



<http://researchcommons.waikato.ac.nz/>

## Research Commons at the University of Waikato

### Copyright Statement:

The digital copy of this thesis is protected by the Copyright Act 1994 (New Zealand).

The thesis may be consulted by you, provided you comply with the provisions of the Act and the following conditions of use:

- Any use you make of these documents or images must be for research or private study purposes only, and you may not make them available to any other person.
- Authors control the copyright of their thesis. You will recognise the author's right to be identified as the author of the thesis, and due acknowledgement will be made to the author where appropriate.
- You will obtain the author's permission before publishing any material from the thesis.

THE EFFECT OF PERSONALITY, EMOTIONAL INTELLIGENCE  
AND SOCIAL NETWORK CHARACTERISTICS ON SALES  
PERFORMANCE: THE MEDIATING ROLES OF MARKET  
INTELLIGENCE USE, ADAPTIVE SELLING BEHAVIOUR AND  
IMPROVISATION

A thesis submitted in fulfilment  
of the requirements for the degree of

**Doctor of Philosophy**

in

**Marketing**

at

**The University of Waikato**

by

**ZAZLI LILY WISKER**



THE UNIVERSITY OF  
**WAIKATO**  
*Te Whare Wānanga o Waikato*

2011

## **ABSTRACT**

Today's account management is complex. The market is extremely competitive, technology is making alternatives and low-distribution methods possible, product lifecycles are accelerating, and customers are becoming less loyal and more sophisticated while at the same time, becoming more demanding. A key challenge facing firms is to determine how to deploy highly effective account managers in order to perform in this complex environment. In this dissertation, I tested whether account manager (1) personality traits, (2) social network characteristics, and (3) emotional intelligence affected their sales performance. I then tested whether these three independent variables affected sales performance through various mediating variables including: (1) market intelligence use, (2) improvisation, and (3) adaptive selling behaviour. Finally, I tested the model by comparing between the Muslim and non-Muslim account managers due to the understanding that Islamic values influence the personality and behaviour of its followers.

The research setting involved Muslim and non-Muslim account managers in Malaysia who managed sales of financial products such as shares, bonds, unit trusts, foreign exchange, and futures markets. A combination of mail and in-person survey was used to collect the data. A pilot test was conducted prior to final survey administration. Eighteen randomly selected account managers participated in the pilot test. Results and observations from the pilot test were used to finalise the survey. The finalised questionnaire was sent to 2,122 account managers drawn randomly from the 29 registered finance companies, stock brokers, and banks in Malaysia. Four hundred ninety four usable questionnaires were returned yielding a 23.3 percent response rate. Of the 494 replies, 280 were

from Muslim account managers while the remaining 214 were from non-Muslim account managers.

Data was analysed using Structural Equation Modeling (SEM). The Goodness of Fit Index GFI, Comparative Fit Index CFI, and Root Mean Square Error of Approximation RMSEA were used as model fitness indicators. The missing data was analysed using Maximum Likelihood (ML).

Overall, the results of the data illustrated strong support for the conceptual model. Market intelligence use and improvisation was found to mediate the relationship between the independent variables and the dependent variable. More specifically, market intelligence use and improvisation were observed to mediate the relationship between openness to experience and sales performance, conscientiousness and sales performance, and network size and sales performance. Adaptive selling behaviour was found to mediate the relationship between emotional intelligence and sales performance. Finally, no significant statistical differences were observed between Muslim and non-Muslim managers.

The results of this study contribute to sales management literature by understanding the role of mediators in the personality trait-sales performance relationship, social network characteristics-sales performance relationship, and emotional intelligence-sales performance relationship. Consequently, these findings indicate several managerial implications for recruitment, training, work practices, internal and relationship marketing, and policies at the workplace.

## ACKNOWLEDGEMENTS

My PhD journey has been long, hard, and challenging, yet enjoyable. This journey would not have been possible without the support of many people. The willingness of Professor Richard Varey to accept me as a student and to believe in what was then a rather insubstantial research proposal is a tribute to his dedication to the success of his graduate students in the marketing department. He is, and will remain my scholarly idol. Not only did Richard help lay a cornerstone to initiate my growth as a scholar but he was always there when I needed him. Although most of our conversations happened over the telephone, he would always listen to my frustrations, sorrow and joys.

Associate Professor Marc Anderson's guidance at each stage of the process and his insistence on always keeping the bar high, will remain with me during my entire career. His attention to detail and specificity of theory development are unmatched. I will be forever grateful for his unwavering support and guidance. Marc has shaped much of the way I think about my scholarly work. After Marc's return to the United States, I was uncertain in my journey. However, although he was no longer attached to my university, he continued providing scholarly feedback until I was assigned another advisor.

While Associate Professor Scott Koslow came on board quite late in the process, his guidance on my Research Methodology, Data Analysis, and Discussion Chapters was astounding. His knowledge of Structural Equation Modeling has helped me move forward. He always remained positive, and I admire him for that.

Jenny, from the administrative staff in the marketing department, provided devoted professional assistance, as well as friendship.

I am grateful to my employer, the New Zealand Defence Force, for partially funding my studies and providing support when necessary; my former manager Lieutenant Colonel Andrew Shaw and current manager Comander Shaun Fogarty for their constant encouragement and support; my colleagues Dr Peter Greener

and Rebecca Young, who taught me how to dream again during this process, and how to build a comprehensive conceptualisation of success in my life.

I am also thankful for my close friends; Malcolm, Norzam, Rose and Mike Few for always having time to lend an ear and share their hearts; Warren for reminding me that boundaries never have to be drawn; my father-in-law, Ian for his endless back-up; and my sister-in-law Michelle for her constant babysitting support for Natasha.

My gratitude also goes to my peer in the doctoral programme, Sue for both her sincerity and her passion for our field. Our telephone conversations and coffees will be missed.

This dissertation would not have been completed without the help of my informants; the fund managers (account managers) attached to the financial institutions in West Malaysia.

I am indebted to my best friend and partner, Rob, for his endless encouragement and support in so many ways, and for putting up with my crankiness, tears and angers; and to my non-English-speaking and illiterate mother for always being there.

I am most grateful for the love, sacrifice and support of Natasha; my soul, my life and my daughter, and for her many years of accepting that Mum was upstairs in the room studying, for her many years of living on takeaways and for understanding about Mum missing her school activities and trips. Sweetie, this work is for you. The tragic death of Natasha's dad, John, towards the end of this journey did not help the process. He was my number one fan. I almost tumbled, but the support of the people surrounding me has helped me to continue and maintain my momentum.

Thank you all so very much.

## TABLE OF CONTENT

ABSTRACT .....	ii
ACKNOWLEDGEMENTS .....	iv
TABLE OF CONTENT .....	vi
LIST OF TABLES .....	x
LIST OF FIGURES .....	xii
<b>CHAPTER ONE.....</b>	<b>1</b>
<b>STATEMENT OF PROBLEM.....</b>	<b>1</b>
<b>General Model of Organisational Informational Processing .....</b>	<b>4</b>
Environmental Factors .....	5
Organisational Factors .....	7
Informational Factors .....	7
Individual Factors .....	9
Task Complexity .....	10
Market Intelligence Use and Performance.....	10
<b>General Model of Salesperson Performance .....</b>	<b>11</b>
<b>A Proposed General Model of the Factors that Affect Sales Performance ....</b>	<b>13</b>
Importance of Assessing the Link between Personality Traits and an Account Manager’s Sales Performance.....	13
The underdeveloped link between Emotional Intelligence and an Account Manager’s Sales Performance.....	15
Underdeveloped Link between Social Network Structures and Account Manager Sales Performance.....	17
Market Intelligence Use as a Mediating Variable between an Account Manager’s Characteristics and Performance.....	19
Adaptive selling behaviour as a mediating variable between manager behaviour and performance.....	20
Underdeveloped study of improvisation as a mediating variable between manager behaviour and performance .....	22
<b>Conclusion.....</b>	<b>23</b>
<b>Motivation for the Study .....</b>	<b>23</b>
<b>Summary and Overview .....</b>	<b>25</b>
<b>CHAPTER TWO .....</b>	<b>27</b>
<b>BACKGROUND LITERATURE I .....</b>	<b>27</b>
<b>Exogenous Latent (Independent) Variables .....</b>	<b>28</b>
Overview of Personality Traits .....	28
Emotional Intelligence and Work Performance.....	49
Social Network.....	50
<b>Network Ties.....</b>	<b>52</b>
<b>Network Size .....</b>	<b>56</b>
<b>Cost.....</b>	<b>57</b>
<b>Mediating Variables.....</b>	<b>59</b>
Market Intelligence Use .....	59
Adaptive Selling Behaviour .....	67
Improvisation .....	71
<b>Endogenous Variable .....</b>	<b>74</b>

Sales Performance .....	74
<b>Conceptual Model</b> .....	<b>76</b>
<b>Summary</b> .....	<b>77</b>
<b>CHAPTER THREE</b> .....	<b>79</b>
<b>BACKGROUND LITERATURE II</b> .....	<b>79</b>
<b>The importance of studying Muslim account managers’ characteristics</b> .....	<b>79</b>
<b>Islamic Philosophy</b> .....	<b>82</b>
Islam in Malaysia .....	84
Personality and Behaviour .....	86
<b>Islamic Values and Their Impact on Behaviour and Personality</b> .....	<b>89</b>
Conclusion .....	94
<b>Summary</b> .....	<b>95</b>
<b>CHAPTER FOUR</b> .....	<b>96</b>
<b>RESEARCH MODEL AND HYPOTHESES</b> .....	<b>96</b>
<b>Market Intelligence Use and Performance</b> .....	<b>98</b>
<b>Adaptive Selling Behaviour and Sales Performance</b> .....	<b>99</b>
<b>Improvisation and Sales Performance</b> .....	<b>100</b>
<b>Personality Traits and Performance</b> .....	<b>101</b>
<b>Openness and Performance</b> .....	101
<b>Conscientiousness and Performance</b> .....	103
<b>Extraversion and Performance</b> .....	104
<b>Agreeableness and Performance</b> .....	106
<b>Emotional Stability and Performance</b> .....	107
<b>Emotional Intelligence and Performance</b> .....	<b>108</b>
<b>Social Network and Market Intelligence Use and Performance</b> .....	<b>111</b>
<b>Tie Strength</b> .....	111
<b>Network Size</b> .....	112
<b>Cost</b> .....	113
<b>Islamic Values and Managers’ Performance</b> .....	<b>114</b>
<b>Summary</b> .....	<b>117</b>
<b>CHAPTER FIVE</b> .....	<b>118</b>
<b>RESEARCH METHOD</b> .....	<b>118</b>
<b>Overview of the Research Design</b> .....	<b>118</b>
<b>Research Site and Sample</b> .....	<b>118</b>
<b>Data Collection Method</b> .....	<b>120</b>
Stage One: Pilot .....	120
Stage Two: Survey .....	121
<b>Measures</b> .....	<b>122</b>
<b>Exogenous Variables</b> .....	<b>123</b>
Big Five.....	123
Emotional Intelligence Measures.....	130
Network Size.....	131
Average Tie Strength .....	134
Cost .....	134
<b>Mediating Variables</b> .....	<b>135</b>
Instrumental/Conceptual Intelligence Use .....	135
Adaptive Selling Behaviour .....	139
<b>Endogenous Variable</b> .....	<b>141</b>



Performance .....	141
<b>Demographic Information.....</b>	<b>142</b>
<b>Treatment of Data.....</b>	<b>143</b>
Statistical Analyses – Structural Equation Modeling .....	143
Measures .....	144
Distribution of Data .....	146
Model Fitness.....	147
Missing Data .....	148
Statistical Power.....	149
<b>Summary.....</b>	<b>151</b>
<b>CHAPTER SIX.....</b>	<b>152</b>
<b>RESULTS.....</b>	<b>152</b>
<b>Preliminary Test (t-test) .....</b>	<b>153</b>
<b>Baseline Measurement Model.....</b>	<b>163</b>
<b>Testing for Measurement Invariance.....</b>	<b>170</b>
<b>Testing Structural Equation Modeling.....</b>	<b>175</b>
<b>Hypotheses Results.....</b>	<b>177</b>
Impact of Personality on Sales Performance .....	180
The Impact of Emotional Intelligence on Sales Performance.....	181
The impact of Social Network Characteristics on Sales Performance.....	181
<b>Mediating Variables.....</b>	<b>182</b>
Improvisation as a Mediating Variable.....	186
Adaptive Selling Behaviour as a Mediating Variable.....	187
Hypotheses without Mediation Effects .....	188
<b>Hypothesis.....</b>	<b>196</b>
<b>Summary.....</b>	<b>197</b>
<b>CHAPTER SEVEN.....</b>	<b>198</b>
<b>DISCUSSION AND CONCLUSION .....</b>	<b>198</b>
<b>Theoretical Implications.....</b>	<b>200</b>
<b>Mediating Variables.....</b>	<b>201</b>
Instrumental and Conceptual Market Intelligence Use.....	202
Improvisation .....	206
Mediating Variables: Adaptive selling behaviour .....	208
<b>Independent Variables.....</b>	<b>210</b>
Personality Traits .....	210
Openness to Experience .....	210
Conscientiousness .....	212
Extraversion .....	212
Agreeableness .....	213
Emotional Stability .....	214
Social Network Cost .....	215
Network Size.....	216
Tie Strength.....	217
Emotional Intelligence .....	218
<b>Managerial Implications.....</b>	<b>220</b>
Recruitment and Training .....	220
Work Policy .....	223
Relationship Marketing.....	224

Internal Marketing.....	228
Assessing sub-cultural issues in Malaysia .....	230
<b>Limitations .....</b>	<b>232</b>
Sample Size.....	232
Generalisation .....	232
Measurement Issues .....	233
<b>Future Research .....</b>	<b>234</b>
<b>Concluding Remarks .....</b>	<b>236</b>
 <b>REFERENCES.....</b>	 <b>237</b>
 <b>APPENDICES .....</b>	 <b>294</b>
<b>Appendix A: Letter to Potential Participant .....</b>	<b>294</b>
<b>Appendix B: Market Information Strategy Research Project Information     Sheet .....</b>	<b>295</b>
<b>Appendix C: Scale Items for Personality Traits .....</b>	<b>297</b>
<b>Appendix D: Scale Items for Emotional Intelligence.....</b>	<b>299</b>
<b>Appendix E: Scale Items for Market Intelligence Use.....</b>	<b>300</b>
<b>Appendix F: Scale Items for Adaptive Selling Behaviour, Improvisation     and Subjective Sales Performance.....</b>	<b>303</b>
<b>Appendix G: Demographic Scale and Scale for Sales Performance .....</b>	<b>304</b>
<b>Appendix H: Scale for Social Network Size, Cost and Tie Strength.....</b>	<b>305</b>

## LIST OF TABLES

<b>Table 2.1: Dimension of Personality Traits .....</b>	<b>32</b>
<b>Table 2.2.: Goldberg (1990) 50-items IPIP .....</b>	<b>35</b>
<b>Table 2.3: Costa and McCrae’s (1992) NEO PI-R Facets .....</b>	<b>36</b>
<b>Table 2.4: Summary and Comparison of Emotional Intelligence Measure Characteristics .....</b>	<b>48</b>
<b>Table 2.5: Market, Hierarchical and Social Relation .....</b>	<b>58</b>
<b>Table 2.6: Approaches to Measurement of Intelligence Use .....</b>	<b>61</b>
<b>Table 2.7: Adaptive Selling behaviour Study: Measures Use and Summary Findings .....</b>	<b>70</b>
<b>Table 3.1: Organisational Implications of Personality Level ...</b>	<b>89</b>
<b>Table 5.1: Scale Reliability Coefficients (Alphas) - Big Five .....</b>	<b>124</b>
<b>Table 5.2a: Standardised Factor Loadings for Latent Extraversion.</b>	<b>125</b>
<b>Table 5.2b: Standardised Factor Loadings for Latent Agreeableness.</b>	<b>126</b>
<b>Table 5.2c: Standardised Factor Loadings for Latent Conscientiousness .....</b>	<b>127</b>
<b>Table 5.2d: Standardised Factor Loadings for Latent Emotional Stability .....</b>	<b>128</b>
<b>Table 5.2e: Standardised Factor Loadings for Latent Extraversion</b>	<b>129</b>
<b>Table 5.3: Scale Reliability Coefficient (Alphas) – Emotional Intelligence.....</b>	<b>130</b>
<b>Table 5.4a: Exploratory Factors Loadings of Emotional Intelligence (Muslim) .....</b>	<b>132</b>
<b>Table 5.4b: Exploratory Factors Loadings of Emotional Intelligence (non-Muslim) .....</b>	<b>133</b>
<b>Table 5.5: Scale Reliability Coefficient (Alphas) – Market Intelligence Use.....</b>	<b>136</b>
<b>Table 5.6a: Exploratory Factors Loadings of Market Intelligence Use (Muslim).....</b>	<b>137</b>

<b>Table 5.6b: Exploratory Factors Loadings of Market Intelligence Use (non-Muslim).....</b>	<b>138</b>
<b>Table 5.7: Standardised Factor Loadings for Latent Adaptive Selling Behaviour.....</b>	<b>139</b>
<b>Table 5.8: Standardised Factor Loadings for Latent Improvisation ...</b>	<b>141</b>
<b>Table 5.9: Standardised Factor Loadings for Latent Subjective Sales Performance.....</b>	<b>142</b>
<b>Table 5.10 Parcelling Result for Extraversion .....</b>	<b>145</b>
<b>Table 6.1: Demographic Profile .....</b>	<b>155</b>
<b>Table 6.2a: Means, Standard Deviations and Correlations between Variable (Muslim Sample) .....</b>	<b>161</b>
<b>Table 6.2b: Means, Standard Deviations and Correlations between Variable (non-Muslim Sample).....</b>	<b>162</b>
<b>Table 6.3: Summary of CFA and Revision Result for the Baseline Models .....</b>	<b>168</b>
<b>Table 6.4: Summary of Fit for Measurement Invariant Models.....</b>	<b>173</b>
<b>Table 6.5: Overall SEM Model Fit – Multisample .....</b>	<b>175</b>
<b>Table 6.6: Regression Weights: Impact of Exogenous Variables (X) and Mediating Variables (M) on Sales Performance (Y) .....</b>	<b>179</b>
<b>Table 6.7: Regression Weights: Impact of Exogenous Variables (X) on Market Intelligence Use .....</b>	<b>190</b>
<b>Table 6.8: Regression Weights: Impact of Exogenous Variables (X) on Improvisation ... ..</b>	<b>191</b>
<b>Table 6.9: Regression Weights: Impact of Exogenous Variables (X) on Adaptive Selling Behaviour .....</b>	<b>192</b>
<b>Table 6.10: Effect of Exogenous Variables (X) and Mediating Variables (M) on Sales Performance (Y) .....</b>	<b>194</b>
<b>Table 6.11: Mediating Effects .....</b>	<b>195</b>
<b>Table 6.12: Effect of Agreeableness and Network Cost .....</b>	<b>196</b>
<b>Table 6.13: Comparative Observation between Muslim and non-Muslim .....</b>	<b>196</b>

## LIST OF FIGURES

<b>Figure 1.1: A Model of Organizational and Informational Factors affecting Firm Performance .....</b>	<b>5</b>
<b>Figure 1.2: Factors Driving Account Managers Performance .....</b>	<b>13</b>
<b>Figure 2.1: Type of Market Intelligence Use .....</b>	<b>65</b>
<b>Figure 2.2: Factors Driving Account Manager Sales Performance ....</b>	<b>78</b>
<b>Figure 4.1: Proposed Model .....</b>	<b>97</b>
<b>Figure 5.1: Sample Size .....</b>	<b>151</b>
<b>Figure 6.1: Baseline Measurement Model .....</b>	<b>169</b>
<b>Figure 6.2: Test of Proposed SEM .....</b>	<b>176</b>
<b>Figure 6.3: Chain Diagram of a Mediator .....</b>	<b>182</b>
<b>Figure 6.4: Illustration of Direct and Indirect Effect .....</b>	<b>184</b>
<b>Figure 6.5: Result for Hypotheses .....</b>	<b>193</b>

# **CHAPTER ONE**

## **STATEMENT OF PROBLEM**

Today's account management is complex. The market is extremely competitive, technology is making alternatives and low-distribution methods possible, product lifecycles are accelerating, and customers are becoming less loyal and more sophisticated while at the same time, becoming more demanding (Boone & Kurtz, 2002). As a result, the nature of buyer-seller exchanges and account management has shifted from a simplistic production and sales perspective to a more complex partnering role with customers (Dwyer, Schurr & Oh, 1987; Weitz & Bradford, 1999). Competing in this environment requires that firms possess the best possible group of account managers. This is because nothing can replace the power of personal selling and account management in generating sales and building strong, loyal customer relationship (Boone & Kurtz, 2002; Kotler & Armstrong, 2005; Paparoidomis & Guenzi, 2009). Boone and Kurtz claim that "professional account managers are problem-solvers who focus on satisfying the needs of customers before, during and after the sales are made" (2002, p.529). Account managers arm themselves with knowledge about their firm's goods and services, those of competitors and their customer's business needs, and pursue a common goal of creating long-term relationships with customers. In fact, account managers play a key role in customer relationship management and in understanding, creating, communicating and delivering values to customers which, in turn, increase the sales performance of a firm (Paparoidomis & Guenzi, 2009; Weitz & Bradford, 1999).

The importance of account management and personal selling has long been recognised as contributing to the success of a firm (Churchill, Ford, Hartley

& Walker, 1985; Leigh, Pullinn & Comer, 2001; Sharma, Levy & Evanschitzky, 2007; Weitz, Sujan & Sujan, 1986). On the other hand, practitioners and managers agree that the costs associated with account management and personal selling are high (Deeter-Schmelz & Sojka, 2007). Unfortunately the costs of a mis-hire, when hiring an account manager, are higher (Hrehocik, 2007). Firms anticipate the rising costs associated with personal selling and account management to be leveraged against the increase in sales performance. To achieve this, a firm often has no other choice but to recruit and maintain the most effective account managers they can. Firms need to have very high performing, productive and motivated account managers in order to succeed. Therefore, it is not surprising that practitioners and researchers have long sought to gain deep insight into the characteristics of an effective account manager. Over the last few decades, hundreds of empirical studies have shown that personal characteristics, role perceptions, and job attributes typically account for about ten percent variance in account managers' performance and job satisfaction (Brown & Peterson, 1993; Churchill, et al., 1985; Weitz et al., 1986). Thus assessing other useful predictors could prove helpful in the recruitment, training and motivation of account managers. This study is designed to contribute to sales management literature by identifying and assessing the characteristics of account managers. More specifically this study seeks to address the gaps in current understanding by proposing and testing a model of account manager social network characteristics, personality traits and emotional intelligence. This model will then be examined to assess the extent to which these factors might impact on sales performance. In particular, the study addresses the following broad research questions:

**Research Question 1:** To what extent do personality traits, social network characteristics, and emotional intelligence influence the sales performance of account managers?

Churchill et al. (1985) conducted a meta-analysis study on more than 300 studies on personality traits-performance relationships and found that the correlation was inconclusive. Several other studies have suggested that account managers' sales performance could also be related to differences in account managers' market intelligence structures (Sujan, Sujan & Bettman, 1988), differences in adaptive selling behaviour (Franke & Park, 2006) and differences in improvisation (Moorman & Miner, 1998). Subsequently I believe that personality traits, social network characteristics and emotional intelligence do not influence performance directly, but rather through a variety of mediating mechanisms. This informs research questions two and three:

**Research Question 2:** What conditions facilitate or constrain the influence of social network characteristics, personality traits and emotional intelligence on the sales performance of account managers?

