	.00
	2	.015	16.026	.34	.00	.67	.01
	3	.011	18.786	.01	.76	.01	.40
	4	.008	22.865	.65	.24	.31	.59

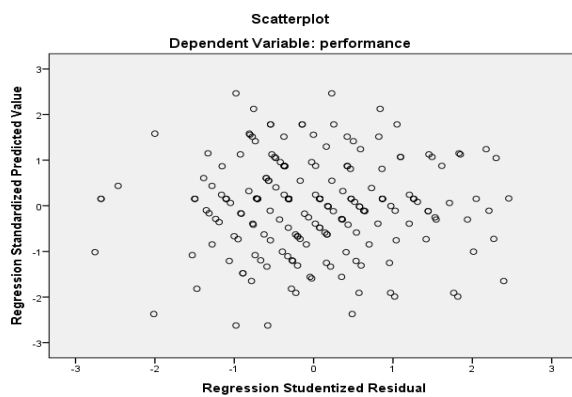
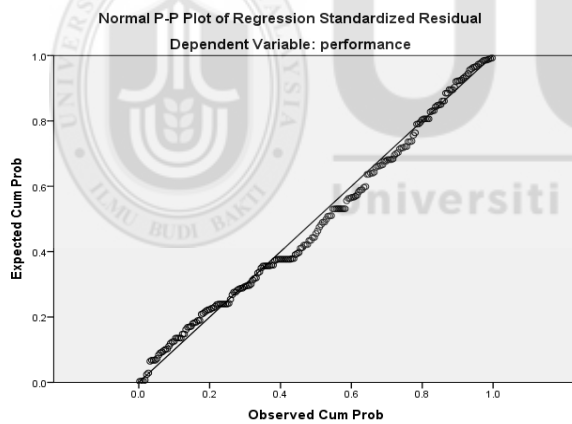
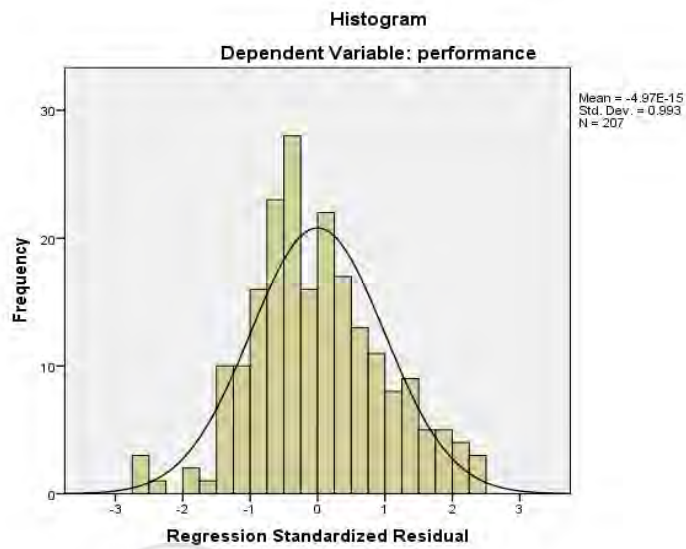
a. Dependent Variable: performance

Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	5.0490	5.9369	5.5067	.17446	207
Std. Predicted Value	-2.623	2.466	.000	1.000	207
Standard Error of Predicted Value	.021	.094	.037	.014	207
Adjusted Predicted Value	5.0556	5.9498	5.5066	.17429	207
Residual	-.77399	.68726	.00000	.28074	207
Std. Residual	-2.737	2.430	.000	.993	207
Stud. Residual	-2.755	2.459	.000	1.002	207
Deleted Residual	-.78442	.70344	.00006	.28625	207
Stud. Deleted Residual	-2.801	2.490	.000	1.008	207
Mahal. Distance	.091	21.795	2.986	3.340	207
Cook's Distance	.000	.126	.005	.012	207
Centered Leverage Value	.000	.106	.014	.016	207

a. Dependent Variable: performance

## Charts



## APPENDIX 18

### Regression Analysis of Ethics on Business Performance

**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	ethics <sup>a</sup>	.	Enter

a. All requested variables entered.