**Research Question 3:** Are the relationships between social network characteristics, personality traits, emotional intelligence and sales performance mediated by market intelligence use, improvisation and adaptive selling behaviour?

Previous studies in this area have generally examined the account managers from mostly Western countries such as the United States of America (Anderson &



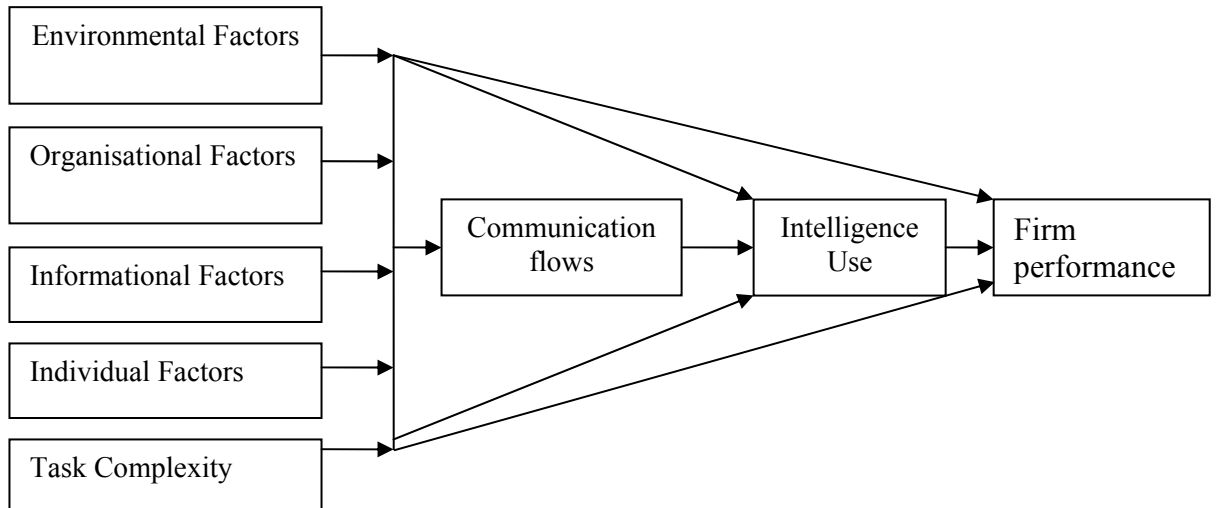
Nichols, 2007; Barrick, Parks & Mount, 2005; Deshpande & Zaltman, 1982; 1984; Rindfleisch & Moorman, 2001), the United Kingdom (Souchon & Diamantopoulos, 1999; Souchon, Diamantopoulos, Holzmuller, Axinn, Sinkula, Simmet et al., 2003), New Zealand (Gray, Matear, Basoff & Matheson, 1998) and other European countries such as Germany and the Netherlands (Birgelen, Ruyter & Wetzels, 2000; 2001). Many researchers agree that in order to generalise the model of the impact of human behaviour on successful performance, it is essential to examine the effects under various environmental situations and circumstances (Lopez, Carr, Grgory & Dwyer, 2005; Wong & Law, 2002). In an attempt to address this gap, I propose to test this model using Muslim and non-Muslim account managers in Malaysia, which leads to research question four.

**Research Question 4:** Do the relationships between social network characteristics, personality traits, emotional intelligence and sales performance differ between Muslim and non-Muslim account managers in Malaysia?

### **General Model of Organisational Informational Processing**

The next section, I assess the basic foundational theory and literature in sales management in support of the projected research questions, following which, the study model will be proposed. Organisational informational learning theory and a general model salesperson performance theory contribute to the basic foundation of this study.

**Figure 1.1: A Model of Organizational and Informational Factors Affecting Market Intelligence Use and Firm Performance**



The informational processing model has identified several elements that affect intelligence use and sales performance in a firm. As depicted in Figure 1.1, these elements are: (1) environmental factors, (2) organisational factors, (3) informational factors, (4) individual factors, and (5) task complexity (Menon & Varadarajan, 1992; Souchon & Diamantopoulos, 1996). The model illustrates that intelligence use is a function of the direct and indirect effects of organizational factors, environmental factors, informational factors, individual factors and task complexity which eventually affect firm performance.

### **Environmental Factors**

A firm's environmental factors include internal factors such as the firm's capabilities, resources and facilities, and external factors such as marketing environment, competitive environment, economic environment, political environment, legislation and technological environment (Quester, McGuiggan, McCarty & Perreault, 2003). Over the decades the effect of a firm's internal and

external environment on its structure, operation and performance has been acknowledged in marketing strategy literature (Day, 1994; Duncan, 1972; Menon & Varadarajan, 1992; Quester et al., 2003). For example, Menon and Varadarajan (1992) claimed that the volatility of a firm's environment affected the communication flow and eventually affected the use of market intelligence in an organisation. Others also argued that the volatility and instability of the environment affected the firm's organisational structure, and manager's need for more information and thus managerial tendency to gather and use information (Duncan, 1972; Daft, Lengel & Trevino, 1987; Menon & Varadarajan, 1992). Another theory that supports the effect of environmental factors on market intelligence use and sales performance is Day's (1994) 'market driven-capabilities' perspectives on the decision-making process. Capabilities are defined as "the complex bundles of skills and accumulated knowledge [intelligence], exercised through an organisational process that enables firms to cooperate in activities and make use of their assets" (Day, 1994, p. 38). A firm's capabilities are the glue that brings the firm's assets together and enables them to be deployed advantageously which in turn increase the firm's performance. Day's (1994) capabilities include human resource management activities such as recruiting, training, and motivation employees. This is aligned with the human resource management literature that concensusly supports the value of having good employees, which in turn affects the performance of a firm (Deeter-Schmelz & Sojka, 2007; Hrehocik, 2007). In fact a firm's human resource is considered as a firm's asset.

The effect of technological environment on a firm's performance can also be "far reaching and require adaptive changes in marketing strategy" (Quester, et al., 2003, p. 80). This is not an understatement because we have seen over the

years how technology affects the way we communicate and affect the way information is transferred within and between firms. In summary, a large numbers of scholars have found that environmental factors such as internal and external factors impact the way communication is flowed, and market intelligence use which eventually affect the performance of a firm.

### **Organisational Factors**

The key variables underlying organizational factors are the features of the organisational structures such as the level of formalisation and centralisation, intelligence and innovation cultures, and the level of communication flow among personnel (Corwin & Louis, 1982; Deshpande & Zaltman, 1982; Menon & Varadarajan, 1992). Research has found that the level of formalisation and centralisation affects intelligence gathering and use in a negative way (Deshpande & Zaltman, 1982). As the organisation becomes less formalised and centralised, the intelligence is more easily acquired and therefore able to be used (Deshpande & Zaltman, 1982). On the other hand, decentralisation can also lead to an isolation that hinders relevant research findings from flowing to other divisions within the organisation (Corwin & Louis, 1982). Intelligence use is also affected by the level of communication flow among employees (Menon & Varadarajan, 1992).

### **Informational Factors**

The informational factor is a construct suggested to affect the use of intelligence (Menon & Varadarajan, 1992). The primary elements underlying informational factors are cost of intelligence, perceived credibility, and usefulness of intelligence (Birgelen et al., 2001; Souchon & Diamantopoulos, 1996; Maltz, Sounder & Kumar, 2001). Perceived credibility and usefulness of intelligence refer to the extent to which a person perceives that the market intelligence

received from a sender is accurate, relevant, clear and timely (Deshpande & Zaltman, 1982; Maltz & Kohli, 1996). Regardless of whether a manager acquires and uses intelligence from interpersonal or impersonal sources, he or she is always concerned with the credibility of intelligence (Deshpande & Zaltman, 1982; Maltz & Kohli, 1996; Maltz, Menon & Wilcox, 2006). Credibility reflects the perceived value of information (Menon & Varadarajan, 1992) and the perceived value affects its uses (Birgelen et al., 2001; Maltz et al., 2001; Cabrera, Collins & Salgado, 2006; Deshpande & Zaltman, 1982; 1984; Moorman, Deshpande & Zaltman, 1992; Maltz & Kohli, 1996). An increasing body of empirical support exists for the link between the perceived credibility of intelligence and the strengths of sender-receiver relationships (Birgelen et al., 2001).

While perceived credibility is leveraged by trust (Birgelen et al., 2001; Deshpande & Zaltman, 1982), the strength of sender-receiver relationships is influenced by factors such as such as closeness of the sender and the receiver and the frequency of interactions between the two (Eisenhardt & Tabrizi, 1995). A sender and receiver who “have known each other for a long time are more likely to be familiar with mutually acceptable norms of behaviour, and therefore, they are likely to have the ability to interact with each other effectively” (Maltz & Kohli, 1996, p. 52), which in turn increases the strength of the relationship. The level of the tie strength between sender and receiver is critical to intelligence sharing, where frequent intelligence sharing leads to less dissemination of redundant intelligence (Granovetter, 1973). Strong and weak ties demonstrate differentiated roles in the dissemination of intelligence and are moderated by the level of complexity of the intelligence (Hansen, 1999).

## **Individual Factors**

Individual or personal factor constructs are conceptualised as level of experience, knowledge, cognitive styles, and level of decision making (Menon & Varadarajan, 1992). Interestingly, Menon and Varadarajan (1992) argue that the relationship between personal factors and the acquisition of market intelligence is expected to be negative because managers who have strong personal factors such as a high level of experience and knowledge are likely to search less and to use more selective intelligence. In contrast, the sales management literature has documented that individual differences in levels of cognitive ability and judgement impact the quality and quantity of market intelligence that an individual possesses in a positive manner (Jacoby, Morrin, Johar, Gurhan & Kuss, 2001). As a result of this contrast, the relationship between personal factors and intelligence use are equivocal. This unclear relationship between personal factors and intelligence use is likely to be due to the narrow definition of personal factors constructed by previous studies. Researchers in psychology suggest that there is a link between level of knowledge, cognitive ability and personality characteristics (Cacioppo, Petty, Feinstein & Jarvis, 1996). For example, a person who scores highly for openness and conscientiousness always seeks to acquire new knowledge and skills (McCrae & Costa, 1992). Personality traits are also important determinants of work performance (Barrick, Mount & Judge, 2001). In the account manager performance literature, personal factors such as empathy and sociability are further associated with sales aptitudes (Ford et al., 1988). In light of the discussion above, this study would therefore be remiss if it discounted the effect of personality traits in discussing the relationship between one's personal factors, market intelligence use and work performance.

## **Task Complexity**

Menon and Varadarajan (1992) viewed task complexity as “the degree of task variability and task difficulty in a particular job” (p. 64). They theorised that as the task complexity increases, a decision maker is likely to solicit and gather information from various source (Menon & Varadarajan, 1992). This implies that the greater the task complexity, the greater the amount of communication flows in an organisation and the greater the task complexity, the greater the market intelligence enhancing and affective uses of information in an organisation in relation to action-oriented use.

## **Market Intelligence Use and Performance**

Organisational learning literature has long recognised the relevance of information to sound decision making, which in turn affects a firm’s competitive advantage and ultimate performance (Calantone & Cooper, 1981; Shaker & Gembicki, 1999; Miller, 2000; Jacoby, Morrin, Johar, Gurhan, Kuss & Mazursky, 2001; Liu & Comer, 2006). Miller (2000) suggests that market intelligence use can change a firm’s decision-making culture and can eventually lead to improved performance. Firms that engage in higher levels of intelligence activity report increases in the quality of products and/or services, growth of market knowledge, and increased quality of strategic planning (Jaworski & Wee, 1993). Market intelligence use is also positively related to company performance for small firms (Verhees & Meulenbergh, 2004). In another study of export marketing, Toften (2005) observes that conceptual use of intelligence supports export performance.

Borrowing this concept, it is fair to argue that an account manager’s performance is to an extent influenced by his/her behaviour in managing market intelligence use. Past research that has investigated the skill level of account

managers also suggests that sales performance is influenced by a person's knowledge of selling situations (Weitz et al., 1986), and that part of this knowledge is acquired through market intelligence. For example, the ability to properly identify the needs of a customer, which is a determinant of sales performance, relies on the quality and quantity of information that an account manager holds (Strieter, Celuch & Kasouf, 1999). An account manager's access to market intelligence within an organization also leads to a deeper understanding of organizational capabilities and customer requirements (Weitz & Bradford, 1999). A greater amount and diversity of market intelligence gives an account manager more information with which to predict and interpret the uncertainty of the market environment (Souchon et al., 2003). Therefore, if an account manager's performance is influenced by the quality and quantity of market intelligence, then examining the determinants of market intelligence use is crucial.

### **General Model of Salesperson Performance**

Sales management research finding during the last two decades provide an extensive body of knowledge concerning the antecedents of salesperson performance (Baldauf, Cravens & Piercy, 2001; Brown, Cron & Slocum, 1997; Churchill et al., 1985; Walker, Churchill & Ford, 1979). Among those, scholars have consistently identified five basic antecedents to an account manager's sales performance: (1) personal, organisational and environmental variables: (2) role perception: (3) aptitude: (4) skill level and: (5) motivation (Brown, et al., 1997; Churchill, et al., 2000). The aptitude of an account manager is comprised of physical factors such as age and attractiveness, and personality factors such as extraversion and emotional stability (Ford, Walker & Churchill, 1988). The skill level variable refers to an account manager's learned proficiency at performing



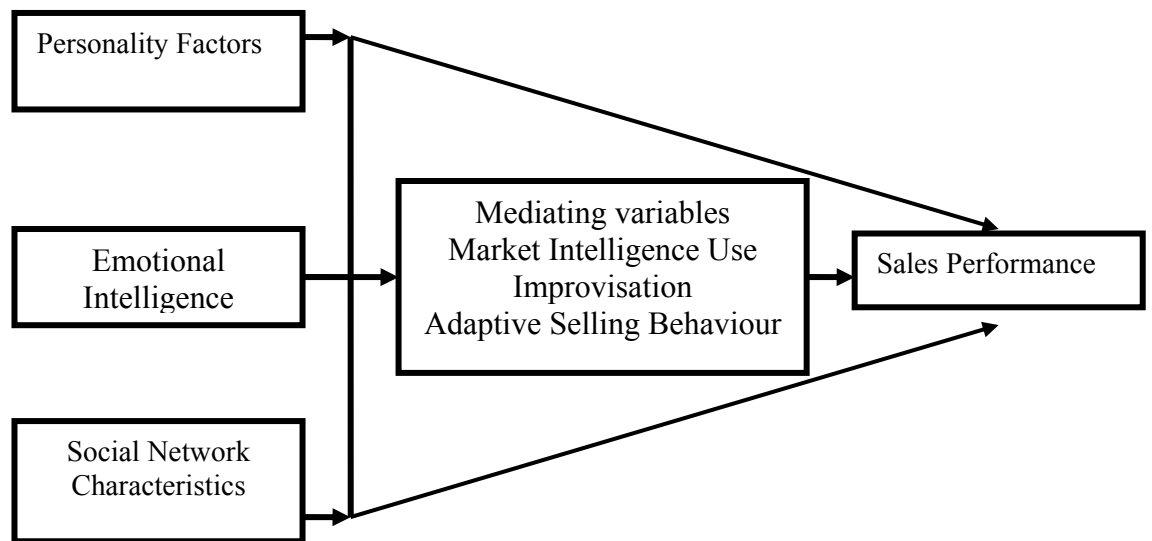
the sales and depends on learning and experiencing tasks (Weitz & Bradford, 1996). Although no single variable accounts for the variance in sales performance as personal selling evolves towards relationship account management, an account manager's skills and knowledge structure plays a significant role in sales performance (Churchill et al., 2000). Arguably, selling effectiveness depends on the amount, credibility, and accuracy of market intelligence that account managers have (Weitz et al., 1986). For this reason, over the last decade many studies have been devoted to a better understanding of the selling process, and have focused on a salesperson's information processing (Sujan et al., 1988; Szymnski & Churchill, 1990; Weitz et al., 1986). The majority of these studies have adopted the cognitive selling paradigm concept to explain an account manager's behaviour and his/her underlying knowledge structure (Churchill et al., 2000; Sujan et al., 1988; Szymnski & Churchill, 1990; Weitz et al., 1986). For example, they suggest that sales performance could be linked to differences in an account manager's knowledge structures and especially the richness of information that he/she categorises (Sujan et al., 1988). They also propose that intelligence acquisition and processing are important in the process of building long term relationships with prospects and clients (Dwyer, Schurr & Oh, 1987).

In conclusion salesperson performance is an evaluation of the salesperson's contribution to achieving the organisation's objectives (Baldauf, Cravens & Piercy, 2001; Brown, Cron & Slocum, 1997; Churchill et al., 1985; Oliver & Anderson, 1994; Walker, Churchill & Ford, 1979). It is conceptually useful to examine performance in terms of (1) the behaviour or activities carried out by salespeople, and (2) the outcomes that can be attributed to their efforts.

## A Proposed General Model of the Factors that Affect Sales Performance

Building on the general model of salesperson performance and organisational learning theory, I propose that personality factors, emotional intelligence and social networks affect an account manager's performance directly and indirectly. The indirect relationship is affected through the interplay of mediating variables.

**Figure 1.2: Factors Driving Account Manager's Sales Performance**



### Importance of Assessing the Link between Personality Traits and an Account Manager's Sales Performance

Selecting sales personnel who possesses characteristics that influence success in the marketplace has become an important issue for today's sales manager. Not surprisingly, in an effort to minimise the risk of hiring non performers, sales managers have turned to personality tests as a means to screen for potential successful sales performers (Adler, 1994). However, practitioners are advised to use personality trait tests with caution. This is because researchers have found that the relationship between personality traits and job performance has never been consistent (Churchill et al., 1985). Researchers suggest that the true

predictive validity of personality could be obscured by the lack of a common personality framework for organising the traits being used as predictors (Hurtz & Donovan, 2000) or could be because the relationship between personality traits and performance is not always direct (Barrick & Mount, 2005).

Although studies assessing the relationships between personality traits variables and job performance have received much attention, scholars continue to emphasise the importance of researching this issue (Barrick & Mount, 1991; Barrick et al, 2001; Eysenck, 1991; Hurtz & Donovan, 2000; Cortina et al., 1992; Witt, 2002). For example, Eysenck asserts that the Big Five (personality traits) should be examined against “academic aptitude and achievement, and work performance” (1991, p. 785). There are at least two reasons for emphasising this research area. First, the dimensions of personality have been found to affect job performance differently in different types of job (Hurtz & Donovan, 2000). For example, extraversion appears to positively influence sales and managerial jobs while openness to experience appears to positively affect performance in customer service jobs (John & Srivastava, 1999). Therefore, it is deemed important to examine the relationships between personality traits and job performance for various jobs types and environments. John and Srivastava argue that “the literature on adults also found external validity of the Big Five (personality traits).....[Examining] these traits by job interactions help researchers develop a more fine-grained understanding of how different traits are instrumental to performance in various job environments” (1999, p. 125). Second, the personality traits literature is not consistent in reporting the impact of personality traits on work performance. Scholars argue that the reason for the inconsistencies in the relationships between personality traits and performance is that the impact of personality traits on performance depends on other factors and traits (Barrick et

al., 1993; Hurtz & Donovan, 2000; Witt, 2002). For example Barrick et al. (1993) have found that conscientiousness affects performance through performance expectancies, and Gellatly (1996) has found that self-efficacy intervenes with the effect of conscientiousness on job performance. As Hurtz and Donovan explain,

“...if we are truly to understand the relationship between personality and job performance, we must move beyond bivariate relationships towards specifying the intervening variables that links these domains. With better identification of intervening variables, the total effects of personality traits on job performance may emerge more strongly than the simple bivariate correlation coefficient has demonstrated” (2000, p. 882). Similarly, Barrick et al. suggest that “researchers should move away from examining personality as a main effect (Is personality related to performance?), to focusing on the effects that explain how personality traits influence performance (What conditions facilitate or constraint the influence of personality traits on performance?)” (2005, p. 746). In an effort to address this concern, this study has examined other conditions that may facilitate the effect of personality traits on performance.

### **The underdeveloped link between Emotional Intelligence and an Account Manager’s Sales Performance**

Although emotional intelligence (EI) is arguably the most controversial concept to be introduced to academic psychology and management (Mayer, Salovey & Caruso, 2004), scholars have attempted to examine the effect of emotional intelligence on performance. For example, Goyal and Akhilesh (2007) studied the effect of emotional intelligence on innovativeness, Sue-Chan and Gary (2004) examined emotional intelligence against cognitive control, and Wong and

Law (2002) assessed the impact of emotional intelligence on effective leadership. The findings of these studies are mixed.

Many scholars and clinical psychologists, however, agree that the concept of emotional intelligence is relatively new and under-developed (Sue-Chan & Gary, 2004; Gohm, 2003; Goyal & Akhilesh, 2007; Matthews et al., 2004; Wong & Law, 2002). Matthews et al., (2004) in discussing the seven myths about emotional intelligence, accurately point out that workplaces and educational institutions are rushing to teach emotional intelligence before valid evidence of the viability and effectiveness of emotional intelligence constructs have been empirically tested. They add, "...equally frustrating, much of the evidence presented in popular books or academic book chapters to support this edifice is based on unpublished or in-house research" (Matthews et al., 2004, p. 190).

In support of further research on the concept and application of emotional intelligence, Gohm (2003) suggests emotional intelligence should be studied in a cross-culture work, especially in non-Western countries, to provide a better understanding of emotional intelligence constructs. Differences in cultural norms need to be taken on board when measuring a person's level of emotional intelligence. For example, Shim (2003) and Butler, Lee & Cross (2009) found Asian Americans to be less expressive than other ethnic groups. Concluding the discussion, it is therefore imperative for emotional intelligence theory to be empirically assessed in a cross-cultural setting in order to be able to generalise the constructs of emotional intelligence. Similarly, in a more recent study, Law, Wong, Huang and Li (2008) echo previous scholars' observations on the immaturity concept of emotional intelligence and claim that "up to now, scientifically solid evidence of the usefulness of EI as a psychological construct is still far from sufficient and there is still enormous debate about the meaning and

usefulness of the construct” (Law et al., 2008, p. 52). In an attempt to address this concern, this study seeks to provide insight into this issue by examining the relationship between emotional intelligence and performance. More importantly, this study examines emotional intelligence in a cross-cultural context and in a non-Western country, dealing as it does with Malaysian Muslim and non-Muslim managers.

### **Underdeveloped Link between Social Network Structures and Account Manager Sales Performance**

While a number of recent works have begun to acknowledge the role of network structures on team and firm performance (Reagans, Zuckerman & McEvily, 2004; Gulati, Nohria & Zaheer, 2000; Zaheer & Bell, 2005) surprisingly empirical work examining the impact of an account manager’s social network structures on his/her performance has received little, if any, attention. Past studies of network structures have typically focused on the organisation as the unit of analysis (Reagans et al., 2004; Gulati et al., 2000; Zaheer & Bell, 2005) with a very limited focus on the individual. Among the studies with a focus on the individual are those of Adler and Kwon (2002), Anderson and Nichols (2007), Reagans and McEvily (2003) and, Seibert, Kraimer and Liden, (2001). Adler and Kwon (2002) focus their study on the links between social network characteristics such as the size and strength of the ties between people and social capital. Anderson (2007) establishes the impact of social network structures on information gathering behaviour. Reagans and McEvily (2003) examine various features of informal networks and their effect on knowledge transfer. However, the bulk of these studies primarily assess the impact of network characteristics on information processes. Less focus has been given to the following areas: (1) the

relationship between network structures and account manager performance: (2) the economic aspect (cost) of networks and: (3) the strengths of the relationships between the senders of market intelligence and the receivers (account managers), and their impact on performance.

In the organisational network literature, the importance of network structure and its impact on organisational performance has become a topical issue (McEvily & Marcus, 2005; Gulati et al., 2000; Zaheer & Bell, 2005). Some studies have established the importance of external resources through networks (McEvily & Marcus, 2005); others have found effects of network structures on firm performance from strategic perspectives (Gulati et al., 2000) and the effect of network ties and pattern on firm performance (McEvily & Zaheer, 1999). Therefore, given the importance of social networks on a firm's performance, it would be remiss not to develop our understanding of the relationships between network structures and manager performance. Recruitment, selection, personal development and training, and performance have been at the heart of account managers' research for decades. Therefore, it is timely for us in this introduction to assess the relationships between an account manager's social network structures and his/her performance.

In terms of the economic aspect of market intelligence, practically speaking, market intelligence is never free (Borgatti & Cross, 2003). Market research, internal databases, market assistants, other salespeople, and government publications are just some of the examples of sources of market intelligence (Rulke, Zaheer & Anderson, 2000; Souchon & Diamantopolous, 1996; 1999). The transfer of market intelligence represents a cost, at the very minimum in terms of the time and effort spent by the sender in helping the receiver (Reagans & McEvily, 2003). Firms spend thousands (if not millions) of dollars annually on the

subscription to database licenses in order to be better informed about the market, competitors and customers. Interestingly, the subjects of the economic aspect of market intelligence use during the process and of social network relationship structures remains under-developed and fragmented in the salespeople management literature (Akgun, Lynn, & Yilmaz, 2006; Zaheer & Bell, 2005). This study seeks to address this gap.

### **Market Intelligence Use as a Mediating Variable between an Account Manager's Characteristics and Performance**

The importance of market intelligence in supporting business decision making is widely recognised in both domestic and international contexts (Cui & Calantone, 2004; Davis, 1991; Hart, Webb, & Jones, 1994; Souchon & Diamantopoulos, 1996). Market intelligence is used not only to reduce risk and uncertainty, but also to monitor changes in demand patterns, supply sources, competitive activities and a host of other factors that impinge on decisions related to improved business performance (Deshpande & Zaltman, 1984; Jaworski & Kohli, 1993; Maltz & Kohli, 1996). Firms that engage in higher levels of market intelligence activities have been shown to have higher quality products and services, a faster growth of market knowledge, and higher quality strategic planning (Jaworski & Wee, 1993; Verhees & Meulenbergh, 2004). Research has shown that market intelligence use not only affects the performance of organisations but also plays an important role in the performance of individuals (such as salespeople and account managers) (Birgelen et al., 2001; Maltz & Kohli, 1996; Sujan et al., 1988; Weitz et al., 1986). For example, Weitz et al. (1986) found that selling effectiveness depends on the accuracy and use of market intelligence by account managers. Another study claims that differences in



account manager sales performance are linked to differences in their knowledge structures, and especially to the richness of the information (intelligence) that they categorise, process and use (Sujan et al., 1988). Some studies have also found that market intelligence acquisition, processing and use are important in the process of building long-term relationships with prospects and clients (Dwyer et al., 1987). In a nut-shell, the literature has for years acknowledged the link between market intelligence use and performance, both at the organisational and at individual levels. Therefore, based on this understanding I argue that market intelligence use plays an important role in mediating the relationship between account manager personality traits, social networks, and emotional intelligence and account manager sales performance.

### **Adaptive selling behaviour as a mediating variable between manager behaviour and performance**

Over the years, sales management researchers have adopted the cognitive selling paradigm concept in order to explain the link between account manager behaviour and selling processes and information processing (Churchill et al., 2000; Sujan et al, 1988; Szymnski & Churchill, 1990; Weitz et al., 1986). The focus of this paradigm is primarily on the behavioural aspects of account managers during interactions with clients and during sales presentations. In today's age of relationship selling, it is important for an account manager to build rapport with customers (McMurrian et al., 2002). The process of building good rapport involves understanding customers' wants and needs and then altering the sales presentations to meet those needs (Tanner, 1994); this strategy is known as adaptive selling behaviour.

Adaptive selling behaviour is defined as “the altering of sales behaviours during a customer interaction or across customer interactions based on perceived information about the nature of the selling situation” (Weitz et al., 1986, p. 175). The concept of adaptive selling behaviour has evolved considerably since Weitz (1978) found its positive relationship with work performance. Following that, sales management researchers have devoted a great deal of work to examining adaptive selling behaviour and work performance. Although the literature has reported mixed results, the majority found the relationship between adaptive selling behaviour and performance to be positive (Boorum, 1994; Franke & Park, 2006; Goolsby, Lagace & Boorum, 1992; Li & Calantone, 1998; Mark, Vohies & Badovick, 1996; Park & Holoway, 2003). For example, the ability of an account manager to engage in adaptive selling is important for building long-term relations with customers and so could be a particularly important skill for improving sales performance (Jolson, 1997). Adaptive selling behaviour skills are ranked as the second most important of the sales presentation skills that subsequently lead to higher sales performance (Marshall, Goebel & Moncrief, 2003). The popularity of the concept of adaptive selling behaviour has increased as past sales performance studies have failed to establish a relationship between sales performance and salesperson personality traits; these studies suggest that the important determinant for sales success lies within the sales interaction between a salesperson and the customer (Marshall et al., 2003; Sujan et al., 1988).

Summarising this discussion, adaptive selling behaviour has long been recognised as an important skill in managing sales presentations, which in turn correlates with sales performance. Therefore, it is fair to predict that adaptive selling behaviour can be shown to be a mediating variable for the interaction between

personality traits, social networks and emotional intelligence and sales performance.

### **Underdeveloped study of improvisation as a mediating variable between manager behaviour and performance**

The concept of improvisation is fairly new to marketing management literature. Furthermore, although the relationship between improvisational skill and organisational learning (Miner, Bassoff & Moorman, 2001), innovation change (Leybourne, 2006) and team performance (Jambekar & Pelc, 2007) have been subjects of speculation, there is a dearth of empirical study on these relationships.

Borrowing the concept of improvisation from organisational learning theory as articulated by Miner et al. (2001), I define improvisation in sales presentation as ‘the creative process in the altering of sales behaviour during a customer interaction or across customer interactions outside routines or formal plans.’ Improvisation is a dimension of adaptive selling behaviour. Miner et al. observe that “improvisation emerges under time pressure to solve problems or address opportunities quickly” (2001, p. 329). Their definition of improvisation is consistent with the work of others who identify external time pressure and lack of prior routines as common triggers for improvisation (Baker, Miner & Eesley, 2001; Weick, 1996). Improvisation allows managers to continuously and creatively adjust to change, and subsequently it plays an important role in innovation (Brown & Eisenhardt, 1998; Poolton & Ismail, 2000). Furthermore, a person capable of improvisation can cope with and adapt to unforeseen circumstances and can devise solutions to intractable problems (Meyer, 1998). Given the definitions of improvisational behaviour, it is fair to expect that

improvisational skills may be shown to mediate the relationship between exogenous and endogenous variables in this study.

### **Conclusion**

This study brings together three strands of research: (1) account managers personality traits, emotional intelligence and social network characteristics as exogenous variables: (2) the role of market intelligence use, adaptive selling behaviour and improvisation as mediating variables of the links between exogenous and endogenous variables: and (3) account manager performance as an endogenous variable. Two underlying theories (or models), informational processing theory and sales person performance model, form the basic theoretical foundation for this study.

### **Motivation for the Study**

The motivation behind this study arises from several of its potential contributions. The primary contribution of the proposed study will be an increased understanding of the profile of successful account managers. Understanding what factors make for a successful account manager in an intelligence-intensive, learning centred organisation is an important topic for further research (Lopez et al., 2005). The importance of personality traits-performance relationships have been already recognised in sales management literature. However, researchers have established inconclusive correlations (Churchill et al., 1985; 2000). Therefore, recognising what other conditions facilitate or constrain this relationship is imperative.

The concept of emotional intelligence is relatively new and under-developed (Sue-Chan & Gary, 2004; Gohm, 2003; Goyal & Akhilesh, 2007; Matthews et al., 2004; Wong & Law, 2002). The concept is also neglected in the

sales management literature. As a result, knowledge of whether emotional intelligence is related to manager performance and of the mechanisms that may underlie such a relation is limited (Cote & Miner, 2006). Given that the concept of emotional intelligence is relatively unchallenged, this study will also contribute to the body of knowledge in this area.

Despite numerous claims concerning the importance of market intelligence for supporting business decisions in both domestic and international contexts, it is surprising that studies in these areas have focused only on organisations and have ignored individuals such as account managers, as units of analysis (Birgelen et al., 2001; Jaworski & Kohli, 1993; Kohli & Jaworski, 1990; Narver & Slater, 1990; Toften, 2003; Vyas & Souchon, 2003; Souchon et al., 2003). Moreover, previous studies on market intelligence use have typically focused on only one type of use, namely instrumental use (e.g. Birgelen et al., 2001; Cadogan et al., 2002) hence discounting that market intelligence use as a multi-dimensional constructs (Diamantopoulos & Souchon, 1999; Menon & Varadarajan, 1992; Vyas & Souchon, 2003). These studies have also neglected to examine the effect of market intelligence use as a mediating role in the relationship between personality factors, emotional and social networks characteristics, and performance. Thus, the present study will provide some insights into these issues.

Prior management research has attempted to study the effect of improvisation on performance. Surprisingly, the concept of improvisation remains neglected in the sales management literature (Miner et al., 2001; Poolton & Ismail, 2000; Vera & Crossan, 2005). Since the concept of improvisation is fairly new it merits further investigation.

Little consensus exists in the account manager literature regarding whether job performance should be measured through subjective evaluation by

supervisors, co-workers, or the account managers themselves (Motowildo, Borman & Schmitt, 1997; Organ & Paine, 1999; Salgado, 1997), or objective data such as gross sales (Behrman & Perreault, 1984). As objective data is difficult to secure, researchers often rely on self-evaluation data when studying sales performance. The proposed study will add to the body of knowledge by directly and indirectly linking exogenous (independent) variables to both objective and subjective performance.

Finally the study will provide insight into the management practices of a non-Western sample; Muslim and non-Muslim account managers in Malaysia. In my understanding this is the first study that attempt to examine the differences of personality traits and social networks of Muslim versus non-Muslim account managers. By learning the behaviour of the middle managers of this group, trust and understanding may be facilitated between the Western and the Muslim world, and eventually business relationships and confidence between the two may be thus enhanced.

### **Summary and Overview**

Chapter One has outlined a brief overview of the research setting, a statement of the problem, the research questions, and the concepts surrounding the elements of the study. The aim of this study is to examine the factors that affect sales performance among account managers in Malaysia. The foundation of the framework was built on an organisational learning model and an account manager performance model. Following that, the gaps in the account manager performance literature relating to factors affecting market sales performance such as the social network characteristics, personality traits, and emotional intelligence factors were discussed. The mediating variables that are expected to signify the indirect

relationships between exogenous variables and an endogenous variable were also presented. Finally, the chapter identified potential contributions of the study to the body of knowledge.

Chapter Two details the literature review on the study variables that support the framework. Subsequently it outlines the conceptual framework.

Chapter Three illustrates the Islamic concepts and outlines the account manager's personality and behaviour from the Islamic perspective. It also discusses how business between the West and Islamic countries is interdependent. This will provide an understanding of Islamic culture in general and particular in Malaysia.

Chapter Four provides an in-depth discussion of the theoretical support for each of the proposed research hypotheses. Chapter Five outlines the methodology used for data collection and analysis. Chapter Six presents the results from the completed data collection and analysis. Chapter Seven discusses the results and conclusions and explores the contribution of the study to theory and to business practice. In the final section, the study limitations and implications for potential further study are presented.

## **CHAPTER TWO**

### **BACKGROUND LITERATURE I**

The four guiding questions laid out in Chapter One will be used in Chapter Two and Chapter Three to direct the review of literature on personality, emotional intelligence, social network characteristics, market intelligence use, improvisation, adaptive selling behaviour and some information on Islamic culture. Specifically, this chapter presents the literature review for the variables included in this study. In each section, I review the literature to provide construct definitions and concepts, and summarise relevant major research studies in the area. Subsequently, a set of constructs and associations between constructs is built to work towards a proposed research model.

In first section, I explore the proposed independent (exogenous) variables in the study. These are personality traits, emotional intelligence and social network structure. The first section is further broken down into three sub-sections. First, the literature on the basic concept of personality traits and its evolvement over the years is discussed. This leads to a discussion of the Big Five model: its facets and proposed measures by several researchers are discussed. This flows on to a discussion of the relationships between personality traits and human behaviour, and subsequently work performance. Second I discuss the newly emerging concept in social sciences areas that is emotional intelligence including its definition and concepts and proposed measures. Following this I expand the discussion to examine the impact of emotional intelligence on work performance. Third I present the literature relating to social network structures. Although there are several constructs that make up social network structures, in this study, I focus on network size, tie strength and network cost. Therefore the concepts of network



size, tie strength and cost are presented in detail, followed by a discussion of their measures. This then flows into a discussion of the studies that relate network structures with the use of intelligence and work performance.

The second section is devoted to discussing the mediating variables adopted in this study: market intelligence use, improvisation and adaptive selling behaviour. Similarly to section one, I first discuss the concepts of these variables in detail, and then discuss their measures. This section also discusses a range of studies that establish the relationship between performance and market intelligence use, improvisation and adaptive selling behaviour.

The third section synthesizes the literature on the concept of work performance, which represents the endogenous (dependent) variable in this study. Specifically, the debate between objective and subjective measures of account manager performance is discussed. As a result, two sets of sales performance measures are proposed.

## **Exogenous Latent Variables**

### **Overview of Personality Traits**

Personality is the dynamic organisation within the individual of those psychophysical systems that determine his unique adjustments to his environment (Allport, 1937) and is referred to as the cognitive and behavioural patterns that show stability over time and across situations (Cattell, 1965). Over the years, trait researchers have sought to develop a common dimension for human personality to facilitate an orderly accumulation of knowledge and to stimulate more scholarly exchanges of research findings. As a result, the past decade has witnessed a rapid convergence of views regarding the structure of the concepts of personality (Barrick, Mount & Judge, 2001; Costa & McCrae, 1987; Digman, 1990;

Goldberg, 1990; John & Srivastava, 1999; Schmidt, Shaffe & Oh, 2008; Seibert, Kramer & Liden, 2001). Early theorists like Pavlov proposed a behaviourist view; Eysenck proposed a biological basis of personality; Sheldon and Kretschmer proposed a taxonomy based on physical types; Buss and Plomin proposed a different taxonomy based on genetic components (John & Srivastava, 1999). By the 1930s, many terms, taxonomies, and classification strategies had emerged and this had led to difficulties among researchers agreeing on a common set of variables to guide any systematic exploration of a unified concept of personality.

In 1936, the two scholars Allport and Odbert carried out a significant study that grouped the approximate original 18,000 personality traits and/or adjectives into four major categories (John & Srivastava, 1999). The first category was a personality traits category, which was defined as containing generalised and personalised determining tendencies such as being sociable, aggressive, and fearful. The second category was made up of temporary states, moods and activities such as being afraid, rejoicing and being elated. The third category was made up of evaluative judgements of personal conducts such as excellent, worthy, average and irritating. The fourth and final category consisted of physical characteristics such as talents and cognitive capacities.

Another significant personality traits researcher, Cattell (1943; 1946; 1947; 1948; 1965), began his work with 4,500 trait terms. He examined a correlation and factor analysis in order to expand and refine the structures for measuring human personality (Cattell, 1965). Subsequently, Cattell (1965) proposed 12 personality factors that were eventually added into his 16 personality factors measures called 16PF. He also claimed that these 12 personality factors had excellent applications across different types of measures such as self-reports, ratings by others and objective tests. However, Cattell's claim was supported by

little, if any, empirical studies. Banks (1948), for example, was highly critical and offered much simpler alternatives to Cattell's claims. In a similar manner, Digman and Takemoto-Chock argue that Cattell's concept was based on "unfortunate clerical errors" (1981, p. 168).

Tupes and Christal (1961), who worked for the American Air Force, re-examined Cattell's correlation matrices and later suggested five relatively strong recurrent personality factors. Their work was then built on and replicated by numerous researchers such as Bogatta (1964), Eysenck (1970), Guilford (1975), Wiggins (1980), Digman and Takemoto-Chock (1981), and Goldberg (1981). By the 1990s, the majority of personality psychologists had come to a consensus that the domain of personality traits could be best described by these five variables.

Subsequently, to this end the recent social psychology marketing literature has focused on these five personality factors, together forming what has become known as the Big Five-Factor model (Barrick & Mount, 1991; Costa & McCrae, 1987; Digman, 1990; Goldberg, 1990; 1993; John & Srivastava, 1999). Barrick and Mount believe that "the robustness of the 5-factor model provides a meaningful framework for formulating and testing hypotheses relating individual differences in personality to a wide range of criteria in personnel psychology, especially in the subfields of personnel selection, performance appraisal, and training and development" (1991, p. 156). Table 3.1 shows the five robust dimensions of personality from Fiske (1949) to the present time (Digman, 1990). The table is based on the work of Goldberg (1981), Hogan (1983), Brand (1984), Digman (1988) and John (1989). Additionally, support for the Big Five model has come from numerous sources, including studies showing the stability of the structure of the model across the life span, and studies showing the consistency of the model across different sources of data such as for school students versus

adults, different rating formats (personnel self-rating, or ratings by supervisors and/or peers) and replicated across different cultures and languages (Costa & McCrae, 1988; Digman & Schmelyov, 1996; Graham & Peter, 2006; Hurtz & Donovan. 2000; Law et al., 2004).

In an attempt to establish the stability of the Big Five across ratings formats, Digman and Digman (1980) examined the personality effects of environmental stressors between parent-child interaction and teacher ratings and found similar results in both measures. McCrae and Costa (1988) echoed Digman and Digman's (1980) study in examining the parental practices with two different measures i.e. the 'Parent-Child Relations Questionnaire' and teacher ratings, and their results were somewhat similar. In a cross cultural comparison, Goldberg et al. (2006) report that the Big Five IPIP 50-item measure has been used and replicated in more than 25 languages such as into Japanese, Mandarin, German, Dutch and Indonesian.

There is a general agreement among the psychologists that Dimension I was initiated by Eysenck (1947). It is comprised of Surgency or Extraversion facets. Extraversion is defined as a tendency to like other people, to be sociable, to prefer to be in large groups, to be gregarious, and to desire excitement and stimulation: an extravert is likely to be assertive, talkative and active. Extravert people also tend to be dominant and energetic (Costa & McCrae, 1987). The second Dimension (Dimension II) consists of Agreeableness (Tupes & Christal, 1961; Norman, 1963). Dimension II has also been interpreted as a paranoid disposition, exhibiting likeability and friendly compliance.

**Table 2.1: Dimension of Personality Traits**

Author	I	II	III	IV	V
Fiske (1949)	Social adaptability	Conformity	Will to achieve	Emotional control	Inquiring intellect
Eysenck (1970)	Extraversion		Psychoticism	Neuroticism	
Tupes & Christal (1961)	Surgency	Agreeableness	Dependability	Emotionality	Culture
Norman (1963)	Surgency	Agreeableness	Conscientiousness	Emotional	Culture
Borgatta (1964)	Assertiveness	Likeability	Task interest	Emotionality	Intelligence
Cattell (1967)	Exvia	Cortertia	Superego strength	Anxiety	Intelligence
Guilford (1975)	Social activity	Paranoid disposition	Thinking introversion	Emotional stability	
Digman & Takemoto-Chock (1981)	Extraversion	Friendly compliance	Will to achieve	Neuroticism	Intellect
Buss & Plomin (1984)	Activity	Sociability	Impulsivity	Emotionality	
Costa & McCrae (1985)	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness
Tellegen (1985)	Positive emotionality		Constraint	Negative emotionality	
Hogan (1986)	Sociability & ambition	Likeability	Prudence	Adjustment	Intellectance
Lorr (1986)	Interpersonal involvement	Level of socialisation	Self control	Emotional stability	Independent
Peabody & Goldberg (1989)	Power	Love	Work	Affect	Intellect

(Adapted from Digman, 1990)

Agreeableness is the tendency to be altruistic, courteous, caring, good-natured, flexible, cooperative, forgiving, tolerant and trusting. At the other end of the dimension includes hostility, indifference to others, self-centredness, spitefulness, and jealousy (Digman, 1990).

Dimension III has generally been accepted as Conscientiousness including the will to achieve, superego strength, thinking, work and self control. It has the tendency to be purposeful, dependable, careful, responsible, reliable, organised, persevering and ambitious. Dimension IV was also initiated by Eysenck (1947) and is usually referred to as Neuroticism or the opposite of Emotional Stability. The facets include the tendency to experience negative effects such as fear, negative emotion, having anxiety, depression, anger, guilt, embarrassment, disgust, or insecurity. Finally Dimension V is referred to Intellect, Openness to Experience, Culture and Inquiring Intellect. Openness to experience or intellectual is the tendency to have an active imagination, openness to new ideas, flexibility of thoughts, aesthetic sensitivity, intellectual curiosity, a broad mind, attentiveness to feelings and readiness to indulge in fantasy. It is worth noting however that the Big Five structure does not imply that personality differences can be reduced to five traits, but rather that these five dimensions represents the broader sense of a large number of personality characteristics (John & Srivastava, 1999). In the next section, I will discuss the three most frequently used Big Five measures in empirical studies.

### **The Big Five Measure**

For many years researchers have carefully developed instruments to measure the Big Five model (Costa & McCrae, 1995; Digman, 1990; Goldberg, 1990; 1992; 1999; John & Srivastava, 1999). Of these, Goldberg's (1990) 100 and 50-items IPIP, Costa and McCrae's (1992) 240-items NEO PI and later 60-

items NEO-FFI, and John and Srivastava's (1999) 44-items BFI have been used repeatedly by social sciences researchers. One of the most popular Big Five model measure that has been increasing rapidly in used is Goldberg's (1990): 100-items and 50-items International Personality Item Pool (IPIP). To date the items from the IPIP have been translated from English into more than 25 other languages, and have been used in and replicated by over 80 publications (Goldberg et al., 2006). In building the IPIP measure, Goldberg (1990) combines empirical, rational-intuitive, and psychometric methods (Goldberg et al., 2006). He also adopts the personality concept developed by Costa and McCrae (1982). The popularity of the IPIP measure is due to its high validity and reliability, relatively simple scoring scales, flexible items that can be presented in any order and, above all its lack of cost to use (Goldberg et al., 2006). The measure includes over 2000 items. However, the 50-item IPIP has proved to be the most used by other studies. In this IPIP, each personality traits domain is measured by 10 items as shown on Table 2.2 (Goldberg, 1990).