b. Dependent Variable: performance

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.702 <sup>a</sup>	.493	.490	.23603	1.712

a. Predictors: (Constant), ethics

b. Dependent Variable: performance

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.085	1	11.085	198.980	.000 <sup>a</sup>
	Residual	11.421	205	.056		
	Total	22.506	206			

a. Predictors: (Constant), ethics

b. Dependent Variable: performance

Coefficients<sup>a</sup>

Model		Unstandardized		Standardized	t	Sig.	Collinearity Statistics	
		Coefficients		Coefficients			Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	1.515	.283		5.343	.000		
	ethics	.752	.053	.702	14.106	.000	1.000	1.000

a. Dependent Variable: performance

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	ethics
				1	1
	2	.002	34.531	1.00	1.00

a. Dependent Variable: performance

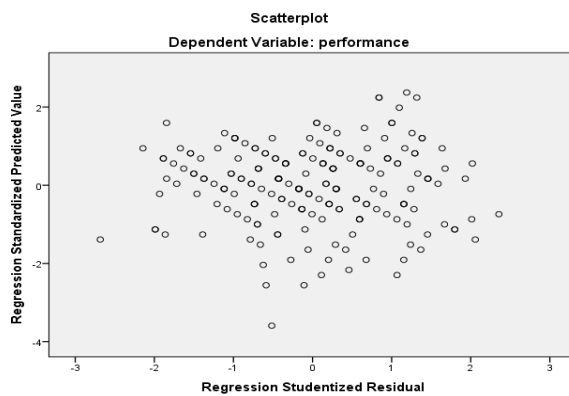
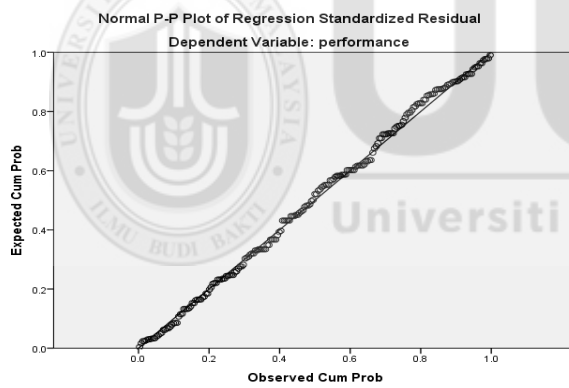
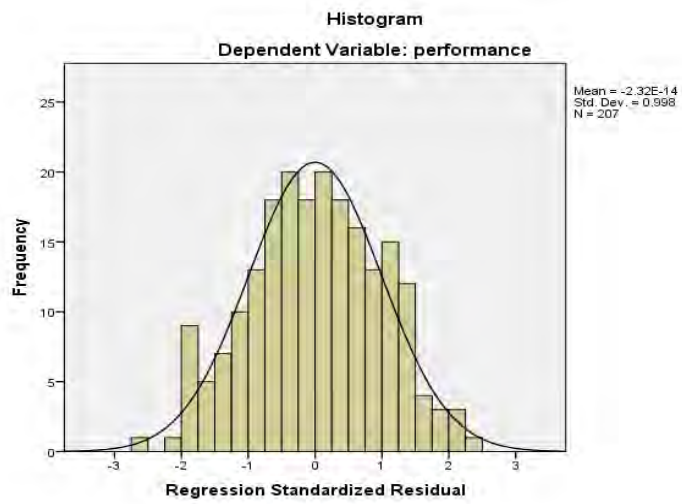
Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	4.6732	6.0569	5.5067	.23197	207
Std. Predicted Value	-3.593	2.372	.000	1.000	207
Standard Error of Predicted Value	.016	.061	.022	.007	207
Adjusted Predicted Value	4.6817	6.0477	5.5065	.23164	207
Residual	-.62898	.55395	.00000	.23546	207
Std. Residual	-2.665	2.347	.000	.998	207
Stud. Residual	-2.684	2.356	.000	1.002	207
Deleted Residual	-.63804	.55813	.00018	.23771	207
Stud. Deleted Residual	-2.726	2.382	.000	1.006	207
Mahal. Distance	.001	12.912	.995	1.542	207
Cook's Distance	.000	.052	.005	.007	207
Centered Leverage Value	.000	.063	.005	.007	207

a. Dependent Variable: performance



## Charts



## APPENDIX 19

### Regression Analysis of Entrepreneurial Management on Ethics

**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	entrepreneurial_culture, growth_orientation, strategic_orientation, management_structure, resource_orientation, reward_philosophy	.	Enter

a. All requested variables entered.