**Table 2.2: Goldberg (1990) 50-item IPIP**

I Extraversion	II Agreeableness	III Conscientiousness	IV Emotional Stability	V Openness
Life of a party	Interested in people	Prepared	Relaxed	Rich vocabulary
Comfortable around people	Sympathise with others	Pay attention to details	Seldom feel blue	Vivid imagination
Start conversation	Soft heart	Get chore done	Stress out	Excellent ideas
Talk a lot	Time out for others	Like order	Worry about things	Use difficult word
Centre of attention	Feel others emotion	Follow schedule	Easily disturbed	Full of ideas
Don't talk a lot	Make people feel ease	Exacting in work	Upset easily	Quick understanding
Keep in background	Not interested in others	Leave belongings around	Frequent mood swing	Spend time reflecting things
Little to say	Insult people	Make a mess	Irritated easily	Understanding abstract ideas
Draw attention to myself	Not interested others problem	Forget to put things back	Change mood lot	Not interested in abstract ideas
Quiet	Little concern	Shirk duties	Often feel blue	Good imagination

Costa and McCrae (1987) started developing Big Five measures on the three dimensions of Neuroticism, Extraversion and Openness to Experience or in an acronym NEO. As time went by, they came to view the Big Five as a causal personality theory that they derived from the Big Five taxonomy. As a result of this, Costa and McCrae (1992a) revised their measures to add Conscientiousness and Agreeableness. This measure is known as NEO-PI-R (Costa & McCrae, 1992). It has 240 items in total. Since the measure was quite lengthy, they re-revised the measure and subsequently, came up with the 60-item NEO-FFI as depicted on Table 2.3. In this, each of the Big Five dimensions has a 12 item



scale. The NEO-FFI scale is highly correlated with NEO-PI-R suggesting that they both measure similar dimensions (Costa & McCrae, 1992a).

**Table 2.3: Costa and McCrae’s (1992a) NEO PI-R Facets**

I	II	III	IV	V
Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness
Gregarious	Trust	Competence	Anxiety	Ideas
Assertiveness	Straightforward	Order	Tense	Curious
Activity	Altruism	Dutifulness	Depression	Fantasy
Excitement-seeking	Compliance	Achievement Striving	Not contented	Imaginative
Positive emotion	Modesty	Self-discipline	Self-consciousness	Aesthetics
Outgoing	Tender-mindedness	Deliberation	Shy	Artistic
Warmth	Sympathetic	Not impulsive	Impulsiveness	Action
Enthusiastic	Not show-off	Not Lazy	Moody	Wide interests
Adventurous	Not stubborn	Thorough	Vulnerability	Feeling
Energetic	Not demanding	Not careless	Not self confident	Excitable
Forceful	Warm	Organised	Angry	Values
Sociable	Forgiving	Efficient	Hostility	Unconventional

(Adapted from John & Srivastava, 1999)

After long and detailed syntheses of personality traits theories, John and Srivastava conclude that “Big Five taxonomy is a major step ahead.....and the taxonomy captures at a broad level of abstraction, the commonalities among most existing systems of personality description, and provides an integrative descriptive model for personality research” (1999, p. 131). As a result of their syntheses, they propose a 44-item BFI (Big Five Inventory) measure. BFI measure is comprised of five domains: extraversion, agreeableness, conscientiousness, neuroticism and openness. Each domain has between eight and ten items. Specifically extraversion

and neuroticism each have eight items, agreeableness and conscientiousness each have nine items and openness has ten items.

### **Big Five and Human Behaviour**

There is no doubt that the Big-Five factor model “can be profitably used in most applied settings” (McCrae & John, 1992, p.206) where it has been conceptualised and examined in several ways (Costa & McCrae, 1992a). There is an extensive body of literature that supports the evidence of a relationship between Big Five and human behaviour (Gellatly & Irving, 2001; Olver & Mooradian, 2003; Jaffee & D’Zurilla, 2009). For example, Costa and McCrae (1992b; 1995) have published a series of articles exploring the utility of the model for clinical psychologists; McCrae, Costa and Dolliver (1991) discuss its application in counselling; Becker, Hagemann, Bartussek, Naumann and Schneider (2004) and Bates and Rock (2004) study the impact of the Big Five on information processing and intelligence performance; Jaffe and D’Zurrilla (2009) establish the relationship between the Big Five and substance abuse; Mount, Ilies and Johnson (2006) relate the Big Five and counterproductive behaviour at work; Major, Turner and Fletcher (2006) suggest the impact of the Big Five on motivation to learn and development activity; and Sojka and Giese (2001) study the Big Five characteristics to predict consumer behaviour. In the following paragraphs I will briefly discuss some of the studies that have established the relationship between personality traits (the Big Five model) and behaviour.

Clinical psychologists suggest that elements of the Big Five have shown robust impacts on substance abuse and alcohol use (Costa & McCrae, 1992; Conrod, Pihl, Stewart & Dongier., 2000; Sher, Batholow & Wood, 2000; Jaffee & D’Zurrilla, 2009). This is because an individual who has high with anxiety and neuroticism tends to experience fear in response to symptoms of physical arousal.

In response to reduce or permit escape from this anxiety, these individuals turn to substance abuse and alcohol use (Conrod et al., 2000). Therefore in this case, identifying the level of neuroticism and anxiety is valuable in an attempt to provide counselling and so forth which in turn will reduce the substance abuse and alcohol use.

In the consumer behaviour literature, the study of the Big Five has not received less attention (Engel & Blackwell, 1995; Sonjka & Giese, 2001). Consumer behaviour studies have linked personality traits to information processing preferences such as the preference towards visual as opposed to verbal information. Engel and Blackwell (1995) suggest that the study of Big Five model is vital in studying consumer behaviour in that traits are common to many individuals. By linking individual Big Five factors to identifiable characteristics such as processing preferences, the model becomes a viable variable for understanding, explaining, and predicting consumer behaviour. This is because processing strategies are not induced by ability but by individual preferences. Therefore, the exposure of different customers into the same advertisement results in different levels of attention among the consumers (Sojka & Geise, 2000).

In human resource management literature, the study of the Big Five is imperative in that it helps to ease the process of recruitment and training. The Big Five research contributes to training and development theories in that the model leads to better understanding the relative efficacy of predictors of motivation to learn. Major et al. (2006) found that an individual who is high in neuroticism and agreeableness is negatively related to motivation to learn. Individuals with high levels of anxiety and few coping skills do not actively seek out new learning opportunities (Major et al., 2006). Similarly, when agreeableness is high,

individuals tend to accommodate towards others which in turn neglects their own desire to learn.

The Big Five literature is also consistent in supporting the influence of the Big Five model on work involvement and career success (Gelissen & de Graaf, 2005; Lau & Shaffer, 1999; Bonzionelos, 2004). However, the meta-analytic evidence regarding the effect of the Big Five model on work performance is mixed (Barrick & Mount, 1991; Brown et al., 2002; Hurtz & Donovan, 2000; Warr & Pearce, 2004). Barrick and Mount (1995) suggest that “research based on a construct orientated approach primarily using Big Five traits has consistently shown that personality predicts job performance across a wide variety of outcomes” (Barrick & Mount, 1995, p. 359). In contrast, in some studies, the attempts to demonstrate the links between personality traits and performance have not always been successful (Bonzionelos, 2004), while other findings vary between investigations (Barrick & Mount, 1991).

Most reviews of the Big Five and work performance relationships have concluded that conscientiousness, extraversion and emotional stability (the opposite of neuroticism) are the strongest predictors, with conscientiousness and emotional stability being the most consistent predictor to work performance (Barrick & Mount, 1991; Barrick, et al., 1991; Hurtz & Donovan, 2000; Salgado, 1997). Barrick and Mount (1991) have studied the relationship between the Big Five and performance criteria in both objective and subjective productivity ratings. Their findings indicate that personality and performance can vary across occupations and performance criteria. For example, extraversion predicted performance best in managerial and sales occupations while conscientiousness consistently predicted job performance across all occupational groups and performance criteria such as job proficiency, training proficiency, and personnel

data (Barrick & Mount, 1991). Similarly, Shaffer and Shaffer (2005), and Waldman, Atwater and Davidson (2004) echo Barrick and Mount's (1991) findings.

In another study, Bozionelos (2004) examined the relationship between each of the five factors and work involvement for white collar workers in several managerial positions, and observed that the relationship between personality and work involvement is more complex as it goes beyond the main effect of personality traits. Agreeableness, via its main effect, and extraversion and openness, via their interaction, were associated with work involvement. The findings also indicated another interesting consequence, that neither extraversion nor openness independently, but only a combination of the two traits is required for higher work involvement.

Barrick et al.'s (2001) meta-analysis study, found that conscientiousness and emotional stability were the only personality predictors for direct overall work performance. Additionally, they observed that extraversion, agreeableness and openness to experience predict performance, but only for certain types of criteria and/or jobs (Barrick et al., 2001). These personality traits are contingent predictors because they predict performance only when personality traits are related to specific criteria (Mount et al., 2006). Likewise Hertz and Donovan (2000) in their empirical study reported that conscientiousness and emotional stability predict the criterion of interpersonal facilitation.

## **Conclusion**

Although traits psychologists could not come to a consensus, there is a growing body of research that suggests that personality traits are relatively stable through out one's life span. Trait researchers have sought for decades to develop a common dimension for over 18,000 personality traits that were originally

acknowledged to form human personalities. By the 1990s, the majority of personality psychologists had come into agreement that the domain could be best described by five variables – the Big Five. The five factor model is one of the most widely accepted comprehensive models of personality traits. Although the body of five factor model research leaves little doubt that a substantial relationship between personality traits and work performance relationship exists, the specific mechanism by which personality might influence work performance is not clear. This current study seeks to examine personality traits beyond the main effect, where it focuses on the potential mediating effects that link personality traits and sales performance.

### **Overview of Emotional Intelligence (EI)**

In recent years, there have been considerable and growing interests in the scientific viability of emotional intelligence (Goleman, 1995; 1998; Mayer & Salovey, 1997; Mayer, Salovey & Caruso, 2004). The theory of emotional intelligence was initiated by the Harvard psychologist, Howard Gardner in 1983 (Chrusciel, 2006). He built his theory based on the social intelligence concept that was developed by Thorndike in 1920. The concept was then expanded by Mayer and Salovey in the early 1990s. However, the concept did not come become popular until Goleman published his book in 1995.

Emotional intelligence has been developed from neuro-psychology and neuro-science, and focuses on a patterned structure of responses that regulates emotions: in particular, it focuses on the role of brain connectivity between the amygdale and the neural-cortex (Roche, 2004). Emotional intelligence from a theoretical perspective refers to the cooperative combination of intelligence and emotions (Mayer & Salovey, 1997; Roberts, Zeidner & Matthews, 2001). Despite its recent unveiling, there are already a large number of definitions of emotional

intelligence. Of this large number of definitions, four predominant approaches to emotional intelligence – the EQ-I Bar On; the ECi Goleman, the Four Branch Model - MSCEIT Mayer, Salovey and Caruso and the Four Dimension EI Davies, Stankov and Roberts (1998) - have been widely used and replicated by several scholars in recent years (Law et al., 2004; Rahim, Psenicka, Zhao, Yu, Chan, Kwok Wai et al., 2002; Sala, 2002). In the following section I will provide further details of the concepts of these approaches. Please note that the following approaches are not in any particular order of importance:

- EQ-i Bar-On (Emotional Quotient Inventory) by Bar-On (1997);
- ECi- 2 (Emotional Competence Inventory version 2) by Goleman (1995;1998);
- MSCEIT (Mayer Salovey Caruso Emotional Intelligence Test) by Mayer, Salovey & Caruso (1990; 1997; 2002; 2004); and
- Four Dimensions of Emotional Intelligence –Davies, Stankov and Roberts (1998).

The psychologist Bar-On (1997) uses an emotional quotient to illustrate emotional intelligence as an array of non-cognitive skills. Further, he describes emotional intelligence as knowledge and a set of emotional and social capabilities that influences one's general ability to effectively face her/his environment's demands (Gabel et al., 2005). Based on 19 years of research and tested on over 48,000 individuals worldwide, the Bar-On Emotional Quotient Inventory is designed to measure a number of constructs related to emotional intelligence. Arguably, the EQi measures developed by Bar-On are well regarded for recruitment, selection purposes and career development (Thompson, 2005). However, the EQi-Bar On (1997) measures of emotional intelligence that are associated with skills have received robust criticism due to the nature of their

testing. The measures are allied with reality testing, independence, and long lists of non-cognitive skills, and the scales assess self-reports of something broader than emotional intelligence. Additionally, the measures overlap and are highly correlated with existing personality scales (Bracket & Mayer, 2003; Davies et al., 1998; Newsome, Day & Catano, 2000). Regressing the Big Five on the Bar-On EQ-i for example, yields a multiple  $R^2 = 0.75$  (Bracket & Mayer, 2003). As a result, the conceptualisation often has little or nothing specifically to do with emotions and fails to map onto the term of emotional intelligence (Mayer et al., 2004).

Emotional intelligence from Goleman's (1995; 1998) perspective is defined by competencies that may be developed through learning (Goleman, Boyatzis, & McKee, 2002). Goleman's five dimensions of competencies are comprised of (1) self-awareness, (2) self-regulations, (3) motivation, (4) empathy, and (5) social skills. Each domain is represented further by its several facets. Self-awareness includes recognising one's emotions and their effect, knowing one's strengths and limits, and self-confidence. Self-regulation includes the following facets: self-control – keeping disruptive emotions and impulses check; trustworthiness – maintaining standards of honesty and integrity; conscientiousness – taking responsibility for personal performance; adaptability – flexibility in handling change; and innovation. Motivation is comprised of the following facets: achievement drive – striving to improve or meet a standard of excellence; commitment – aligning with the goals of the group or the organization; initiative – readiness to act on opportunities; and optimism – persistence in pursuing goals despite obstacles and setbacks. Empathy includes the following facets: understanding others – sensing others' feelings and perspectives, and taking an active interest in their concerns; developing others – sensing the development



needs of others and bolstering their abilities; service orientation – anticipating, recognising, and meeting customers needs; leveraging diversity – cultivating opportunities through different kinds of people; and political awareness – reading a group’s emotional currents and power relationships. The last domain of Goleman’s (1995) emotional intelligence model is social skills. Social skills are represented by influence, communication, conflict management, leadership, change catalysts, building bonds, collaboration and cooperation and team capabilities.

Goleman (1995) claims that the level of emotional intelligence increases with age and is linked with maturity: as such, he claims that it can be learnt and improved upon over time to some extent through training, practice and commitment (Goleman, 1995). The effective management of emotions could contribute to the handling of the needs, satisfaction, and motivation of subordinate at work (Goleman, 1998). However, Goleman’s claims have rarely been supported by empirical findings. Consequently his concept of emotional intelligence is the least adopted by other empirical studies (Semadar, Robins, & Ferris, 2006).

Salovey and Mayer (1990) describe emotional intelligence as a form of social intelligence that involves the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them, and to use this form to guide one’s thinking and action (Salovey & Mayer, 1990). Their concept of emotional intelligence has been built on by Mayer et al. (1997; 2000) who suggest the following four – branch model as the constructs of emotional intelligence: (1) the ability to accurately perceive, appraise and express emotion; (2) the ability to use emotion to facilitate thinking; (3) the ability to understand the temporal course and probable outcome of emotions; and (4) the ability to regulate emotions

effectively. As a result of differences in mean emotional intelligence scores that Mayer et al. (1999) observed between adolescents and adults, they also claim that emotional intelligence is a form of intelligence in that the development of emotional intelligence increases with age.

A person's emotional intelligence ability can be measured by reading emotion in faces, or in group interactions through Mayer Salovey Caruso Emotional Intelligence Test (MSCEIT) measures (Mayer et al., 2002). The MSCEIT test contains eight tasks with two to measure each of the four branches of emotional intelligence. In Branch One, perceiving emotions is measured through (a) faces, for which each participant is asked to identify the emotions in faces, and (b) pictures for which participants are asked to identify the emotions conveyed by landscape and design. In Branch Two, emotions are used to facilitate thought through (a) sensation, for which participants are asked to compare emotions to other tactile and sensory stimuli; and (b) facilitation, for which participants identify the emotion that would best facilitate a type of thinking. In Branch Three, understanding of emotions is measured through (a) changes, which tests a person's ability to know under what circumstances emotional intensity lessens and increases and how one emotional state changes into another; and (b) blends, which asks participants to identify the emotions that are involved in more complex affective states. Finally, in Branch Four, managing emotions is measured through (a) emotion management which involves presenting participants with hypothetical scenarios and asking how they would maintain or change their feelings; and (b) emotion relationships which involves asking participants how to manage others' feelings so that a desired outcome is achieved.

Mayer et al.'s (2000) emotional intelligence concept, constructs and measure (MSCEIT), however, have received criticism from several emotional

intelligence psychologists such as Gohm (2004), Matthews et al. (2004), Law et al., (2008). Gohm argues that MSCEIT assesses one's knowledge about how to manage emotional relations but "knowing what one should say, or how one should behave to sustain a relationship in a specific situation does not mean that one will actually act accordingly in such situations" (2004, p. 225). Additionally she claims that the MSCEIT test might not be applicable to other cultures in that the correct response for the degree of emotion expressed by a face for one culture may differ for another culture. Similarly Law et al. (2008) echo Gohm by arguing that measures such as MSCEIT which was developed by U.S. scholars may not consider the cultural background of the participants. They claim that "in some MSCEIT items, respondents are asked to judge the amount of certain emotion expressed in pictures of several faces but Asian participants may not be able to read faces correctly" (Law et al., 2008, p.60). These are fair claims since Asian Americans for example have been found to have less expressive behaviour than other ethnic groups in America (Butler, et al., 2009; Shim, 2003). Other researchers that are critical of Mayer et al.'s (1997) concept and measures of emotional intelligence are three scholars from Australia, Davies, Stankov and Roberts (1998). They conducted a series of three studies to assess Mayer et al.'s (1997) claim, but found that their findings did not support Mayer et al. where measures of emotional intelligence related scales overlap with the well-established personality factors. Subsequently they concluded that Mayer et al.'s (1997) emotional intelligence concept was elusive (Davies et al., 1998). In return they propose the following four emotional intelligence dimensions: (1) appraisal and expression of emotion in oneself – which relates to an individual's ability to understand his/her own deep emotions; (2) appraisal and recognition of emotions of others – which relates to an individual's ability to perceive and understand the

emotion of people around them; (3) regulation of emotion in oneself – which relates to the ability of an individual to regulate his/her emotions, enabling a more rapid recovery from psychological distress; and (4) use of emotion to facilitate performance – which relates to the ability of a person to make use of emotions by directing them towards constructive activities and personal performance. While Davies et al.'s (1998) concept is not identical to Mayer and Salovey's (1990; 1997), the differences are minor in that they do not support the claim that emotional intelligence develops with age. Arguably, the concept of emotional intelligence developed by Davies et al. (1998) is more representative of the entire body of emotional intelligence models and theories (Law et al., 2004; Wong & Law, 2002). Interestingly, Davies et al. (1998) did not suggest or develop alternative measures that could be used to measure the recommended constructs.

In an attempt to address issues raised about MSCEIT, Wong and Law (2002) developed a self-reported emotional intelligence measure - WLEIS based on the concepts and theory initiated by Davies et al. (1998). The measure includes a self-report questionnaire contrasted with peers' opinion and a self-report questionnaire contrasted with supervisor opinion. The measure has sixteen items in total where each of the four constructs is measured by four items. Subsequently, Law et al. conclude that if the concept of emotional intelligence is "properly defined and measured, emotional intelligence is a distinct and useful construct for psychological and management research" (2004, p. 270).

**Table 2.4:****Summary and Comparison of Emotional Intelligence Measure Characteristics**

Study	Type	EI Measures	Theoretical Model	EI Dimensions and Scales	Length
Mayer et al. (2002)	Ability test against expert and consensus opinion	Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)	Salovey & Mayer (1990; 1997)	Perception, appraisal, expression of emotion. Emotional facilitation of thinking. Understanding and analysing emotional information. Regulation and management of emotion.	141 items
Sala (2002)	Self-report questionnaire multirater	Emotional Competence Inventory, Version 2 (ECI-2)	Goleman (1995; 1998) Boyatzis, Goleman & Rhee (1999)	Self-awareness. Self-management. Social awareness. Social skills.	72 items
Bar-On (2000)	Self-report questionnaire Multirater	Emotional Competence Quotient (EQ-i)	Bar-On (1997)	Intrapersonal. Interpersonal. Adaptation. Stress management. General mood.	133 items
Dulewicz & Higgs (1999b)	Self-report questionnaire Other multirater assessment	Emotional Intelligence Questionnaire (EIQ)	Delewicz & Higgs (1999a)	Self-awareness. Emotional resilience. Motivation. Interpersonal sensitivity. Influence. Intuitiveness. Conscientiousness.	69 items
Law et al. (2002)	Self-report questionnaire against peers' opinion Self-report against supervisor's opinion	WLEIS scale	Davies et al. (1998)	Self emotion appraisal. Others emotions appraisal. Use of emotion. Regulation of emotion.	16 items
Rahim, et al. (2002)	Self-report questionnaire	Emotional Quotient Index (EQI)	Goleman (1995; 1998)	Self-awareness. Self-regulation. Motivation. Empathy. Social skills.	40 items
Goldenberg et al. (2006)	Self-report questionnaire	Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)	Salovey, Mayer & Caruso (2002)	Mood regulation. Appraisal of Emotion. Use of Emotion. Sharing/experiencing Emotion.	33 items

## **Emotional Intelligence and Work Performance**

Despite the debate surrounding the concept and constructs of emotional intelligence there have been several studies that have shown positive associations between emotional intelligence and education, leadership, and to some extent individual work performance and team performance (Dulewicz et al., 2005; Gabriel & Griffiths, 2002; Goleman, 1995; 1998; Longhorn, 2004; Mayer & Caruso, 2002). For example in the leadership literature, leaders who are emotionally competent are found to be better performers, and more successful (Brown & Moshavi, 2005; George, 2000; Mayer & Caruso, 2002b). In addition, an emotionally competent leader correlates with an emotionally competent group norm which in turn affects the team performance (Koman & Wolff, 2008). Dulewicz, Young and Dulewicz (2005) in studying the leadership of navy officers across seven different ranks found that emotional intelligence accounts for the greatest contribution to overall performance. Another study that took place in a retail industry found that emotional intelligence was negatively related with workplace distress and stress, and positively related with emotional well-being, morale, quality of work life, and overall performance ratings (Slaski & Cartwright, 2003).

Interestingly, although Wong and Law (2002) found emotional intelligence of leaders was positively related to job satisfaction and extra-role behaviours of followers, no relationship between the emotional intelligence of leaders and job performance of their followers have been found. In a similar manner, Feyerherm and Rice (2002) discovered that the higher the team leader's emotional intelligence, the worse the team perform. Langhorn (2004) found no support for the idea that age related emotional intelligence associated with performance. In a nut shell, in analysing the substantial body of literature on

emotional intelligence, I have found mixed evidence regarding the effect of emotional intelligence on work performance. Evidence of this has been discussed and presented in an earlier section.

### **Conclusion**

Emotional intelligence can be conceptualised as the ability to monitor one's own and others' emotions to discriminate among them, and to use this information to guide one's thinking and actions (Mayer & Salovey, 1997). The case for which emotional intelligence measure works best is still a discussion point and may be determined on a case-by case basis (Chrusciel, 2006). It is important to recognise, however, that the various theoretical perspectives regarding emotional intelligence are not mutually exclusive. It is also clear that the concept and domain of emotional intelligence has been gradually accepted in numerous studies (Davies et al., 1998; Mayer et al., 1999; 2004; Law et al., 2004; Chrusciel, 2006). Arguably, if the concept and domain of emotional intelligence is properly defined, it is distinct from personality dimensions (Davies et al., 1998; Mayer et al., 1999; Law et al., 2004). Given that the concept of emotional intelligence is relatively new and under developed, it merits further investigation.

### **Social Network**

Social network study has long been a topic of interest to social science researchers and has become a core concept in business, political science and sociology (Adler & Kwon, 2002; Burt, 2000). The early study of the social network focused on the survival and functioning of city neighbourhoods and the personal relationships that developed over time to provide a basis of trust, cooperation and collective action in communities (Jacob, 1965). Over the years, the concept has been used to explain a wide range of social phenomena such as

the development of human networks, the study of families and youth behaviour, economic development, and geographic regions (Coleman, 1990; Jackman & Miller, 1998; Loury, 1992, Oh et al., 1999; Putnam, 1995). The concept of social networks has also become increasingly accepted in the study of organisations (Reagans & McEvily, 2003; Seibert et al., 2001). Several studies have adopted social network concepts to explain their influence on career success, resource exchange and product innovation, organisational advantage, group effectiveness, mobility in the workplace, supplier relationships, performance of firms, and knowledge transfer (Baker, 1990; Gabby & Zuckerman, 1998; Nahapiet & Ghoshal, 1998; Oh et al., 2004; 2006; Podolny & Baron, 1997; Reagans & McEvily, 2003; Seibert, Kraimer and Liden, 2001).

A review of the literature on social network reveals broad similarities in the way that social networks are defined. A social network is a set of resources that includes the structure of relations of individual actors such as friends, colleagues, and more general contacts through whom one receives opportunities to use one's human network (Bourdieu, 1986; Burt, 1992; 2000; Coleman, 1988; Nahapiet & Ghoshal, 1998; Oh et al., 2006). Indeed, a social network is any aspect of social structure that creates value and facilitates the actions of the individuals within that social structure (Coleman, 1990). The literature shares many variables in common and has suggested several constructs that seem to define social networks. Debatably, the constructs for social network can be grouped into three dimensions: structural, relational, and cognitive (Nahapiet & Ghoshal, 1998). The structural dimension refers to the organization and configuration of the social network. Its constructs include network size (Marsden, 1990; Burt, 1992; 2000), network density, network hierarchy (Burt, 1992; Nahapiet & Ghoshal, 1998), network closure (Coleman, 1990), and network range



(Marsden, 1990). The relational dimension encompasses such constructs as trust and trustworthiness (Mumby & Putnam, 1992), obligations and expectations (Burt, 1992), norms and sanctions (Putnam, 1995) and the strength of network ties (Jones, 2002). The third is a cognitive dimension that refers to the presence of shared codes and language and shared narrative within a network (Nahapiet & Ghoshal, 1998).

While several constructs have been identified as determinants of social networks, the goal of this study is to find strong, core constructs that can help explain the differences in the market intelligence use strategies between high and low performing account managers. In the organisational learning literature, two of these constructs, tie strength and network size, have been identified as important (Borgatti & Cross, 2003; Burt, 1992; 2000; Hansen, 1999; Marsden, 1990; Wellman, 1992). In addition, the current study proposes to include 'cost' as this construct has been neglected in the literature due to lack of data and perceived relevance (Adler & Kwon, 2002; Borgatti & Cross, 2003). These three constructs are discussed in detail in the next section.

### **Network Ties**

Social network theory regards relationships or ties (Podolny & Baron, 1997) as the basic unit of phenomenon for analysis. The theory proposes that network ties provide access to resources (Nahapiet & Ghoshal, 1998). The first social network theory was established by Granovetter in 1973. He establishes a "weak tie theory" where the study focuses on the strength of the social tie used by a person in the process of looking for a job. He conceptualises tie strength as having four properties; (1) The strength of a tie is a combination of the amount of time, (2) the emotional intensity, (3) the intimacy (mutual confiding), and (4) reciprocal services which characterise the tie. Another researcher, Krackhardt

(1992), echoes his concept of ties strength and argues that tie strength could be measured by three properties; (1) interaction, (2) affection, and (3) time.

Similarly Burt (1997) affirms Krackhardt's (1992) concept and claims that intimacy or emotional closeness is the important element when measuring tie strength.

Granovetter (1973) argues that ties among members of a social clique are likely to be strong (i.e. emotionally intense, frequent and involving multiple types of relationships, such as those with friends, advisors and co-workers) whilst ties that reach outside of one's social clique are likely to be weak (i.e. not emotionally intense, infrequent, and restricted to one narrow type of relationship).

Interestingly, the study found that weak ties are sources of new information because they bridge local cliques, concluding that the more weak ties an individual has in his/her network, the more valuable the network is as a source of information. Consequently over the years the Granovetter theory on weak ties has received robust critiquing by other scholars and researchers and the critiques are mixed (Bridges & Villemez, 1986; Burt, 1992; Hansen, 1999; McPherson et al., 1992; Podolny & Baron, 1997; Wellman, 1992).

For example, Hansen (1999) supports the theory arguing that weak ties are more effective than strong ties because they are less costly to maintain. In contrast, Wellman (1992) observes opposite findings which in turn propose a 'strong tie' theory. The strength of the tie depends on the combinations of many factors such as the amount of time spent between actors, emotional intensity, intimacy and reciprocal services that characterise the tie. To conclude, the study argues that weak ties are more instrumental where they only provide information resources, whilst strong ties provide support and exchange of confidences (Wellman, 1992).

Burt (1992; 2000) institutes a structural holes approach theory to social network. He argues that the social network is the contextual complement to human network. A social network is a metaphor about advantage where the people who do better do so because they are better connected (Burt, 2000). The study takes a different approach from Granovetter (1973) as it focuses on the patterns of relationships among alters in an ego's social network and not on the characteristics of the ego's direct ties. The study conceptualises network ties in terms of information and resources that actors can access in competitive situations, including mobility contests. Burt (1992; 2000) proposes that it is more useful analytically to focus on the pattern of relationships among people to whom ego is tied. The term 'structural holes' is adopted to indicate the absence of connections among those in the network, arguing that the more structural holes surrounding ego, the more conducive the ego's network is to mobility. The underlying theory hypothesised by Burt (1992) is that a person in a network that has a large number of structural holes will be able to access information from the remote parts of the network, and to exploit that information to his or her advantage (Burt, 1992; 2000). If networks that span structural holes are social network, therefore it is expected that the association between performance and network size works in the same direction (Burt, 2000). Burt's (2000) finding is supported by Brass et al. (2004) who found that relationships with other organisational members affect performance, particularly if these relationships involve the ability to acquire needed information and expertise (Brass et al., 2004). Burt (1992) argues further that weak ties are correlated with, rather than a determinant of the amount of unique information provided by ego's network. Burt's (1992) concept of a social network has been empirically supported by

many studies (Burt, 1997; Podolny & Baron, 1997; Sparrowe & Popielarz, 1995; Zaheer & Bell, 2005).

One of the empirical studies that support Burt's (1992) theory is Podolny & Baron's (1997). They studied 236 high-technology engineering and manufacturing personnel to examine the relationship between social networks and mobility at work places in the United States of America. In their study, they used the term 'direct ties' to refer to ego (the person who receive the data is referred to as 'ego' and those he or she is tied to are referred to as 'alters') connections to those in his or her network and 'indirect ties' to refer to ties among the alters in the ego's network. Social networks are presented in a dimension where the type of tie can be further divided into two i.e. 'person-to-person network' that develops intrapersonal attraction and trust and a 'position-to-position network' that augments job interdependencies. The content conveyed through this tie is also divided into two i.e. 'resources' and 'organisational identity'. Nevertheless, the finding of the study supports Burt's (1992; 2000) claims that large information networks that lack indirect ties (i.e. are full of structural holes) promote upward mobility within the company. Hence the pattern of structure of social relations is a meaningful determinant of an individual's fate, including intra-organisational advancement.

### **Conclusion**

All in all the social network literature has so far documented mixed arguments with regards to the relationship of intelligence use and tie strength. While some argue that stronger ties are more costly to maintain and can produce redundant intelligence which in turn could lead to negative transfer of intelligence (e.g. Burt, 1992; 1997), several others claim that strong ties are better suited to transferring complex intelligence (e.g. Hansen, 1999). Nonetheless scholars have to some

extent, come into consensus that tie strength can be measured by the degree of three elements; (1) closeness or affection, (2) interaction and (3) history of interaction (Burt, 1992; Krackhardt, 1992).

### **Network Size**

Network size is defined as ‘the number of social contacts in a network’ (Burt, 2000). It is the most basic indicator of interest where the number of direct ties involving the individual unit is measured (Marsden, 1990). Burt (2000) observes that if a manager has more contacts, he/she is likely to receive diverse bits of information from these contacts and be able to play their individual demands one against the other.

The social network literature has documented studies supporting the evidence of relationship between network size and behaviour factors (Dozier, Harris & Bergman., 1987; Burt, 2000; Galaskiewicz et al., 2004). For example, in clinical psychologist literature, Dozier et al., (1987) found a negative relationship between network size and likelihood of hospitalisation among mental illness patients, and Westermeyer & Neider (1988) also observed a negative relationship between network size and the abuse of substance. Dozier et al., (1987) also discuss the application of social network size on counselling.

In the organisational management literature, several studies support the association of social network size with performance (Cross & Cummings, 2004; Moran, 2005). This is probably a fair argument because if a person has more contacts, that would have created more alternatives for obtaining a valued resources and more ideas and control over the use of those resources. In supporting the concept, Burt argued that “bigger is better” (1992, p. 16) though a very large networks can be difficult and costly to maintain (Moran, 2005; Borgatti & Cross, 2003). Several other studies support a positive relationship between

network size and greater innovation by managers (Rodan & Galunic, 2004), a positive relationship between network size and sales performance (Moran, 2005), and a positive association between network size and job performance (Cross & Cummings, 2004).

### **Cost**

In asking others for assistance, there are costs involved (Adler & Kwon, 2002; Borgatti & Cross, 2003; Reagans & McEvily, 2003). Knowledge transfer represents a cost to the source of knowledge in terms of time and effort spent helping others to understand the source's knowledge (Reagans & McEvily, 2003). Regardless of where the information is secured from, it involves cost (Borgatti & Cross, 2003). In market relations, goods and services are exchanged for money or bartered and the exchange is often symmetrical, whilst for social relations favours and gifts are exchanged for the transfer of information (Adler & Kwon, 2002). For example, in social relations, cost includes favours ("a favour I do for you today is made in exchange for a favour you do for me at a time yet to be determined") and gifts ("gifts are exchanged for the favours done") (Adler & Kwon, 2002, p. 19). Table 2.5 summarises the concept of market, hierarchical and social relations.

Similarly, Borgatti and Cross (2003) echo Adler and Kwon's (2002) claim that cost is involved in asking others for assistance. They argue that cost may be potentially significant in the organizational setting such as interpersonal risk, that is, actor *i* must believe that seeking information from actor *j* is not too costly in either interpersonal risks or obligations incurred (Borgatti & Cross, 2003, p. 435).

**Table 2.5:**  
**Market, Hierarchical, and Social Relations**

Dimension	Market relations	Hierarchical relations	Social relations
What is exchanged?	Goods and services for money or bartered	Obedience to authority for material and spiritual security	Favours, gifts
Are terms of exchange specific or diffuse?	Specific	Diffuse – employment contracts typically do not specify all duties of employee, only that employee will obey orders. Order hierarchical relations imply a similar up-front commitment to obeying orders or laws, even those yet to be determined.	Diffuse - a favour I do for you today is made in exchange for a favour you do for me at a time yet to be determined.
Are terms of exchange made explicit?	Explicit	Explicit - the employment contracts is explicit in its terms and conditions, even if it is not specific. Similarly for other kinds of hierarchical relations.	Tacit - a favour for you today is made in the tacit understanding that it will be returned someday.
Is the exchange symmetrical?	Symmetrical	Asymmetrical - hierarchy is a form of domination.	Symmetrical -the time horizon is not specific nor explicit, but favours eventually are returned.

(Adler & Kwon, 2002, p. 19)

## Conclusion

Previous studies have established the importance of social network factors in acquiring market intelligence, which in turn increases the use of market intelligence in organizations. These studies have suggested several social network constructs that seem to affect the process of gathering, processing and using market intelligence. Two of these constructs, tie strength and network structure, have been identified as the most significant predictors in the process of intelligence transfer (Granovetter, 1973; Burt, 1992; Hansen, 1999; Rindfleisch & Moorman, 2001; Borgatti & Cross, 2003). Conversely, the involvement of cost appears to have been neglected by social network researchers (Borgatti & Cross,

2003). Summarising the discussion to this point, I propose to integrate tie strength, network size and network cost into the current study as they may (or may not) affect the sales performance of Muslim account managers.

## **Mediating Variables**

### **Market Intelligence Use**

The term ‘market intelligence’ is sometimes used interchangeably with ‘knowledge’ (Li & Calantone, 1998; Menon & Varadarajan, 1992; Qian Geng, Townley, Kun & Jing, 2005) and ‘information’ (Moorman, 1995). Market intelligence is the data that have been organised or given structure and that are placed in context and endowed with meaning (Glazer, 1991; Li & Calantone, 1998). Building from Glazer’s (1991) definition of market intelligence, Moorman (1995) conceptualises market intelligence as the data concerned with a firm’s current and potential external stakeholders. The external information covers “all functional areas of firms rather than just marketing departments” (Moorman, 1995, p. 319). In an earlier study, Kohli and Jaworski define market intelligence as “a broader concept that includes consideration of exogenous market factors such as government regulations, competition, technology and other environmental factors that affect customer needs and preferences” (1990, p.4). They claim that effective market intelligence pertains not only to current needs, but also to future requirements (Kohli & Jaworski, 1990). Market intelligence comprises of the following three sets of activities: generation of market intelligence pertaining to customers needs, dissemination of intelligence across departments, and organisation-wide responsiveness to market intelligence (Kohli & Jaworski, 1990).



A review of the literature produced over the last two decades on intelligence use reveals differences in the way it is defined and measured (Birgelen et al., 2000; Deshpande & Zaltman, 1982; 1984; John & Martin, 1984; Maltz & Kohli, 1996; Menon & Varadarajan, 1992; Menon & Wilcox, 2001). The definition of market intelligence use ranges from a behaviourist to a cognitive mode into an affective use. For example, from a behaviourist mode, market intelligence use is defined as the extent to which a report is used directly for guiding behaviour and making decisions (John & Martin, 1984). Others define intelligence use from a cognitive perspective where intelligence is perceived as the extent to which the receiver uses the intelligence disseminated by the sender to understand his/her work environment and to make and to implement decisions (Maltz & Kohli, 1996). The third definition of intelligence use has included the affective use element. For example, Menon and Varadarajan (1992) and Menon and Wilcox (2001) view market intelligence use as having the following three underlying dimensions: (a) action-oriented use, (b) intelligence enhancing use and (c) affective use. To sum up, to date market intelligence use has been defined from various perspectives and dimensions and the definition varies depending on the application of the construct. Table 2.6 illustrates further studies of intelligence use constructs over the years.

**Table 2.6:**  
**Approaches to Measurement of Intelligence Use**

Authors	Intelligence Use Measures
Knorr (1977)	Instrumental and Symbolic Use
Pelz, & Horsley (1981)	Research Use Index
Anderson et al. (1981)	Behavioural, Cognitive and Affective Use
Larsen (1982)	Degree of Use Scales
Weitzel (1987)	General, Specific, Trigger, Exception, Control decision, Allocation-decision and Direction-decision
Deshpande & Zaltman (1982; 1984) John & Martin (1984) Diamantopoulos & Siguaw (2002)	Instrumental Use
Birgelen et al. (2001); Moorman (1995); Weiss (1981); Wilton & Myers (1986)	Instrumental and Conceptual Use
Menon & Varadarajan (1992); Menon & Wilcox (2001)	Action Oriented Use (Instrument and Symbolic Use), Knowledge Enhancing Use (Product and Process Based) and Affective Use (Product and Process Based)
Goodman (1993); Vyas & Souchon (2003)	Symbolic Use
Diamantopoulos & Souchon (1996; 1999); Toften (2003); Citris et al. (2007)	Instrumental/Conceptual, and Symbolic Use
Menon & Wilcox (2001)	Appropriate Use and Inappropriate Use
Maltz et al. (2006)	Appropriate Use (Congruous Use, Cynical Use, Positive Use, Product Use and Process Use) Inappropriate Use (Incongruous Use, Cynical)

One of the most widely used conceptualisations of intelligence use makes a distinction between the three different types of use: instrumental use, conceptual use, and symbolic use (Birgelen et al., 2001; Deshpande & Zaltman, 1982; Diamantopoulos & Souchon, 1999; Vyas & Souchon 2003; Souchon, et al., 2004; Toften, 2003). Instrumental use is the direct application of research findings (Deshpande & Zaltman, 1982) and conclusions to solve a policy problem (Caplan,

Morrison & Stambaugh, 1975; Menon & Varadarajan, 1992). The intelligence is used on an immediate basis as soon as it had been collected, for specific decisions and is often obtained by commissioning specific research projects to specialist (Cadogan, Diamantopoulos & Siguaw, 2002). In addition market intelligence instrumental use often involves applying acquired intelligence directly to decision tasks, which are relatively structured (Citrin, Lee & McCullough, 2007). Before intelligence is considered in decision making, it is interpreted and evaluated and if the intelligence comes from external suppliers, it may be corrected (if the need arises) to make it consistent with the company's internal knowledge base (Diamantopoulos & Souchon, 1996). However, if the intelligence stems from internal/personal sources, the decision to use the information is made directly after it has been collected and/or analysed/interpreted, based on its degree of perceived usefulness. For instance, Menon and Varadarajan (1992) have given the example that when a decision to penetrate a new market is based on marketing research findings and recommendations, then it is an instance of the instrumental use of intelligence. In contrast, when available research findings are not directly applicable to a problem, the intelligence tends to be used conceptually (Menon & Varadarajan 1992; Moorman, 1995; Rich, 1997).

Conceptual use of intelligence is less direct than instrumental use. In conceptual use, intelligence can be employed for general enlightenment rather than for taking action (Birgelen et al., 2001), or as an indirect application of information without putting it to any specific documentable use (Rich, 1997). In addition, in conceptual use, intelligence can be adopted to broaden the managerial knowledge without serving any one particular project (Moorman, 1995). It also can involve integrating new information into a firm's (person's) existing knowledge base to derive meanings and implications. For example, projects and

case studies can commonly provide concepts, assumptions, models and theories that can enter into a manager's orientation towards priorities and the manner in which they formulate problems, the range of solutions that they convey, and the criteria for decision-making that they apply (Menon & Varadarajan, 1992).

When market intelligence is preserved or stored for later use, this is also conceptualised as conceptual use. For example, in the case of an international market where a particular company is part of a global organisation, it often receives unsolicited intelligence from its sister firms abroad. When the export intelligence is acquired and has no direct relation to a current problem that the organisation is facing, or if the resources involved in reacting to that intelligence are greater than the company could afford, the intelligence is either kept in the form of reports in the company's library, or stored on a database to be used in the future (Diamantopoulos & Souchon, 1999). In the conceptual use of intelligence, intelligence is found to be continually updated by most companies, not for any specific decision in hand but in order to be stored in a bank of knowledge, to keep track of the market (Birgelen et al., 2001).

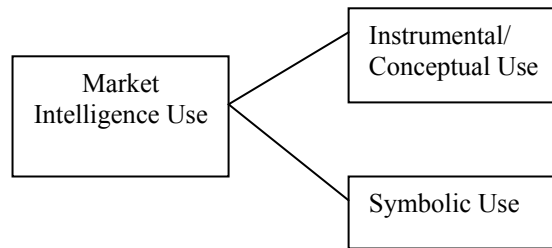
The third distinction of intelligence use is called symbolic use (Weiss, 1977; Goodman, 1993). Unlike instrumental and conceptual use in which intelligence is used in a consistent manner with an intended purpose, symbolic use of intelligence is used distortedly and beyond its correct intent and use (Menon & Varadarajan, 1992). Others define symbolic intelligence use as intelligence used for appearance's sake rather than for any intrinsic value it may have (Menon & Wilcox, 2001; Strieter, Celuch & Kasouf, 1999). Symbolic use is argued to have three main manifestations (Souchon et al., 2003). First, symbolic use occurs when intelligence is misused by taking conclusions out of their context and disclosing only those that confirm an executive's predetermined positions. This is achieved

by oversimplifying the findings of intelligence and/or consciously ignoring any accompanying caveats or assumptions that may weaken the findings (Birgelen et al., 2001; 2002; Weiss & Buuvalas, 1977). Second, symbolic use arises when the intelligence is adopted to preserve good relationships and to sustain previously held dispositions between senders and receivers (Menon & Varadarajan, 1992). In addition, intelligence can also be used for the purpose of self-promoting use where intelligence is used by firms to visibly portray knowledge and competence to others which in turns is perceived by others as specialists in that particular industry (Feldman & March, 1981).

Third, symbolic use crops up when intelligence is used to justify previously made decisions based on intuition and/or experience (O'Reilly, 1982). Given the domain of market intelligence symbolic use, its excessive use is detrimental to performance (Souchon & Diamantopoulos, 1996; Vyas & Souchon, 2003).

The distinctions among the instrumental, conceptual and symbolic dimensions dictate direct implication for measure development according to Souchon and Dimantopolous (1999). Souchon and Dimantopolous sought to establish a market intelligence use measure, and found that instrumental use and conceptual use correlated strongly across all of the samples that they used, indicating that the two type of intelligence use measure the same element or in another words are actually the same domain. This is depicted in Figure 2.1. The concept and measure of market intelligence use developed by Souchon and Dimantopolous's (1999) has been widely accepted, used, tested and replicated by various studies in various countries (Birgelen et al., 2001; Souchon et al., 2004; Toften, 2005; Verhees & Meulenberg, 2004).

**Figure 2. 1: Type of Market Intelligence Use**



There seems to be a general consensus in the intelligence use literature that the employment of instrumental and conceptual market intelligence use is crucial for a firm's success or failure (Diamantopoulos et al., 2003; Citrin et al., 2007; Hart, et al., 1999; Menon & Varadarajan, 1992; Moorman et al., 1992; Toften, 2005; Vyas & Souchon, 2003; Weiss, 1977; Zaltman, 1984; 1986). For example Weiss (1977) argued that organisational processes are conducive to intelligence (instrumental/conceptual) use which in turn promotes the firm's performance. Zaltman (1984) claimed that market intelligence (instrumental/conceptual) use is a form of innovation; consecutively aid the firm's performance. Moorman et al. (1992) argued that market intelligence (instrumental/conceptual) use influences the user's decision making in the complex decision making which ultimately increases the firm's performance (Moorman et al., 1992). Vyas and Souchon (2003) found that firms use instrument and conceptual market intelligence to overcome decision-making uncertainty caused by the potentially unfamiliar environment and this intelligence acts as a key determinant for entry and expansion decision (Vyas & Souchon, 2003). Similarly, other scholars such as Diamantopoulos et al. (2003) and Toften (2005) echoed Vyas and Souchon (2003) and claimed that the use of intelligence instrumentally and conceptually has frequently been seen as a critical determinant to performance. In another study,

Citrin et al. (2007) found that instrumental intelligence use is a critical aspect of a firm's competitive advantage. All in all the employment of instrumental and conceptual market intelligence use is an important tool to driving a firm's decision making which in turn increases its performance.

In contrast, several researchers argue the excessive use of symbolic market intelligence could lead to the destruction of performance (Citrin et al., 2007; Diamantopoulos et al., 2003; Toften, 2003; Vyas & Souchon, 2003). This is because in symbolic use, intelligence is used beyond its correct intent and use (Menon & Varadarajan, 1992) and is often manipulated. Intelligence is also used symbolically to portray knowledge and competence and for the purpose of self-promotion (Feldman & March, 1981).