b. Dependent Variable: ethics

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.723 <sup>a</sup>	.523	.509	.21617	1.250

a. Predictors: (Constant), entrepreneurial\_culture, growth\_orientation, strategic\_orientation, management\_structure, resource\_orientation, reward\_philosophy

b. Dependent Variable: ethics

ANOVA<sup>b</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	10.255	6	1.709	36.574	.000 <sup>a</sup>
Residual	9.346	200	.047		
Total	19.601	206			

a. Predictors: (Constant), entrepreneurial\_culture, growth\_orientation, strategic\_orientation, management\_structure, resource\_orientation, reward\_philosophy

b. Dependent Variable: ethics

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.757	.194		14.198	.000		
	strategic_orientation	.176	.038	.332	4.639	.000	.465	2.150
	resource_orientation	.050	.046	.090	1.091	.277	.348	2.876
	management_structure	-.023	.041	-.051	-.576	.565	.309	3.234
	reward_philosophy	.126	.041	.273	3.042	.003	.296	3.384
	growth_orientation	.076	.033	.187	2.283	.023	.356	2.807
	entrepreneurial_culture	.015	.048	.024	.320	.749	.415	2.408

a. Dependent Variable: ethics

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions						
				(Constant)	strategic_orientation	resource_orientation	management_structure	reward_philosophy	growth_orientation	entrepreneurial_culture
1	1	6.973	1.000	.00	.00	.00	.00	.00	.00	.00
	2	.010	27.031	.15	.02	.02	.00	.10	.18	.01
	3	.006	33.019	.31	.02	.03	.27	.00	.10	.00
	4	.004	43.727	.07	.77	.05	.04	.11	.09	.01
	5	.003	46.285	.36	.04	.15	.15	.09	.09	.32
	6	.002	53.895	.09	.11	.08	.14	.53	.52	.21
	7	.002	61.250	.01	.05	.67	.39	.17	.02	.45

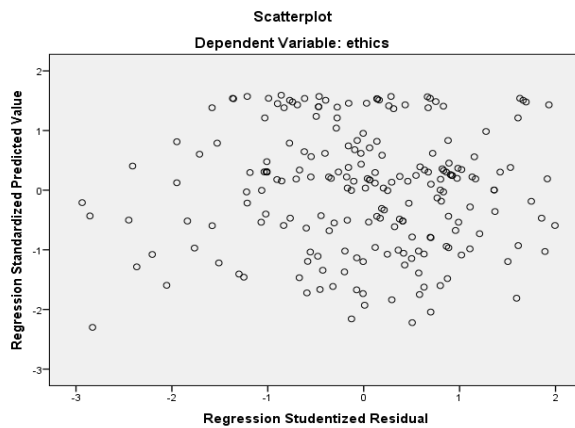
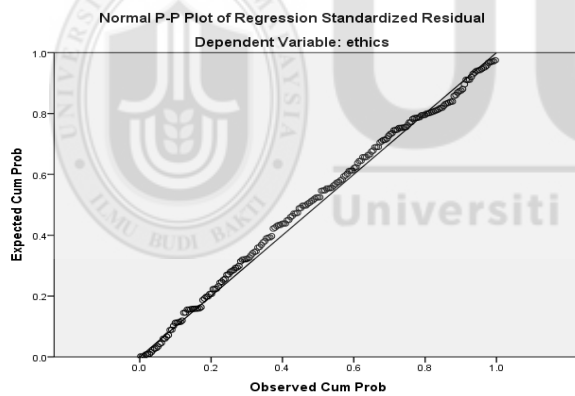
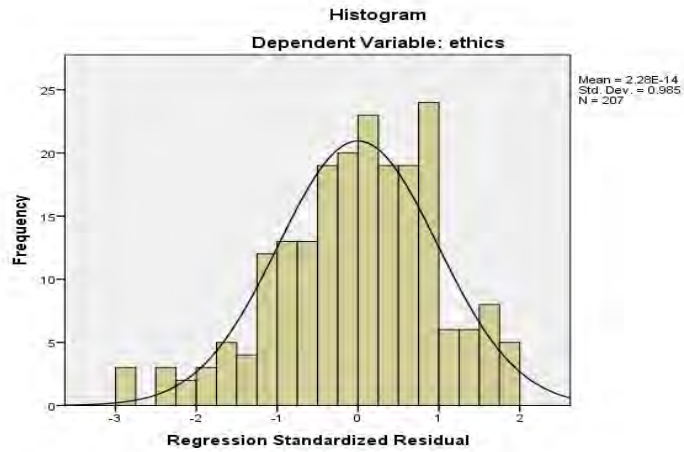
a. Dependent Variable: ethics