## **Conclusion**

The concept of market intelligence use has been established since the 1970s by the organisational learning researchers. Since then, the researchers have provided several classification strategies and measures. Among these, the most widely accepted and used are instrumental and conceptual use. Instrumental use is the direct use of intelligence obtained from specific research projects or reliable sources to solve a specific problem or to aid a decision making process. If market intelligence is used for general enlightenment and as an indirect application of information without putting it to any specific documentable use, it is called conceptual use. Studies have found that when intelligence is used instrumentally and conceptually, it would support the performance of firms and individual. In contrast, given the nature of symbolic use where intelligence is used out of context and distortedly, it is expected that it would be detrimental to sales performance (Souchon & Dimantopolous, 1999; Toften, 2003; Vyas & Souchon, 2003).

## **Adaptive Selling Behaviour**

The concept of adaptive selling behaviour has been examined and developed over decades (Park & Holloway, 2003; Spiro & Weitz, 1990; Weitz et al., 1986). Generally adaptive selling behaviour refers to alterations in selling strategies, tactics, social style, verbal communication and physical appearance of the seller (Giacobbe, Jackson, Crosby & Bridges, 2006). Nonetheless over the years the definition of adaptive selling behaviour has evolved to reflect the philosophy of selling and marketing in that era. In the late 70s to early 80s where selling philosophy and 'hard sell tactics' were popular, adaptive selling behaviour was defined as "required persuasive techniques and the selection and use of appropriate methods" (Weitz, 1981, p. 502). In comparison, in late 80s, adaptive selling behaviour was defined as "the altering of sales behaviour during a customer interaction or across customer interactions based on perceived information about the nature of the selling situation"(Weitz et al., 1986, p. 175). In today's relationship marketing era, buyers are more experienced, educated and powerful; subsequently, the definition of adaptive selling behaviour has changed to reflect this condition, where adaptive selling behaviour is defined "as a complex process that emphasizes customised solutions to fit each buyer" (DelVecchio, Zemanek, McIntyre & Claxton, 2004, p. 859).

The first scholar to theorise the relationship between adaptive selling behaviour and performance was Weitz (1978). Since then, several other researchers have developed the measures for adaptive selling behaviour and have attempted to test the relationship between adaptive selling behaviour and performance. The measures developed to measure adaptive selling behaviour range from elicitation techniques (e.g. laddering techniques) (Gengler, Howard & Zolner, 1995), to role playing (Shepherd & Rentz, 1990) to survey approach



(questionnaire design) (Robinson, Marshall, Moncrief & Lasek, 2002; Spiro & Weitz, 1990). Among the most popular adaptive selling behaviour concepts and measures is ADAPTS, developed by Spiro and Weitz (1990). Arguably, this measure of adaptive selling behaviour, ADAPTS has been accepted, used and replicated widely by other researchers albeit with some minor changes to the concept. In developing ADAPTS, Spiro and Weitz (1990) employed the concept of adaptive selling behaviour conceptualised by Weitz et al. (1986). ADAPTS consists of six facets: (1) a recognition that different selling approaches are needed in different sales situations, (2) confidence in the ability to use a variety of different sales approaches, (3) confidence in the ability to alter the sales approach during a customer interaction, (4) a knowledge structure that facilitates the recognition of different sales situations and access to sales strategies appropriate for each situation, (5) the collection of information about the sales situation to facilitate adaptation, and (6) the actual use of different approaches to different situations (Spiro & Weitz, 1990, p. 62). It is a 16-item scale. The first three facets are related to motivation of a salesperson to practice adaptive selling behaviour. The fourth and fifth pertain to the capabilities needed to practice adaptive selling behaviour and the last facet refers to the actual behaviour of a salesperson. In building ADAPTS, Spiro and Weitz (1990) also confirmed the nomological validity of the scale with several related constructs such as personality traits (openness, empathy, androgyny, self-monitoring, and locus of control) intrinsic motivation, experience, management style and performance. On the downside, ADAPTS scale also received critiques by several other researchers (Boorum, Goolsby & Ramsey, 1998; Marks, Vohies & Badovick, 1996; Sigauw & Honeycutt, 1995). These researchers argued that ADAPTS needs better scale development. For example Marks et al. (1996) tested ADAPTS scale on sales

performance and found that a salesperson's belief about adaptive selling behaviour was not significant to sales performance whilst a salesperson's practice to adaptive selling behaviour was significant to sales performance resulted in a development of shorter version of ADAPTS (Marks et al., 1996).

Given the conceptualisation of adaptive selling behaviour, a positive relationship between salesperson adaptive capabilities and sales performance would be expected (Anglin, Stolman & Gentry, 1990; Giacobbe et al., 2006; Jeong-Eun & Holloway, 2003; Weitz et al., 1986). Over the years researchers have tested the impact of adaptive selling behaviour on sales performance. Although a few studies do not support the relationship between adaptive selling behaviour and performance most studies do (Anglin et al., 1990; Boorom et al., 1998; Giacobbe et al., 2006; Goolsby et al., 1992; Jeong-Aun & Holloway, 2003). For example Spiro and Weitz (1990) found a modest, yet significant relationship between adaptive selling behaviour and sales performance in both salesperson's self report performance and supervisors' report of salesperson performance. Similarly, Boorom et al. (1998) found a significant relationship albeit modestly related, between adaptive selling behaviour and sales performance among insurance sales people. A summary of the findings and measures are displayed on Table 2.7. All in all, there is a growing support in the literature that adaptive selling behaviour explains some differences in sales performance.

**Table 2.7:****Adaptive Selling Behaviour Study: Measures Use and Summary of Findings**

Illustrative Studies	ASB Measures	Test	Summary of Findings
Spiro and Weitz (1990)	ADAPTS: 16-item scale	ASB → Performance	Significant to self assess performance but not to management rating performance
Anglin et al., (1990)	Cognitive sales script elicitation	ASB → Performance	Some significant
Goolsby et al., (1992)	ADAPTS	ASB → several types of Performance	Some significant Some not significant
Siguaw (1993)	Role conflict, organizational commitment, functional flexibility	Identify if ASB related to eight personal selling variables and sales performance	ASB related positively to sales performance
Marks et al., (1996)	ADAPTS	ASB → Performance	Significant to sales performance ADAPTS has two dimensions: one related to belief and one related to behaviour
Boorom et al., (1998)	Subset of ADAPTS	ASB → Performance	ASB modestly related to sales performance
Robinson et al., (2002)	ADAPTS – shorter version	ASB → Performance	ASB is significant to sales performance
Park & Holloway (2003)	Learning orientation, ASB	ASB → Performance	ASB is significant to sales performance
Giacobbe et al. (2006)	Sales managers -rated Self-rated	ASB → Sales Performance	Some significant to sales performance

## **Conclusion**

This section has advanced definitions and concepts of adaptive selling behaviour. The framework that relates the relationship between adaptive selling behaviour and sales performance was pioneered by Weitz (1978). Since then, the concept has flourished and been tested in several empirical studies. The most popular measure is called ADAPTS and was initially developed by Spiro and Weitz (1990). Generally, the sales management literature has documented a positive relationship between adaptive selling behaviour and sales performance.

## **Improvisation**

The concept of improvisation is initiated by the term used in jazz performance. Literally speaking, improvisation is defined as a practice of acting and reacting, of making and creating, in the moment and in response to the stimulus of one's immediate environment which can result in the creation of new thought patterns, new practices, new structures or symbols, and/or new ways to act (Miner, Basoff & Moorman, 2001). In applied business, improvisation has been defined as “the planning and executing of any action simultaneously or the condition by which composition and execution converge in time” (Moorman & Miner, 1998, p.698): “intuition guiding action in a spontaneous way” (Crossan & Sorrenti, 1997, p. 156): and “the conception of action as it unfolds...drawing on available material, cognitive, affective, and social resources” (Cunha, Cunha & Kamoche, 1999, p. 302). The strategic business and learning literature has discussed the various constructs of improvisation where it is linked with the aspects of time, intuition, creativity, innovation, bricolage and short time learning (Cunha et al., 1999; Leybourne, 2007; Miner et al., 2001; Moorman & Miner, 1998; Zaltman, Duncan & Holbek, 1973) whilst the features of improvisation

include temporal convergence design and execution, novel and deliberate (Miner et al., 2001). All in all, the concept of improvisation tends to blend prescriptive and descriptive elements in which effectiveness and quality of performance have been embedded in the phenomenon (Vera & Crossan, 2005).

Based on the work developed by Rogers (1983), and Zaltman et al. (1973), Moorman and Miner (1998) argue that improvisation involves intra organisational creativity and innovation. This is because all improvisation, by definition involves the creation of action outside the current plan and routines (Moorman & Miner, 1998). Unlike adaptive behaviour, creativity was observed to represent an unusual valuable competence for improvising organisations whilst innovation is a necessary feature of improvisation. However it is worth noting, that not all innovation is improvisation (Miner et al., 2001; Poolton & Ismail, 2000). Miner et al. (2001) differentiate improvisation from creativity and innovation in that creativity may involve absolutely no improvisation and that innovation may be created through improvisation and planning (Miner et al., 2001).

Improvisation is distinct from other strategic firm behaviour such as adaptation (e.g. adaptive selling behaviour) and long term learning. It is distinct from adaptation in that adaptation can be achieved in preplanning, and whilst improvisation is merely a creative, impromptu, spontaneous action (Campbell, 1989; Moorman & Miner, 1998). Learning is a process that requires discovery, retention and exploitation of stored knowledge, including information and behavioural routines: therefore improvisation is not a long-term learning. Nonetheless Miner, Bassoff and Moorman (2001) observe that improvisation is a special type of short-term, real-time learning that can influence long term organisational learning and adaptation. Improvisation also involves combining known and unknown routines in different contexts, and the use of resources to

resolve unforeseen occurrences (Leybourne, 2006). However, pre-existing routines do not constitute improvisation because improvisation simply refers to deliberate, as opposed to accidental, creation of novelty (Miner et al., 2001).

Given the concept of improvisation, researchers have begun to theorise and empirically test improvisation and organisational learning (Akgun et al., 2006; Barrett, 1998), improvisation and new product development (Moorman & Miner, 1998), improvisation and new product performance (Akgun et al., 2007), improvisation and innovation (Crossan, 1997) and improvisation and performance in teams (Jambekar & Pelc, 2007; Vera & Crossan, 2005). The literature has documented mixed argument about the impact of improvisation on firm's success. For example Miner et al., in their exploratory study explain improvisation as "a special type of learning; a double-edged sword that has the ability to enhance other learning processes and to detract from their value or operation" (2001, p. 331) which in turn could lead to firm's success. Akgun et al. (2007) in their empirical study found that team improvisation positively impacts on new products' success by utilising new knowledge acquired by unlearning and improvisation. Other researchers, such as Moorman and Miner (1998) argue that improvisation plays an important role in the new product development. Jambekar and Pelc (2007) theorise that improvisation-based mindsets play an important role for the team performance enhancement. In contrast, Akgun et al. (2006) in their study on the new product development team suggest that the changing beliefs and routine do not always lead to success. This is because unlearning takes time and uses some of the limited resources and this can be disorienting or paralysing because the team member's initial goal may erode with changes in their attitudes, and concurrently may lead to apathy during the projects (Akgun et al., 2006). Similarly, Hmieleski and Corbett (2008) in their empirical study, found that there

is no direct relationship between entrepreneur improvisational behaviour and new venture performance.

### **Conclusion**

This section advances the definitions and concepts of improvisation. The study of improvisation in the sales management literature is fairly new and underdeveloped. The concept was initially borrowed from the theatre and musicians. It is an intuition guiding action in a spontaneous way and improvisation is distinct from adaptation which involves the adjustment of a system to external conditions. Although the literature has documented mixed evidence, there seems to be a general agreement that improvisation could impact on performance in several ways such as in new product development, innovation, organisational learning and team performance.

### **Endogenous Variable**

#### **Sales Performance**

Little consensus exists in the performance literature about whether job performance should be measured through subjective measures such as evaluations by top managers, co-workers, or self-evaluation (Bommer, Johnson, Rich, Podsakoff & Mackenzie, 1995) or through objective measures such as countable behaviours or outcomes like sales volume, market spanning, number of customers and number of sales calls (Behrman & Perreault, 1984). Over the years there has been an increasing number of studies about constructing a comparative analysis between objective and subjective performance measures (Bommer et al., 1995; Heneman et al., 1986; Hoffman, Nathan & Holden, 1991; Pransky, Finkelstein, Berndt, Kyle, Mackell & Tortorice, 2006).

Researchers and theorists who have studied objective and subjective performance measures have established mixed arguments. Some researchers and theorists suggest that these two type of measures should not be used interchangeably (Bommer et al., 1995; Heneman, 1986; Murphy & Cleveland, 1991; Pransky et al., 2006). For example, Bommer et al.'s study between objective and subjective measures reported a corrected  $R^2$  of 0.389 indicating that "the measures are clearly not interchangeable" (1995, p. 592). Their finding is consistent with Heneman's study that had observed a correlation of only 0.27 and suggested that "the measures were not substitutable" (1986, p. 820). The implication for these observations is that at the most basic level, subjective measures should not be used as proxies for objective measures if objective performance is the behaviour of interest (or vice versa). For example, if sales is the desired outcome, organisations should not reward employees based on a supervisor's overall performance evaluation of that employee. Conversely, if broadly defined performance is more important, it is inappropriate to reward employees solely on objective measures such as gross sales (Bommer et al., 1995). One should note that objective measures are intended to directly record the actual job-related behaviour or outcome and they are frequently free of systematic bias and random error. A good example is the machine- recorded performance measures (Sackett, Zedeck & Fogli, 1988).

Interestingly, and in contrast, several other studies have found no significant differences between the two measuring metrics across various types of performances (Fishman, 1999; Wall, Michie, Patterson, Wood, Sheehan, Clegg et al., 2004; Wang, Beck, Berglund & McKenas, 2004; Tett, Jackson & Rothstein, 1991; Viswesvaran & Schmidt, 1993). Tett et al. (1991) in their meta-analytic study examined the personality of managers against job performance and found



no differences in the objective and subjective measures. Similarly, Viswesvaran and Schmidt (1993) failed to find differences between objective and subjective measures involving production records and ratings of overall job performance. Wall et al.'s (2004) study to validate subjective measures on company performance used three different sets of samples and the findings consistently showed that subjective and objective measures were positively associated and that the relationships of the measures (objective and subjective) with a range of independent variables were equivalent. In a more recent study, Pransky et al. (2005) argue that even if self-reported measures of work performance did not correlate strongly with objective measures of work performance, the low observed correlations do not imply that self-reporting is inaccurate. There are reasons why subjective measures of company performance have been, and will continue to be adopted. One is that they are very cost effective and because such performance measures can be gathered through questionnaires or interview surveys. Another is that many small companies do not have appropriate financial records, and even with such records, the data may be aggregated in a way that is not compatible with the level of analysis needed for human resource management (Wall et al., 2004).

### **Conclusion**

This study uses sales performance as the endogenous variable. To date researchers have still not reached a consensus as to whether objective performance offers similar or different measures as to subjective performance. This very uncertainty about the issue of the adoption of objective versus subjective performance measures makes it ideal to include both measures in this present study.

### **Conceptual Model**

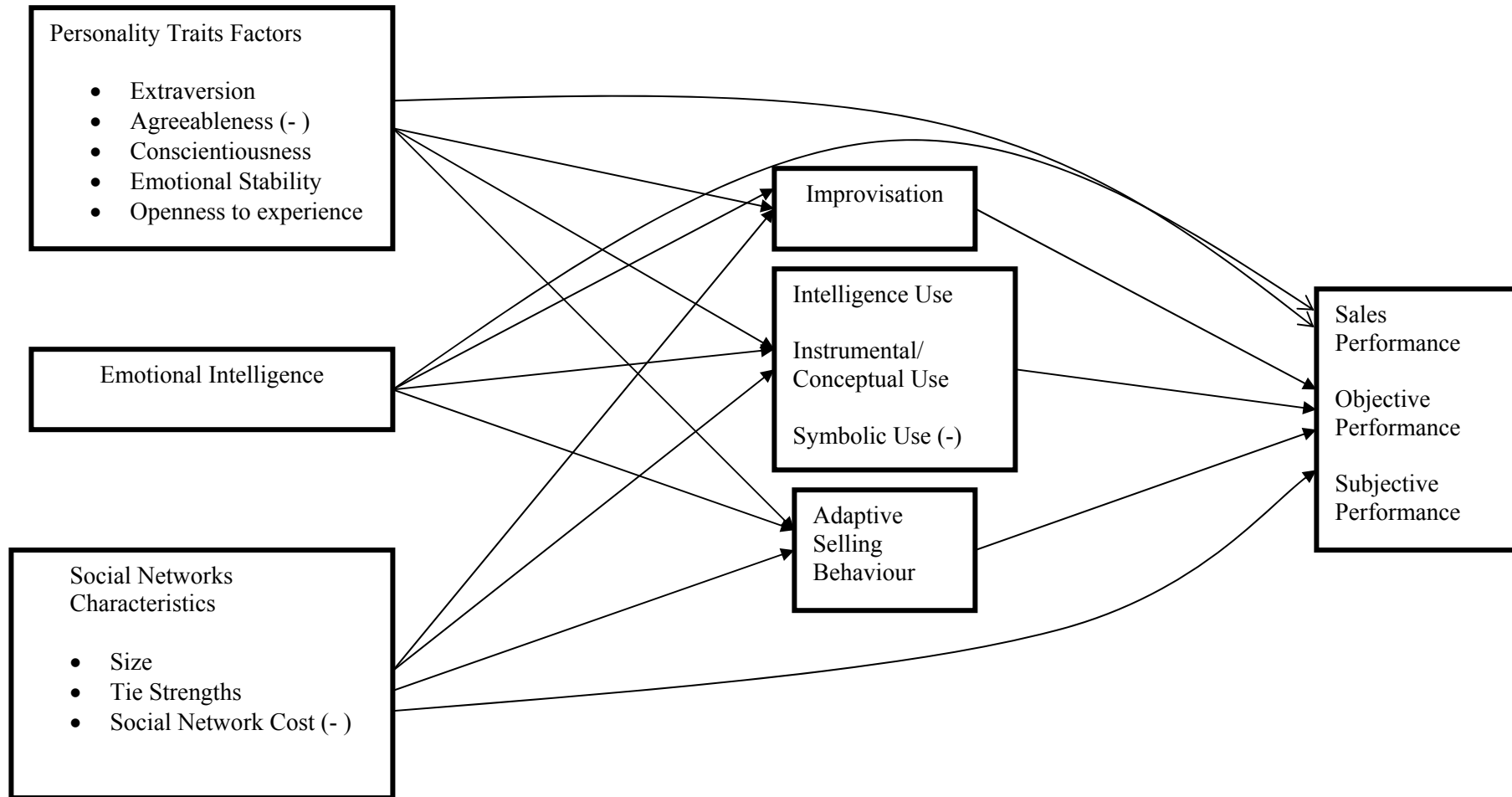
Summarising the discussions in earlier sections, I propose a conceptual framework that consists of three exogenous latent variables, three mediating

variables and a single endogenous latent variable. Figure 2.2 displays the conceptual model in a graphic form. Specifically, personality factors (that include extraversion, agreeableness, conscientiousness, emotional stability and openness to experiences), emotional intelligence and social structural factors (that include network size, tie strengths and network cost) form the exogenous variables. The endogenous variable is represented by account manager sales performance. Improvisation, market intelligence use and adaptive selling behaviours are the mediating variables that mediate the relationship between exogenous and endogenous variables.

### **Summary**

This chapter has reviewed the relevant literature used to build a theoretical foundation for the proposed conceptual framework. The exogenous (independent) variables such as personality traits, emotional intelligence, and social network were defined and discussed in the first section. The constructs for each variable were also discussed in detail. The second section discussed the concept of mediating variables i.e. market intelligence use, improvisation and adaptive selling behaviour. The final section discussed the endogenous (dependent) variable which is sales performance.

**Figure 2.2:**  
**Factors Driving Account Manager Sales Performance**



## **CHAPTER THREE**

### **BACKGROUND LITERATURE II**

This chapter focuses on guiding the Research Question Four. It aims at providing some understandings of Islamic culture in general and Malaysia in particular. The chapter begins by discussing the importance of studying Muslim managers' characteristics. Then it discusses the Islamic philosophy in general followed by Islam in Malaysia. Subsequently this chapter offers Islamic perspectives on manager's personality and characteristics.

#### **The importance of studying Muslim account managers' characteristics**

In recent years, Muslim communities have been rising steadily up the marketing agenda of many Western countries. There are about 1.5 billion Muslims world-wide (Central Intelligence Agency, 2005). Due to the economic prosperity of much of this group, the issue of Islam and the Muslim way of doing business has caught the attention of many scholars from both the Muslim and Western spheres (Abuznaid, 2006; Tayed, 1997; Williams & Sharma, 2005; Yap & Pecotich, 2006). Religiously speaking, many Muslims are bound to Islamic law or '*sharia*' when doing business both within the Muslim community and with non-Muslims. The *sharia* principles are quite complex, but in pertinent part, they generally mean that Muslims cannot take or receive interest, cannot invest in forbidden '*haram*' activities such as gambling, armaments, pornography, alcohol, or pork-based industries and they cannot indulge in speculation (Williams & Sharma, 2005).

The sharia law covers many areas of business, including management. The law has its own concepts, principles and comprehensive guides to management

(Moaddel, 2002). In terms of management approaches in Islam, Muslims are encouraged to adopt participative and consultative leadership styles '*al-shura*', honesty '*sidk*', assertiveness '*al-hazm*', understanding '*al-rahman*', teamwork '*al-amal al-jemae'e*', planning '*al-takhteet*' and control '*al-ishraf* and *al-mutabaa*' (Abuznaid, 2006). In another study, Kalantari (2005) claims that Islamic management emphasises justice, equality, social equity, democratic leadership, consultation, hierarchy, decentralisation, and a clear division of labour specialisation. The literature in Islamic management is not consistent when reporting whether Islamic principles and fundamental teachings are in line with modern and contemporary business approaches adopted by the West (Abuznaid 2006; Kuran, 2003; Lewis, 2002). A group of scholars such as Lewis (2002) and Abuznaid (2006) who are quite compassionate towards Islamic teachings claim that Islamic ways of doing business are compatible with the modern and contemporary approaches. Conversely, Kuran (2003) argues that Islamic teachings conflict with the working of modern and contemporary business.

Since the beginning of the twenty-first century, the relationship between Muslims and the West has come under a new nervous tension. Many Muslims see the West as full of opportunity and potential, yet lacking in moral and spiritual guidance. The West is wary of Muslims because it perceives that the Muslim world is run by religious and tradition-based practices instead of through more contemporary business practices like their own. In fact, Islam is viewed by some non-Muslims as being "a fatalist religion" (Tayeb, 1997, p.356). This misconception has led to suspicion and scepticism between the two worlds.

However, history has shown that the Western and the Muslim worlds are very interdependent such that their mutual economic growth depends heavily upon trade with each other; this independence was in play as early as the seventeenth century (Curtin, 1984). In a fairly recent trade deal, a US\$800b Islamic bond, '*sukuk*', from the Abu Dhabi Investment bank in Dubai that closed on December 4, 2006 had nearly 40 percent of its investors in Europe (The Economist, 2006). Such examples suggest that commerce in the Western and the Muslim worlds is interdependent, which, in turn makes it crucial for each of the groups to understand the other's business cultures, values and behavioural patterns. Near the end of the first decade of the twenty-first century, a tipping point between the two groups has been reached such that it is time for both to understand and learn about each other's way of doing business so as to develop better relationships.

In an effort to address this gap, several studies have emerged examining the business cultures of the Muslim world (Ali, 2004; 2005; Tayeb, 1997). However, the majority of the research in Muslim studies to date falls under the domain of Islamic financial concepts (Choudhury, 2007; Lewis, 2007; Saeed, 1995; Smith, 2002 ), and Islamic managerial approaches at the macro-level (Ali, 2005; Tayeb, 1997). To date, studies on Muslim managers' personality and characteristics and the factors that impact on their performance have been underdeveloped. A better understanding is, therefore, critical to improving the relationships between these two groups. This study is designed to contribute to sales management literature by comparing the characteristics of Muslim and non-Muslim account managers.

## **Conclusion**

Islam has evolved into one of the most powerful forces in today's political and business arenas. Therefore it will be useful to examine Muslim account managers' personality and characteristics in relation to managing sales so as to determine whether their personality and characteristics are influenced by Islamic teachings. This comparative empirical study testing the impact on sales performance of Muslim versus non-Muslim managers' personality traits, social network characteristics and emotional intelligence promises to be significant in contributing to the body of knowledge in sales management literature.

### **Islamic Philosophy**

In the following section, I will outline the philosophy of Islam – not in an attempt to provide a detailed theological review but to illustrate certain central concepts through examples. The crux of Islamic belief is that there is only one God, *Allah* and that *Muhammad* is his messenger (prophet). The followers of Islam are accountable to God and believe that their behaviour and deeds in this life will affect their treatment in the afterlife (Tsalikis & Lassar, 2009). The holy book, the *Quran*, and the *Sunnah* (the recorded sayings and deeds of *Muhammad*) provide the guidelines and teachings of Islamic law (Rice, 1999). Islam is not presented merely as a religion but as a way of life (Ali, 2005; Chapra, 1992; Farooqi, 2006; Rice, 1999; Simbar, 2008). Simbar summarises how this emphasis distinguishes Islam:

Thus Islam as a way of life differs from secularism. Secularism segregates religion from matters of society and state, limiting it only to the personal sphere and to places of worship. In contrast Islam has guidelines for all

aspects of life and demands its believers' commitment to all of its teachings (2008, p. 57).

The *Quran* and *Sunnah* provide ethical guidelines on the concepts of unity, justice and trusteeship. The concept of unity entails equality and brotherhood among people leading to cooperation and equal partnership in business transactions, while the concept of trusteeship emphasises sustainable development and the discouragement of conspicuous consumption (Tsalikis & Lassar, 2009). Islamic law also provides comprehensive guidelines on business management and trading (Ali, 2005). In fact, Islam considers "business as a useful social function" (Rice, 1999, p.349). Rice (1999) further explains this phenomenon by comparing Christianity and Islamic teachings on the issues of business and economics, arguing that in contrast with Christianity which encourages its followers to keep a critical distance from the economic system due to its morally ambiguous practices, Islam supplies practical socio-economic guidelines for participation in business, which includes detailed coverage of specific economic variables such as interest, taxation, circulation of wealth, fair trade, and consumption (Rice, 1999).

One of the fundamental bases of Islamic teachings is that Muslims are advised to practice moderation in all their affairs (Chapra, 1992; Farooqi, 2006; Rice, 1999). In addition, a goal of Islam is to lead a good life, which stresses brotherhood and socio-economic justice as well, requiring a balance of both material and spiritual needs (Farooqi, 2006). Moreover, Islam demands that its followers take care of the basic needs of the poor. In accordance with these concepts, in business management styled after Islamic law, a measurement such as person's sales performance, is not the main motivator (Tsalikis & Lassar, 2009). For example, "in Islam it is unlawful to



undercut another's price (whether that person be Muslim or non-Muslim) during a stipulated option to cancel period" (Rice, 1999, p.349). Additionally the law prohibits earnings based on interest (*riba*), a teaching which is interwoven with the concept of moderation and brotherhood (Chapra, 1992). In stressing the concept of brotherhood and the distribution of wealth, the law has comprehensive guidelines on taxation (*zakat* and *fitrah*). Islamic teachings also reject absolute equality because that concept disregards need, merit and contributions.

### **Islam in Malaysia**

Although all Muslims are bound to Islamic principles and laws, in practice the commitment to Islamic values and ethics varies according to circumstances, personal differences, political reality, and governmental interferences (Tayeb, 1997). For example, Muslims in Saudi Arabia adhere strictly to *sharia* law while Turkey has turned to secular laws for administrations of its economic affairs (Tayeb, 1997). Another unique country is Malaysia. The Malay Muslims that make up about sixty percent of the population in Malaysia have lived and practiced Islam for centuries. Although Muslims are in the majority, and Islam is the official religion, other religious beliefs such as Buddhist, Hinduism and Christianity are free to worship as they please. Unlike many other Muslim countries worldwide, the Malaysian constitution is based on English common law.

Despite the Malaysian legal system being based on English common law, Islamic values are incorporated heavily into their business dealings and practices (Endot, 1995). Islamic banks, insurance companies, clinics and hospitals, universities, restaurants and research foundations are some of the visible and widely known manifestations of such fundamental regeneration of Islamic values in Malaysia

(Tayeb, 1997). In fact, Malaysia is one of the pioneer Islamic countries that established Islamic banking and finance. Malaysia has demonstrated that Islam can be compatible with the process of modern nation building despite the fact that Islam was constituted as the official religion. The previous prime minister of Malaysia, Badawi describes Islam in Malaysia as “a moderate Islamic country” (The Economist, 2005, p. 66). The government of Malaysia attempts to promote Malaysia as having extremely pragmatic and materialistic Islamic principles through their flexible and bold reinterpretations, and thus transforming the Muslim into the ‘modern’ Muslim.

Religiously speaking, Islam has influenced almost every aspect of life of the Malays in Malaysia in the realm of values and behaviour (Mastor et al., 2000). Similar to other Muslim practice worldwide, the Malay Muslims in Malaysia rely heavily on religious sources such as *Quran* and *Sunnah*. In term of individual personality and behaviour, the Malay Muslims are portrayed as “..... polite and self-effacing and avoiding open conflict whenever possible.....” (Crouch, 1996, p. 165). Aligned with Islamic teachings, the Malay Muslims also have a strong sense of community spirit and they place emphasis on courteousness and helpfulness (Mastor, Jin & Cooper, 2000).

## **Conclusion**

Muslims generally believe that Islam is not merely a religion but also a way of life. Islam has comprehensive guidelines concerning business deals and management. These teachings, principles and guides are all documented in a body of Islamic law called ‘*sharia*’. Human values, ethics, and social values constitute a major foundation for Islamic business dealings. Muslims are encouraged to emphasise on business ethics, as well as broader humanistic and social values.

Translated into organisational behaviour, this emphasis should mean self-discipline, trustfulness, honesty, resolve, and loyalty, and should encourage Muslim account managers to use sound judgement and integrity in managing their business.

Nonetheless, in practice, the commitment to Islamic values and principles varies according to circumstances, personal differences, political reality, and, more importantly, the governmental interferences.

### **Personality and Behaviour**

Islamic literature maintains that “human personality and behaviour is shaped by upbringing, social and economic constraints, knowledge, and perceived opportunities” (Ali, 2005, p. 26). Debatably there are five work-related values that are deemed important to Muslims: (1) equality under God, (2) individual responsibility within a framework of co-operation with others, (3) a view that people in position of power should treat subordinates kindly, as if their subordinates are their brothers and sisters, (4) a certain fatalism, but also a recognition of personal choice, and (5) encouragement of consultation and of acquiring knowledge [intelligence] for the decision-making process (Ali, 2005; Tayeb, 1997).

In terms of individual personalities and behaviour, Islam identifies four levels of personality: ‘*Sawala*’ (a passion for temptations), ‘*Ammara*’ (a prone-to-evil psyche), ‘*Lawama*’ (self-reproaching) and ‘*Mutamainna*’ (the righteous) (Ali, 2005). These levels are in a state of flux and dynamism. A *sawala* person (or a person with a passion for temptations) has values that reflect his/her desire to achieve personal pleasure, fame, enjoyment and his/her recklessness. As a result, he/she espouses values that enhance power and material wealth, irrespective of humanistic, ethical and social values. A *sawala* person views ethics as situational and flexible in that ethics

that maximise his/her own welfare are sanctioned and those that stand in his/her way are avoided and denounced as obsolete and outdated. In relation to business, Islam views a *sawala* person as being obsessed with self-interest, an obsession which in turn restrains him/her from rationally capitalising on opportunities and engaging in effective organisational behaviour.

An *ammara* person (or a person with a prone-to-evil psyche) has a tendency to be aware that his/her soul induces him/her to do wrong doings and yet shows no resistance. An *ammara* person is also aware that he/she exists as part of a group or community. He/she recognises that maximising self-interest may dictate a manipulation of situations and events to achieve goals which in turn put him/her in a conflict situation. Therefore, a person under this category is arguably more likely to be selective and to thrive in politics and be adept at manoeuvring. Similar to a *sawala* person, “ethical values and social values are not held in high regard, except when they are seen as necessary for advancing personal interests” (Ali, 2005, p. 70). Nevertheless, a person under this category is willing to confess mistakes under pressure or when he/she understands the current conditions are no longer conducive to serving his/her interest.

A *lawama* person (or a self-reproaching person) is arguably sensitive to moral and ethical standards, aware of his/her weak tendencies, resists selfish pursuits, is troubled when things go wrong, and considers what happens a consequence of his or her own choices. A person belonging to this level of personality pays strict attention to ethical and social humanistic values and attempts to live within acceptable social and moral standards and a controlled zone of deviation.

The last level of personality according to Islamic perspective is *mutamainna*. The person in this level is completely in tune with all the values outlined by Islamic teachings. She or he is content and seeks perfection. She or he does not show any doubt in knowing the zone of righteousness and wrongfulness. According to their beliefs, the persons falling under this level are non-power seekers and receive comfort and pride from self-reflection, involvement and spirituality. They resist wrongdoing and promote good. More importantly, these various levels of personality, according to Islam, have distinct implications for business management. For example, if a *sawala* person is motivated extrinsically in dealing with business, sales performance and other extrinsic remuneration are marked as the drivers of his or her work performance (Ali, 2005). By contrast, for a *mutamainna* person, self fulfilment, achievement and actualisation would be primary drivers for work performance. Table 3.1 presents a summary of organisational implications for each of the discussed personality levels.

**Table 3.1: Organisational Implications of Personality Levels**

Area	<i>Sawala</i>	<i>Amara</i>	<i>Lawama</i>	<i>Mutamainna</i>
<i>Reward System</i>	Extrinsic rewards and personal incentives	Extrinsic rewards based on personal achievement and meeting organisational goals	Intrinsic rewards, though extrinsic are also sought. Good performance is publicly acknowledged and appreciated	Self achievement. Rewards from personal control over work and personal fulfilment
<i>Growth Opportunities</i>	Promotion and personal advancement is based strictly on performance	Promotion and personal advancement is based on the achievement of organisational goals and objectives	Allows exposure to teams and working with others for self advancement, to serve the organisation and show concerns for others	Communicates existing and possible opportunities that strengthen involvement with team, society and organisation
<i>Planning</i>	Stated in economic terms and measurable objectives	Stated in economic terms, specifies unacceptable deviations	Essential road map that identifies goals and possible rewards	General, and seeks to ensure involvement and participation in company affairs
<i>Communication</i>	Formal system with his/her manager closely involved	Formal system but actively seeks others' feedback	A mix of formal and informal	Open and informal
<i>Conflict</i>	Believes dysfunctional conflicts should be punished	Believes management keep a close eyes on conflict	Believes management explains the consequence of conflict	Seeks to move forward to optimising contributions to community and society

(Adapted from Ali, 2005, p.33)

### **Islamic Values and Their Impact on Behaviour and Personality**

In this section, I address the relationship between Islamic religious values and individual personality and behaviour. Drawing on Weber's (1954) rationalisation

theory, I argue first that the Islamic values influence the personality traits (extraversion, conscientiousness, emotional stability, openness to experience and agreeableness) and emotional intelligence of Muslim managers studied. Then, using McPherson, Smith-Lovin and Cook's (2001) homophily theory in social networks, I suggest that Islamic values affect the social network characteristics (i.e. tie strength, network size and network cost) of Muslim managers. Finally, I conclude that the effects of personality traits, emotional intelligence and social network characteristics on performance are different for Muslim managers and for non-Muslim managers.

Values have been defined by Rokeach (1973, p. 5) as “an enduring belief that a specific mode of construct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end state of existence”. Hofstede (1999) argues that values are culture-specific, never universal; they generally represent what is desirable and generally are a preference of specific states of affairs over others (Hofstede, 1999). Values have long been considered an important antecedent of individual behaviour (Bell, 2007; Glew, 2009; Harrison, Price, Gavin & Florey, 2002). Value systems are not permanent, but they, nonetheless are relatively stable over time (Rokeach, 1973). The literature has documented the effects of values system on personality (Allport, 1968; Roccas, Sagiv, Schwartz & Knafo, 2002), social systems (Schwartz, 1994), individual behaviour and work performance (Harrison et al., 2002), and team behaviour and performance (Bell, 2007).

There seems to be a general consensus among personal values theorists that one of these sets of values is religious values, or salvation (Rokeach, 1973; Richards, 1950). Religion is defined as a “set of beliefs, feelings, dogmas and practices that

provides an ethical and moral framework for understanding, motivation, and behaviour” (King, 2007, p. 104). A given religion is defined by the material and practices of its community of adherents: dogmas, sacred books, rites, worship, sacrament, moral prescription, interdicts and organizations (Johnson et al., 2001).

The relationship between religious values and individual behaviour is well established. Weber (1954) argued that religion influences the personality, attitudes, behaviour and productivity of individuals. The effects of religious values on behaviour stem from two main sources. First there are taboos and obligations which people honour (Mokhlis, 2006). For example, Islamic teaching forbids Muslims charging or paying interest (*riba*); therefore no Islamic firms are permitted to be involved in such a business. This practice illustrates how religion contributes to the formation of culture and norms, attitudes, and value of a society (Al-Habshi & Syed Agil, 1994). Religion is a fundamental element in most cultures. It is inevitably linked to many aspects of human life, including personality and behaviour (Heaven & Ciarrochi, 2007; Roccas, et al., 2002; Saroglou, 2002; Saucier & Goldberg, 1998; Zimbardo & Ruch, 1979). Others argue that religious faith is the foundation of ethical decision-making, and that it influences career choices and attitudes, as well as and personality (Emmons, Cheung & Tehrani, 1998; Mott, 1984; 1993; Weber, 1954).

The impact of religious values on behaviour and personality is not in doubt (Glew, 2009), and there is considerable documentation of a strong relationship between religious values and personality traits (Glew, 2009; Heaven & Ciarrochi, 2007; Roccas et al., 2002). For example, Saroglou (2002) conducted a meta-analysis of the relationship between religion and the Big Five personality factors. It revealed that religious values were related to conscientiousness, agreeableness and openness to



experience, and the directions are positive in all instances (Saroglou, 2002). Others have found that religious values correlate positively with positive traits such as kindness, compassion and forgiveness (Heaven & Ciarrochi, 2007; Peterson & Seligman, 2004). Based on these data, I argue that the religion of Islam affects the personality and behaviour of its believers through the formation of culture, norms, attitudes and values.

Therefore it is not surprising that the role of religion in the workplace, including public administration and management, has received attention (Garcia-Zamor, 2003; King, 2007; Fairholm, 2001). Marketing researchers have found that the religious values affect the use of cosmetics, clothing styles, communication approaches, and financial products (Diamond, 2002; Fauziah, Ramayah & Dzuljastri, 2008). Others have found that religious values affect social and political views, and recruitment and staffing (Abdullah, 1992; Poulson et al., 1998; Witkowski, 1999).

In a recent marketing study, Fauziah et al. (2008) assessed the effect of attitudes of Muslim and non-Muslim customers in Malaysia on their intention to use home financing. They found that a significant difference between the two groups on this intention, concluding that “two different marketing approaches are required in reaching these two groups” (Fauziah et al., 2008. p. 246). Sagiv and Schwartz (1995) compared the religious values of groups of Muslim, Jewish, and Christian managers and the impact of these values on their out-group social contacts. They found significant differences between the three groups; specifically they found that members of the Jewish group evidenced a significantly stronger positive correlation with their values and their readiness for out-group contacts than did members of the Muslim and Christian groups. Bamberger (1982) conducted a comparative study

between Muslim and non-Muslim small business owners in Pakistan and India. It was found that Muslim Pakistanis were less successful than Indians due to the influence of Islamic culture. For example the Islamic *syariah* (law) prohibits the payment of interest on bank loans; as a result many Islamic based small businesses were reluctant to get funding from the bank which then becomes a barrier to the firm's growth (Bamberger, 1982). Similarly, Smallbone, Fadahunsi, Supri and Paddison (1999) found that Muslim Pakistani have not performed as well as non-Muslim Pakistani businesses when the two groups were compared. Comparing Muslim and non-Muslim firms in South East Asia, Rafiq (1992) found that non-Muslim firms performed better because the Muslim firms were not allowed to charge interest and thus found it difficult to get funding from conventional banks (Rafiq, 1992).

Several other studies have focused on the differences between the values and behaviour of Muslim and non-Muslim managers. For example, in a study of the leadership styles of Muslim managers in the Arab world, Ali (2009) found that although the majority of the managers preferred a consultative style, a significant number mixed this style with an autocratic style that the non-Muslim Western managers tended to avoid. The author argues that these leadership styles might have been influenced by Islam's historical domination of politics in the Middle East. Several studies conducted in Malaysia uncovered positive relationships between Islamic values and managerial behaviour and decision making (Abdullah, 1992; Manshor, Jusoh & Simun, 2003). For example, Manshor et al. (2003) found that Muslim managers' behaviour and decision-making processes were influenced by Islamic values. They showed a strong preference for Muslim candidates in recruiting

new staff for their organisations, which the authors interpreted as attributable to the managers being influenced by the concept of brotherhood in Islamic teachings.

According to the theory of homophily as described in the social network literature, people with similar characteristics (e.g., class background, ethnicity, educational attainment, religious beliefs) tend to "...become localised in socio-demographic space. By interacting only with others who are like ourselves anything that we experience as a result of our position gets reinforced" (McPherson, Smith-Lovin & Cook, 2001, p. 415). The theory of homophily in social networks maintains that social network contacts are more among similar people rather than among dissimilar people. Several studies in theology have confirmed this proposition. For example, in the United States, Protestants are likely to be friends with and marry other Protestants (Kalminj, 1998). Similarly, Islamic law demands that Muslims marry only other Muslims. Studies in Pakistan and India have shown that Muslim managers tend to seek advice from others who embrace similar religious values (Smallbone et al., 1999). Altinay (2008) found that Turkish managers who practice Islam are more dependent on other followers of Islam for financial loans, signifying that the ties among people who share the Islamic religion are cemented through such loans and the transmission of market intelligence (Altinay, 2008).

## **Conclusion**

Based on the preceding discussion, I conclude that Islamic values play an influential role in societies where Muslims develop their own distinctive orientation towards all aspects of life, and that these orientations, in turn, profoundly influence the daily behaviour of Muslims. Therefore, it is reasonable to argue that the personality, emotional intelligence, social network size and network ties of Muslim

managers are also influenced by Islamic values, which in turn affect sales performance differently when compared to the non-Muslim managers.

### **Summary**

This chapter has presented the background literature of Islamic concept. It started by illustrating the interdependent elements between business in the West and the Islamic communities. Following that, it briefly outlined the Islamic concept to provide an understanding of Muslim culture in Malaysia. Finally, it briefly presented the Islamic perspectives on the personality and characteristics of good managers.

This following chapter will carry out the process of developing the variables and hypotheses from these constructs and propositions, and will offer operationalization of these variables for use in empirical research.

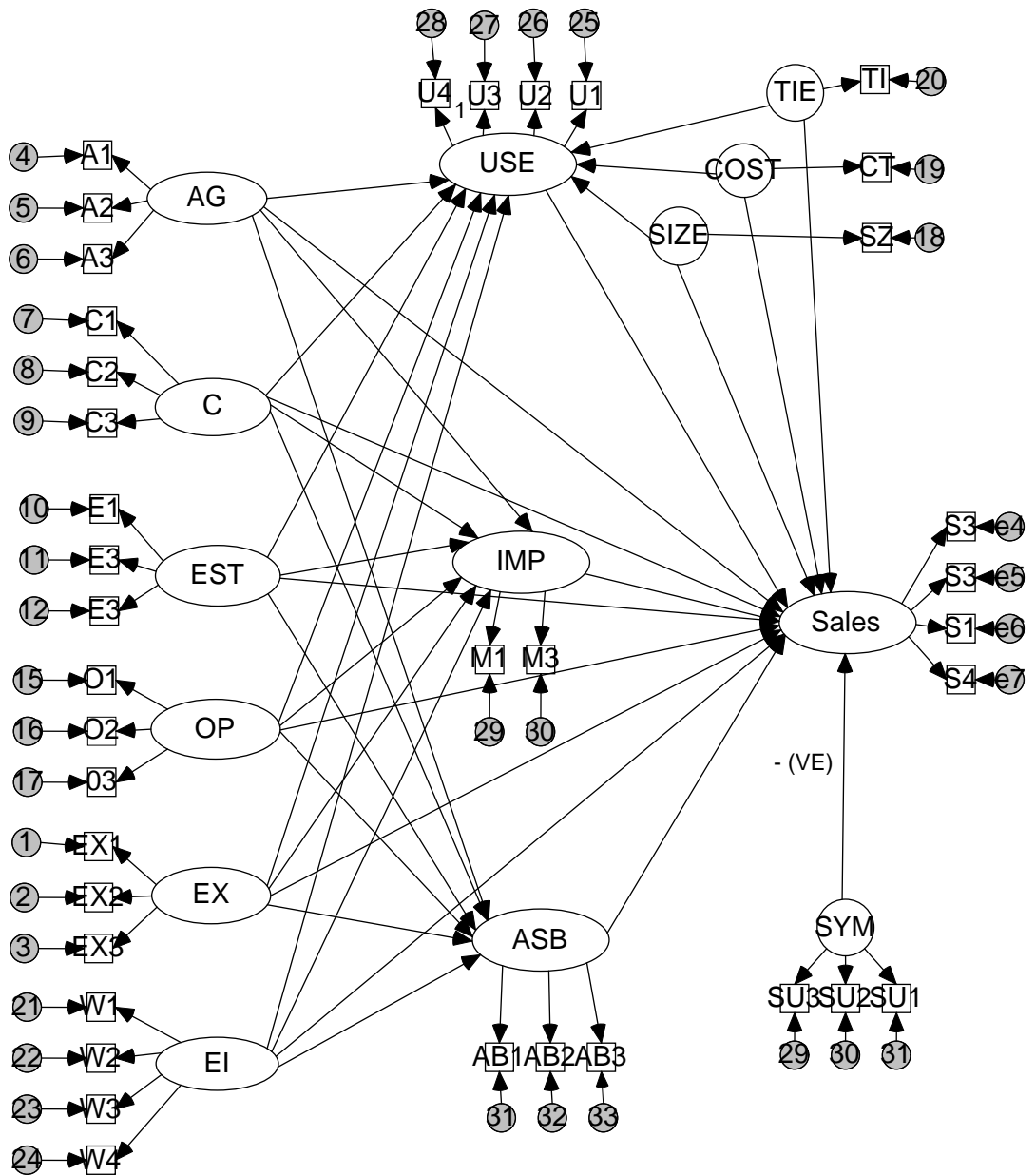
## CHAPTER FOUR

### RESEARCH MODEL AND HYPOTHESES

Chapter Three details the discussion of each variable that provides a guide to the development of research hypotheses for empirical testing. Figure 4.1 presents the proposed Structural Equation Modeling (SEM) for the research model. For the sake of clarity, I have not included correlation parameters in the diagram. There are three different types of relationship hypothesized in this study. First is the series of exogenous (X) variables on an endogenous (Y) variable, second is series of exogenous (X) variables on mediating (M) variables, followed by the mediating variables (M) on an endogenous (Y) variable. Details of Structural Equation Modeling (SEM) method will be discussed in Chapter Five.