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	4.7952	5.6637	5.3084	.22312	207
Std. Predicted Value	-2.300	1.592	.000	1.000	207
Standard Error of Predicted Value	.020	.062	.039	.009	207
Adjusted Predicted Value	4.8083	5.6681	5.3085	.22320	207
Residual	-.62183	.42371	.00000	.21300	207
Std. Residual	-2.877	1.960	.000	.985	207
Stud. Residual	-2.936	1.994	.000	1.002	207
Deleted Residual	-.64782	.43865	-.00006	.22040	207
Stud. Deleted Residual	-2.994	2.009	-.001	1.008	207
Mahal. Distance	.700	16.115	5.971	3.243	207
Cook's Distance	.000	.062	.005	.008	207
Centered Leverage Value	.003	.078	.029	.016	207

a. Dependent Variable: ethics

## Charts



## APPENDIX 20

### Regression Analysis of Entrepreneurial Orientation on Ethics

**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	risk_taking, innovativeness, proactiveness		Enter

a. All requested variables entered.

b. Dependent Variable: ethics

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.373 <sup>a</sup>	.139	.126	.28836	1.482

a. Predictors: (Constant), risk\_taking, innovativeness, proactiveness

b. Dependent Variable: ethics

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.721	3	.907	10.908	.000 <sup>a</sup>
	Residual	16.880	203	.083		
	Total	19.601	206			

a. Predictors: (Constant), risk\_taking, innovativeness, proactiveness

b. Dependent Variable: ethics

Coefficients<sup>a</sup>

Model		Unstandardized		Standardized	t	Sig.	Collinearity Statistics	
		Coefficients		Coefficients			Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	4.514	.171		26.374	.000		
	innovativeness	-.022	.042	-.042	-.535	.593	.679	1.473
	proactiveness	.109	.039	.242	2.797	.006	.568	1.759
	risk_taking	.116	.045	.205	2.571	.011	.669	1.496

a. Dependent Variable: ethics

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	innovativeness	proactiveness	risk_taking
				1	1	3.966	1.000
	2	.015	16.026	.34	.00	.67	.01
	3	.011	18.786	.01	.76	.01	.40
	4	.008	22.865	.65	.24	.31	.59

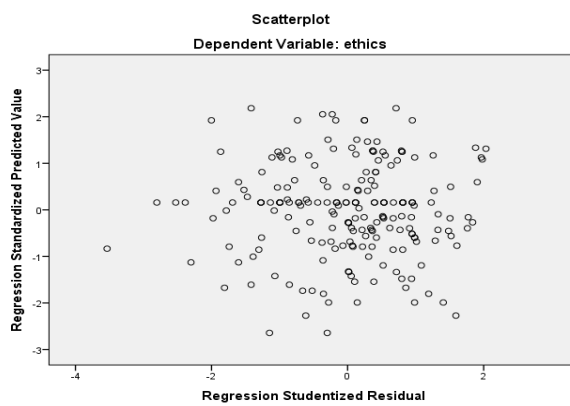
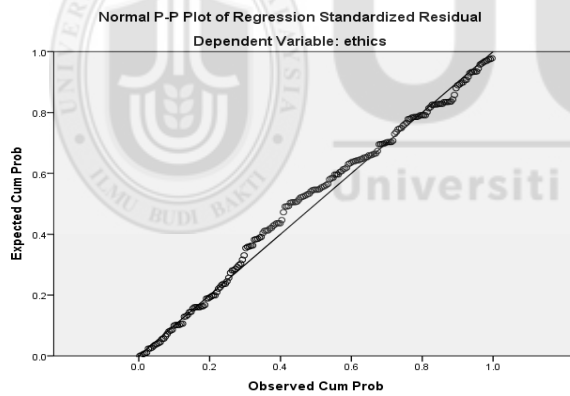
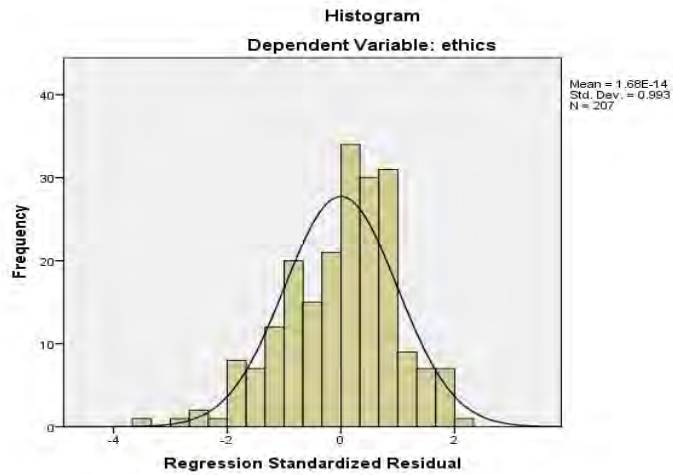
a. Dependent Variable: ethics

Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	5.0045	5.5593	5.3084	.11493	207
Std. Predicted Value	-2.644	2.183	.000	1.000	207
Standard Error of Predicted Value	.021	.096	.037	.014	207
Adjusted Predicted Value	4.9934	5.5784	5.3083	.11579	207
Residual	-1.01255	.58063	.00000	.28625	207
Std. Residual	-3.511	2.014	.000	.993	207
Stud. Residual	-3.535	2.033	.000	1.002	207
Deleted Residual	-1.02620	.59198	.00012	.29167	207
Stud. Deleted Residual	-3.640	2.049	-.001	1.008	207
Mahal. Distance	.091	21.795	2.986	3.340	207
Cook's Distance	.000	.079	.005	.009	207
Centered Leverage Value	.000	.106	.014	.016	207

a. Dependent Variable: ethics

## Charts





## APPENDIX 21

### Mediated Regression Analysis of Entrepreneurial Management, Ethics and Business Performance

**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	entrepreneurial_culture, growth_orientation, strategic_orientation, management_structure, resource_orientation, reward_philosophy		. Enter
2	ethics <sup>a</sup>		. Enter

a. All requested variables entered.

b. Dependent Variable: performance

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.689 <sup>a</sup>	.474	.458	.24323	
2	.785 <sup>b</sup>	.616	.603	.20831	1.722

a. Predictors: (Constant), entrepreneurial\_culture, growth\_orientation, strategic\_orientation, management\_structure, resource\_orientation, reward\_philosophy

b. Predictors: (Constant), entrepreneurial\_culture, growth\_orientation, strategic\_orientation, management\_structure, resource\_orientation, reward\_philosophy, ethics

c. Dependent Variable: performance

**ANOVA<sup>c</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.674	6	1.779	30.070	.000 <sup>a</sup>
	Residual	11.832	200	.059		
	Total	22.506	206			
2	Regression	13.871	7	1.982	45.666	.000 <sup>b</sup>
	Residual	8.635	199	.043		
	Total	22.506	206			

a. Predictors: (Constant), entrepreneurial\_culture, growth\_orientation, strategic\_orientation, management\_structure, resource\_orientation, reward\_philosophy

b. Predictors: (Constant), entrepreneurial\_culture, growth\_orientation, strategic\_orientation, management\_structure, resource\_orientation, reward\_philosophy, ethics

c. Dependent Variable: performance

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.721	.218		12.453	.000		
	strategic_orientation	.161	.043	.284	3.779	.000	.465	2.150
	resource_orientation	.220	.052	.368	4.228	.000	.348	2.876
	management_structure	-.028	.046	-.056	-.604	.546	.309	3.234
	reward_philosophy	.108	.047	.219	2.321	.021	.296	3.384
	growth_orientation	-.064	.038	-.147	-1.706	.090	.356	2.807
	entrepreneurial_culture	.072	.053	.107	1.347	.180	.415	2.408
2	(Constant)	1.108	.265		4.180	.000		
	strategic_orientation	.058	.038	.103	1.518	.131	.420	2.381
	resource_orientation	.190	.045	.318	4.262	.000	.346	2.893
	management_structure	-.014	.039	-.028	-.356	.722	.309	3.240
	reward_philosophy	.034	.041	.070	.845	.399	.282	3.540
	growth_orientation	-.109	.033	-.249	-3.335	.001	.347	2.880
	entrepreneurial_culture	.063	.046	.094	1.378	.170	.415	2.409
ethics	.585	.068	.546	8.584	.000	.477	2.097	

a. Dependent Variable: performance

**Excluded Variables<sup>b</sup>**

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics			
					Tolerance	VIF	Minimum Tolerance	
1	ethics	.546 <sup>a</sup>	8.584	.000	.520	.477	2.097	.282

a. Predictors in the Model: (Constant), entrepreneurial\_culture, growth\_orientation, strategic\_orientation, management\_structure, resource\_orientation, reward\_philosophy

b. Dependent Variable: performance

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	4.6586	6.1450	5.5067	.25949	207
Std. Predicted Value	-3.269	2.460	.000	1.000	207
Standard Error of Predicted Value	.023	.062	.040	.009	207
Adjusted Predicted Value	4.6687	6.1365	5.5064	.25995	207
Residual	-.60134	.58573	.00000	.20474	207
Std. Residual	-2.887	2.812	.000	.983	207
Stud. Residual	-2.938	2.921	.001	1.002	207
Deleted Residual	-.62299	.63196	.00032	.21295	207
Stud. Deleted Residual	-2.997	2.978	.001	1.007	207
Mahal. Distance	1.604	17.498	6.966	3.520	207
Cook's Distance	.000	.084	.005	.008	207
Centered Leverage Value	.008	.085	.034	.017	207

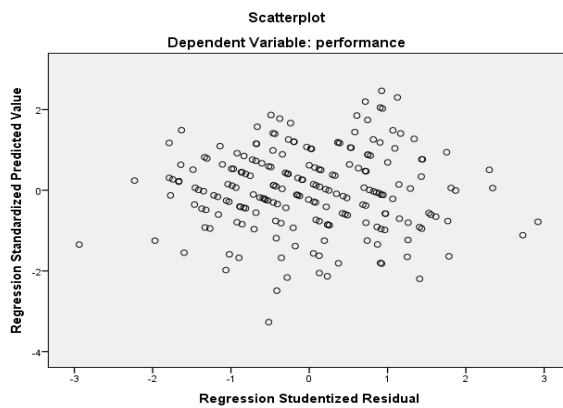
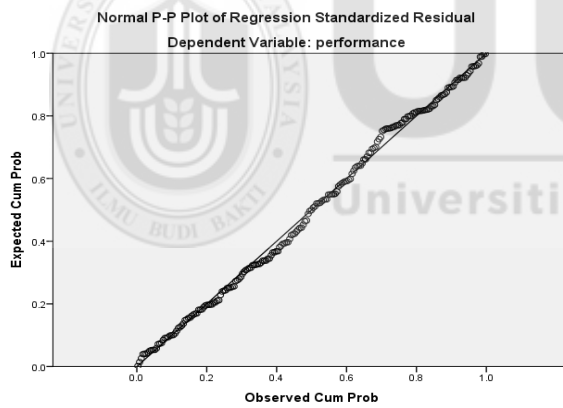
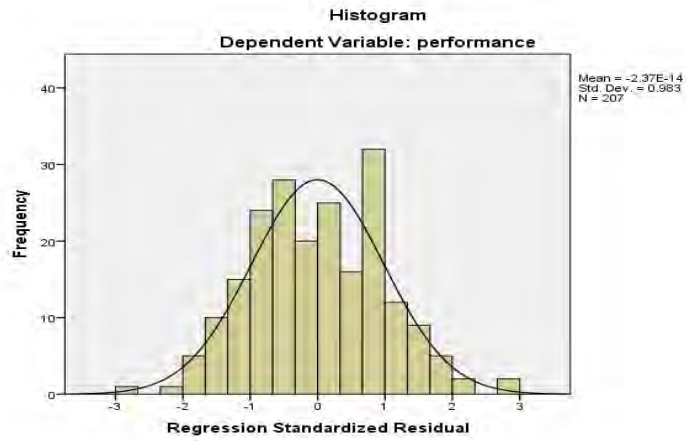
a. Dependent Variable: performance

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigen value	Condition Index	Variance Proportions							
				(Constant)	strategic_orientation	resource_orientation	management_structure	reward_philosophy	growth_orientation	entrepreneurial_culture	ethics
1	1	6.973	1.000	.00	.00	.00	.00	.00	.00	.00	.00
	2	.010	27.031	.15	.02	.02	.00	.10	.18	.01	
	3	.006	33.019	.31	.02	.03	.27	.00	.10	.00	
	4	.004	43.727	.07	.77	.05	.04	.11	.09	.01	
	5	.003	46.285	.36	.04	.15	.15	.09	.09	.32	
	6	.002	53.895	.09	.11	.08	.14	.53	.52	.21	
	7	.002	61.250	.01	.05	.67	.39	.17	.02	.45	
2	1	7.970	1.000	.00	.00	.00	.00	.00	.00	.00	.00
	2	.010	28.234	.08	.01	.01	.01	.09	.15	.01	.01
	3	.007	33.693	.07	.02	.06	.22	.01	.11	.00	.02
	4	.004	46.718	.03	.71	.06	.02	.09	.06	.03	.00
	5	.003	48.072	.07	.00	.10	.21	.09	.13	.33	.03
	6	.002	57.613	.04	.10	.08	.14	.51	.51	.20	.00
	7	.002	65.185	.03	.03	.68	.39	.13	.02	.40	.01
	8	.001	83.843	.67	.13	.01	.01	.08	.01	.02	.93

a. Dependent Variable: performance

## Charts



## APPENDIX 22

### Mediated Regression Analysis of Entrepreneurial Orientation, Ethics and Business Performance

**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	risk_taking, innovativeness, proactiveness	.	Enter
2	ethics <sup>a</sup>	.	Enter

a. All requested variables entered.

b. Dependent Variable: performance

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.528 <sup>a</sup>	.279	.268	.28281	
2	.762 <sup>b</sup>	.581	.573	.21606	1.981

a. Predictors: (Constant), risk\_taking, innovativeness, proactiveness

b. Predictors: (Constant), risk\_taking, innovativeness, proactiveness, ethics

c. Dependent Variable: performance

**ANOVA<sup>c</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.270	3	2.090	26.130	.000 <sup>a</sup>
	Residual	16.236	203	.080		
	Total	22.506	206			
2	Regression	13.076	4	3.269	70.030	.000 <sup>b</sup>
	Residual	9.430	202	.047		
	Total	22.506	206			

a. Predictors: (Constant), risk\_taking, innovativeness, proactiveness

b. Predictors: (Constant), risk\_taking, innovativeness, proactiveness, ethics

c. Dependent Variable: performance

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta				Tolerance	VIF
1 (Constant)	4.395	.168			26.179	.000		
innovativeness	-.089	.041	-.157		-2.177	.031	.679	1.473
proactiveness	.136	.038	.282		3.561	.000	.568	1.759
risk_taking	.238	.044	.390		5.354	.000	.669	1.496
2 (Constant)	1.528	.270			5.663	.000		
innovativeness	-.075	.031	-.132		-2.394	.018	.678	1.475
proactiveness	.067	.030	.138		2.248	.026	.547	1.827
risk_taking	.164	.034	.269		4.753	.000	.648	1.544
ethics	.635	.053	.593		12.075	.000	.861	1.161

a. Dependent Variable: performance

**Excluded Variables<sup>b</sup>**

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
					Tolerance	VIF	Minimum Tolerance
1 ethics	.593 <sup>a</sup>	12.075	.000	.647	.861	1.161	.547

a. Predictors in the Model: (Constant), risk\_taking, innovativeness, proactiveness

b. Dependent Variable: performance

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	innovativeness	proactiveness	risk_taking	ethics
1	1	3.966	1.000	.00	.00	.00	.00	
	2	.015	16.026	.34	.00	.67	.01	
	3	.011	18.786	.01	.76	.01	.40	
	4	.008	22.865	.65	.24	.31	.59	
2	1	4.959	1.000	.00	.00	.00	.00	.00
	2	.019	16.069	.04	.03	.44	.00	.03
	3	.011	20.853	.00	.84	.09	.24	.00
	4	.009	23.761	.02	.11	.43	.75	.03
	5	.002	56.058	.94	.03	.04	.00	.94

a. Dependent Variable: performance

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	4.6866	6.0676	5.5067	.25195	207
Std. Predicted Value	-3.255	2.226	.000	1.000	207
Standard Error of Predicted Value	.016	.075	.032	.011	207
Adjusted Predicted Value	4.6970	6.0676	5.5065	.25121	207
Residual	-.63862	.57129	.00000	.21395	207
Std. Residual	-2.956	2.644	.000	.990	207
Stud. Residual	-2.985	2.680	.000	1.002	207
Deleted Residual	-.65153	.58681	.00020	.21927	207
Stud. Deleted Residual	-3.046	2.722	.000	1.007	207
Mahal. Distance	.092	24.080	3.981	3.594	207
Cook's Distance	.000	.113	.005	.011	207
Centered Leverage Value	.000	.117	.019	.017	207

a. Dependent Variable: performance

**Charts**