An exogenous latent variable is synonymous with an independent variable (Byrne, 2001). In this current study, they are represented by personality traits: openness, conscientiousness, extraversion, agreeableness, and emotional stability (the opposite of neuroticism); social network factors: network size, network cost and tie strengths: and emotional intelligence. Similarly, an endogenous latent variable is synonymous with a dependent variable and in this study it is represented by a sales performance. Sales performance is measured by both objective and subjective measures. Mediating variables are embodied by market intelligence use, improvisation to sales presentation and adaptive selling behaviour.

**Figure 4.1: Proposed Model**



Note:

AG – Agreeableness

OP – Openness

SZ – Network Size

USE – Instrumental/Conceptual Use

COST- Network cost

SALES – Sales Performance

C – Conscientiousness

EX – Extraversion

ASB – Adaptive Selling Behaviour

SIZE- Network size

EST – Emotional Stability

EI – Emotional Intelligence

IMP – Improvisation

SYM – Symbolic Use

TIE – Tie Strength

## **Market Intelligence Use and Performance**

Numerous studies have shown the positive relationship between the instrumental and conceptual use of market intelligence and performance in various ways (Cui & Calantone, 2004; Jaworski & Wee, 1993; Verhees & Meulenberg, 2004). The link between instrumental and conceptual market intelligence use and decision making within the organisational behaviour is no longer an alien term to scholars and practitioners (Davis, 1991; Hart et al., 1994; Souchon & Diamantopoulos, 1996). In addition, instrumental market intelligence use is used to serve in assessing and tracking competitors, providing early warnings of opportunities and threats, supporting strategic planning, and supporting strategic decision- making which in turns improve performance (Boone & Kurtz, 2002; Menon & Varadarajan, 1992; Souchon & Diamantopoulos, 1996). Researchers and practitioners recognise the importance of instrumental and conceptual market intelligence use in that it not only serves as a direct tool in decision making but it goes beyond that. For example, instrumental and conceptual market intelligence use is used for affective use where intelligence is used to bolster levels of confidence in the decisions to be made (Menon & Wilcox, 2001). All in all, instrumental and conceptual market intelligence use has become a vital tool in any firms' decision making which, in turn, boosts the firms' performance. It is therefore, reasonable to predict instrumental and conceptual market intelligence use as a potential variable that mediates the relationship between each of personality traits, social networks characteristics and emotional intelligence, and sales performance. This leads to the following hypothesis:

*H<sub>1a</sub>: Market intelligence instrumental and conceptual use is positively related to sales performance.*

Although the literature is not consistent in reporting the negative effect of symbolic use, several researchers such as Diamantopoulos and Souchon (1999) and Maltz, Souder and Kumar (2001) claim that symbolic use of market intelligence reflects a “bad use” and “not appropriate” which in turn would be detrimental to performance. This is due to the fact that when intelligence is used symbolically, it is distorted and is not consistent with the declared purpose (Menon & Varadarajan, 1992; Toften, 2003). Others also claim that symbolic use of intelligence is not expected to create new knowledge or improve an existing knowledge base (Toften & Olsen, 2003). Therefore, the following is expected:

*H<sub>1ai</sub>: Market intelligence symbolic use is negatively related to sales performance*

### **Adaptive Selling Behaviour and Sales Performance**

The relationship between adaptive selling behaviour and sales performance outcomes is well acknowledged in the sales literature (Anglin et al., 1990; Giacobbe et al., 2006; Sujan et al., 1994; Vorhies & Badovick, 1996; Weiss et al., 1986). For example several studies have found that adaptive selling behaviour exerts a positive influence on a salesperson’s regular performance, on closing ratios, and on the effectiveness of a sales department and unit (Boorum, 1994; Johlke, 2006; Marks et al., 1996). However, the practice of adaptive selling arguably would be successful provided the salespeople are predisposed to its facets such as the recognition of different selling approaches and the ability to use them, and the collection of information about the sales situations to facilitate this adaptation (Spiro & Weitz,



1990). The information about the market plays important roles in the successful of adaptive selling practices which in turns influences the sales performance (Spiro and Weitz, 1990). Based on this finding and argument, it is fair to predict that adaptive selling behaviour impacts on sales performance, and subsequently mediates the relationship between each of personality traits, social networks and emotional intelligence, and sales performance. Therefore the following is hypothesised;

*H<sub>1b</sub>: Adaptive selling behaviour is positively related to sales performance*

### **Improvisation and Sales Performance**

Although the evidence of the relationship between improvisation and sales performance is scarce in marketing literature, several studies in organisational learning literature have theorised the positive outcomes of improvisational behaviour on innovation and change management, on organisational learning, on new product development and on team performance (Crossan et al., 2005; Leybourne, 2006; Miner et al., 2001; Moorman & Miner, 1998; Poolton & Ismail, 2000). In addition several other studies have provided empirical evidence on the positive relationship between improvisation and performance (Bergh & Lim, 2006; McDaniel Jr., 2007; Vera & Crossan, 2005).

Traditionally, salespeople relied mostly on a strictly defined repetitive process such as the standard sales presentation process (Sujan & Sujan 1986). In a highly competitive and uncertain environment, the act of improvisational behaviour allows the salespeople to respond to unanticipated customers' needs, move forward and eventually close the sales. Given the conceptualisations of improvisation, salespeople with high improvisational skills arguably are able to respond constructively to new

needs, are driven to achieve a desired performance, can generate ideas, incorporate changes quickly and easily, and communicate effectively and convincingly during sales presentation which eventually increases the sales.

Therefore, it is fair to hypothesise the following;

*H<sub>1c</sub>: Improvisation is positively related to sales performance*

## **Personality Traits and Performance**

### **Openness and Performance**

Openness to experience is measured by being original, creative, imaginative, curious and broad minded, whilst the low scorers are defined as being conventional and uncreative (Costa & McCrae, 1992). The existing studies about openness and its impact on performance have identified mixed findings (Barrick & Mount, 1991; Judge et al., 1999; Mount, Ilies & Johnson, 2006; Thoresen et al., 2004). For example, Mount et al.'s (2006) empirical study observed that people who are low in openness engaged in more deviant behaviour such as being rude and abusing break time. In contrast, Judge et al. (1999) suggested that open individuals are unhappy in conventional occupations and prone to job hopping (Judge et al., 1999). Therefore, it is not surprising that some have found openness to be negatively related to earnings (Gelissen & de Graaf, 2005) and extrinsic career success in term of salary level (Seibert et al., 2001). In contrast, Barrick and Mount (1991), found positive correlation between openness to experience and the training criterion which subsequently contribute to positive work performance. In their study, they observed that employees high on the openness dimension may be more ready and willing to engage in new learning experiences than those who are lower in openness (Barrick & Mount, 1991). Similarly Bing and Lounsbury (2000) noted a similar pattern when

observing the job performance of the U.S. – based Japanese manufacturing companies (Bing & Lounsbury, 2000). Thoresen et al. (2004) also found a positive relationship between openness to experience and work performance. It makes intuitive sense though that a person who is creative and has the tendency to gather new experience and acquire new skills should be better a performer on the job. Therefore I posit that:

*H<sub>2a</sub>: Openness is positively related to sales performance.*

In comparison with the other variables of the Big Five, openness has the least meta-analytic evidence that shows positive correlation with job performance (Waldman et al., 2004). To make it worst, the direct relationship between openness and job performance indicated relatively weak, although significant correlations (Gelissen & de Graaf, 2005). One possible explanation is that the link between openness and work performance could also be found indirect which in turn suggest another variable could mediate the relationship. Studies found that a person who scores high on openness is more likely to have an appetite for exploring new perspectives and the tendency to develop genuine interest in gathering and using market intelligence (Costa & McCrae, 1992; Digman, 1990). This suggests that market intelligence use may play a role as a mediating variable that links the relationship between openness to experience and performance. It is also fair to argue that the intelligence-processing skills, problem solving-skills and high creativity use by an account manager with high level of openness to experience would be especially helpful to improvising and adapting his or her sales presentation in meeting the need of customers which in turn, would increase sales performance.

Therefore, I hypothesise that:

*H<sub>2b</sub>: The positive effect of openness on sales performance is mediated by market intelligence use.*

*H<sub>2c</sub>: The positive effect of openness on sales performance is mediated by improvisation.*

*H<sub>2d</sub>: The positive effect of openness on sales performance is mediated by adaptive selling behaviour.*

### **Conscientiousness and Performance**

Individuals who are conscientious maintain socially prescribed impulse control such as thinking before acting, delaying gratification, planning, prioritising, and following rules and norms that enhance task performance (John & Srivastava, 1999; Witt, 2002). Conscientious individuals are also observed to have long-term plans, technical expertise, and an organised support network (McCrae & Costa, 1999). Explicitly, conscientiousness is manifested in three related facets-achievement orientation (hard working and persistent), dependability (responsible and careful) and orderliness (well planned and organised) (Costa & McCrae, 1992b). Endorsement of achievement orientation and orderliness reflects the belief that work is a necessary activity and a duty under conscientiousness. Conscientiousness is the trait that has been drawn upon as a main psychological resource in which achievement is an important value (Gelissen & de Graaf, 2005); those situations are especially in the context of work and learning. According to the meta-analytic studies, among the big five variables conscientiousness is the most consistent and potent that positively correlates with job performance and with career success (Mount & Barrick, 1995; Salgado, 1997). Conscientiousness also seems to enable people to obtain promotion into more complex and prestigious jobs (Judge et al., 1999). Therefore I hypothesise that:

*H<sub>3a</sub>: Conscientiousness is positively related to sales performance.*

If conscientious individuals are hard working, achievement oriented, well planned and organised (Costa & McCrae, 1992b), they would have done their homework about a particular clients well prior to approaching and making a sales presentation. For example, they would have gathered and used information to study their customers' needs and wants. Hence it is fair to hypothesise the followings;

*H<sub>3b</sub>: The positive effect of conscientiousness on sales performance is mediated by market intelligence use.*

*H<sub>3c</sub>: The positive effect of conscientiousness on sales performance is mediated by improvisation.*

*H<sub>3d</sub>: The positive effect of conscientiousness on sales performance is mediated by adopting adaptive selling behaviour.*

### **Extraversion and Performance**

Extraversion is measured by assertiveness, activeness, social dominance, ambition, tendencies toward action, and the experience of positive affect (Costa & McCrae, 1992). Therefore, those who report high scores on extraversion must be more likely to possess the need to occupy a central position in their work environment so they can satisfy their ambitious and domineering tendencies (Bonzionelos, 2004). Barry and Stewart (1997) suggest that extraverts perform well in sales jobs. Empirical studies have also found that extraversion correlates with performance in jobs involving social interactions such as in sales and managerial role (Barrick & Mount, 1991) but not in customer services, academic performance and research productivity (Chammoro-Premuzic & Furnham, 2006; Eysenck & Eysenck, 1985; Vinchur et al., 1998).

It should be noted though, that because extraverts tend to be dominant and assertive, competition may emerge for leadership roles, cohesion may suffer, and conflict may arise in a team (Bono et al., 2002). Based on this argument, it is not surprising that Walderman et al., (2004) found that extraversion is not correlated with group performance. In this study, however, the focus is on personal performance and not team achievement, therefore it is fair to predict extraversion based on the first argument. Summarising the discussions, I expect the following:

*H<sub>4a</sub>: Extraversion is positively related to sales performance.*

Extraversion is also characterised by a tendency to be optimistic and a tendency to reappraise problems positively (Costa & McCrae, 1992). Furthermore, extraversion tends to be associated with the use of rational, problem-solving coping strategies and with social support seeking (Bakker, Van Der Zee, Lewig & Dollard, 2006). The tendency of extraverts to seek interactions with other people may also reinforce processes of gathering and acquiring market intelligence from others (Bakker et al., 2006) which in turn increases the use of market intelligence. This indicates that market intelligence use may play a role as a mediating variable between extraversion and sales performance. Adaptive process such as adaptive selling behaviour and improvisation to sales presentation may also provide the intermediate link. Having adaptive sales presentation skills often contribute to closing of sales which in turn increased the sales performance (Sujan, et al., 1986). Hence the followings are posited;

*H<sub>4b</sub>: The positive effect of extraversion on sales performance is mediated by market intelligence use.*

*H<sub>4c</sub>: The positive effect of extraversion on sales performance is mediated by improvisation.*

*H<sub>4d</sub>: The positive effect of extraversion on sales performance is mediated by adaptive selling behaviour.*

### **Agreeableness and Performance**

Agreeableness is an interpersonal orientation ranging from courteous, good-natured, flexible, cooperative, forgiving (Waldman et al., 2004), sympathetic, eager to please others and gullible at one extreme (Gelissen & Graaf, 2005) while low agreeableness on the other extreme is associated with antagonism, rudeness, suspiciousness, selfishness and manipulative (Rabinowits & Hall, 1977).

Agreeableness seems to be the most relevant to job performance that requires joint action and collaboration such as working in a team (Mount et al., 1998). To be an effective team player, one has to have a fairly high level of interpersonal interaction, and it requires selflessness, tolerance, and flexibility. Agreeable persons tend to deal with conflict cooperatively or collaboratively, strive for common understanding, and maintain social affiliations (Digman, 1990).

With respect to the association between agreeableness and market intelligence use, the prediction is not a straightforward as in conscientiousness (Gelissen & Graaf, 2005). Since agreeable persons are associated with cooperation (trusting of others and caring) as well as likeableness (good natured, cheerful, and gentle), it can be argued that being an agreeable person may lead to more work success particularly in acquiring and using market intelligence (Liu & Cormer, 2006). On the other hand, extremely agreeable persons may sacrifice their time in pleasing others over his or her own work. For example, Judge et al. (1999) observed that agreeableness is negatively related to extrinsic career success. It is fair to conclude that an individual who scores

high on agreeableness would prioritize relationships with her/his superior hence they are likely to neglect their own work in gathering and using market intelligence which in turn would impact sales performance in an opposite manner. This leads to the statements of H5:

*H<sub>5a</sub>: Agreeableness is negatively related to sales performance.*

*H<sub>5b</sub>: Agreeableness is negatively related to market intelligence use.*

*H<sub>5c</sub>: Agreeableness is negatively related to adaptive selling behaviour.*

*H<sub>5d</sub>: Agreeableness is negatively related to improvisation.*

Please note that for the mediation to occur (this will be discussed in detail in Chapter Five), the impact of exogenous on endogenous and the impact of mediating variable on endogenous has to be in the same direction. Since the impact of agreeableness (exogenous) on performance (endogenous) is in the opposite direction to the impact of market intelligence use (mediating variable) on performance, no mediation is expected to exist for the relationship between agreeableness and performance.

### **Emotional Stability and Performance**

The psychology literature brands the neurotic as the ‘bad guy.’ Neurotics lack of emotional stability and are likely to feel a great degree of anxiety or insecurity, have a high degree of nervousness, has a low degree of calmness and tendencies to experience negative emotions (Digman, 1990). They can also become easily embarrassed and be quick to anger in the course of communication with other group members (Waldman et al., 2004). Due to their tendency to interpret experiences in a negative light, an individual who scores high on neuroticism (low in emotional stability) is less likely to develop positive attitude towards their work and performance (Malouff et al., 1990; Judge & Ilies, 2002). A person who scores high in



emotional stability tends to have a positive relationship with work performance (Barrick et al., 2001). Therefore, I predict:

*H<sub>6a</sub>: Emotional stability is positively related to sales performance.*

Since a person whose elevation in emotional stability is high, is self confident and is able to communicate, and relate well to customers (Molleman, 2005; Van Vianen & De Dreu, 2001), it is fair to argue that this individual is able to adapt her/his sales presentation styles in any given sales job in order to fulfil the sales targets (goals) which, in turn, increases the sales performance. In essence, this suggests that improvisation in sales presentation and adaptive selling behaviour mediate the relationship between emotional stability and sales performance. Therefore, the following hypotheses are posited:

*H<sub>6b</sub>: The positive effect of emotional stability on sales performance is mediated by market intelligence use.*

*H<sub>6c</sub>: The positive effect of emotional stability on sales performance is mediated by improvisation.*

*H<sub>6d</sub>: The positive effect of emotional stability on sales performance is mediated by adaptive selling behaviour.*

### **Emotional Intelligence and Performance**

Given that emotional intelligence (EI) was initially made known through a series of trade books (Goleman, 1995;1998) with little or no analytic evidence established, it is not surprising that EI has received robust criticism by a few scholars. For example, EI is branded as an elusive and a vague concept and more myth than science (Matthew, Zeidner & Roberts, 2002). These initial negative opinions on EI, according to Mayer et al. (2004) resulted from the lack of empirical research

evidence. Although there is much argument surrounding the nature and the validity of emotional intelligence, there have been several empirical studies that have shown positive association between emotional intelligence and performance (e.g. Mayer et al., 2002; Dulewicz et al., 2005; Semadar, Robins & Ferris, 2006).

A growing body of research suggests that emotional intelligence provides the basis of competencies important in almost any job (Cherniss, 2000). In fact, EI is claimed to be a better predictor of success than the traditional measures of general intelligence, IQ (Goleman, 1995; 1998; Pellitteri, 2002). The higher up anyone goes in an organisation, the more important emotional intelligence becomes, compared to IQ and technical skills (Goleman et al., 2002). More recently, Dulewicz et al. (2005) study provides some initial evidence that emotional intelligence (9.2%) makes the greatest contribution to overall performance when compared to general intelligence (5.0%) and managerial competencies (6.1%). Emotional intelligence can enhance job performance of individuals even with low cognitive skills through the quality of social relationships (Cote & Miners, 2006). For example, if job performance is not attained through cognitive intelligence, it can be attained through emotional intelligence via multiple complementary mechanisms such as interactions with co-workers, supervisors and support staff (Cote & Miners, 2006).

A person with high emotional intelligence may employ their abilities to develop good social relationships that can boost task performance through advice and social support (Wong & Law, 2002; Pearce & Randel, 2004). For instance, the ability to be empathetic and understand both one's own emotions and the emotions of others would enable one to establish rapport with and effectively manage subordinates (Semadar et al., 2006). Further, the ability to manage and control emotional states

such as anger and frustration can be conducive to a more stable working environment (Newsome et al., 2000). In addition, Cote and Miners (2006) also reveal that emotional intelligence is an important predictor of job performance due to its interactive effect with cognitive intelligence. Previous research has also explicitly proposed that emotional intelligence relates to task performance in independent and complementary linear ways (Mayer et al., 2000; Cote et al., 2003).

Bardzil and Slaski (2003) suggest that if a manager has interpersonal skills (one of the emotional intelligence constructs), he or she can evaluate the emotional states of the customers in order to identify their needs (Chrusciel, 2006). As a result, this could lead to gaining competitive advantage. This suggestion is supported by Longhorn's (2004) empirical study in the restaurant industry. The study, that uses Bar-On EQ-i (1997) measures found that emotional intelligence is positively related to customer satisfaction which, in turn, increases the performance of the firm (Longhorn, 2004). Interestingly, the study also discovers that emotional intelligence is able to predict team turnover. Summarising the discussion above, I hypothesise the following:

*H<sub>7a</sub>: Emotional intelligence is positively related to sales performance.*

*H<sub>7b</sub>: The positive effect of emotional intelligence on sales performance is mediated by market intelligence use.*

*H<sub>7c</sub>: The positive effect of emotional intelligence on sales performance is mediated by improvisation.*

*H<sub>7d</sub>: The positive effect of emotional intelligence on sales performance is mediated by adaptive selling behaviour.*

## **Social Network and Market Intelligence Use and Performance**

Since there are limited empirical studies linking social network and market intelligence use strategies in the sales management literature, this study will adopt literature from the organisational networks and organisational learning empirical studies to support the arguments.

### **Tie Strength**

Tie strength represents the closeness and frequency of interactions between organisational members (Granovetter, 1973). Previous studies on tie strength typically classify the relation between social actors as being linked via either a strong or a weak tie (Granovetter, 1973; Wellman, 1992). While there are substantial arguments about the relative advantages of these two different types of ties, there are studies that have found both tie strengths influence information acquisition and use (Anderson 2007; Granovetter, 1973; Burt, 1987; Uzzi, 1996; Hansen, 1999, Ridfleisch & Moorman, 2001). For example, some research has successfully demonstrated the relationship between weak ties and information acquisition and use in finding a job (Granovetter, 1973), individual advancement (Burt, 1992), and diffusion of ideas, whilst strong ties are found to have an impact on the information flow among individuals in both organisational (Hansen, 1999) and inter-organisational settings (McEvily & Zaheer, 1999; Uzzi, 1999). In more recent studies, Anderson (2007) also found stronger average tie rather than weaker average tie strength led to more information gathering. Studies that support strong ties argue that the strength of relationship possessed by individuals in organisations affects the ability to acquire information (intelligence) successfully (Hansen, 1999; Ridfleisch & Moorman, 2001). The information is difficult to acquire if the providers are unwilling

to share, but when a strong tie exists, an organisational member is more likely to invest the time and effort in meeting the information requirements (Hansen, 1999). Individuals who communicate with each other frequently or who have a strong emotional attachment are more likely to share knowledge than those who communicate infrequently or who are not emotionally attached (Reegans & McEvily, 2003). A strong interpersonal connection is expected to have a positive effect on the intelligence acquisition and use which, in turn, improves performance. Given the evidence of the effect of tie strength on information [intelligence] acquisition and transfer, it is fair to argue that tie strength in the present study would impact on the use of market intelligence which in turn influences sales performance. Therefore, I hypothesise that:

*H<sub>8a</sub>: The average tie strength is positively related to sales performance.*

*H<sub>8b</sub>: The positive effect of the average tie strength on sales performance is mediated by market intelligence use.*

### **Network Size**

The evidence of the positive relationships between network size and performance is clearly documented in the literature (Anderson, 2007; 2008; Burt, 2000; Gabby & Leenders, 2001; Galunic & Moran, 1999; Ingram & Robert, 2000). For example, in the marketing literature, Galunic and Moran (1999) saw a positive relationship between network size and firm's revenue. In another study it is claimed that network size indirectly influences economic action which, in turn, increases firm performance (Batjargal, 2003). Ingram and Roberts (2000) studied the social networks behaviour among hotel managers in Sydney and found that the density of friendship and network size affects the performance of the organisation. Hotel managers engaged in friendship networks shared customers and best practices, which

eventually increased the profitability of their organisations. These findings suggest that networks promote transfer of intelligence which allows managers who face similar market conditions to learn from each other's experience. Moreover in the organisational learning literature, several studies have found a positive relationship between network size and ease of knowledge transfer (Reagans & McEvily, 2003), network size and information gathering (Anderson, 2007), network size and organisational learning (Morrison, 2002), and network size and information benefits (Anderson, 2008). It is argued that a person reaps informational benefits by having a large network of non-redundant information contacts (Podolny & Baron, 1997) and a large network of non-redundant contact can also provide diverse and unique information (Burt, 1992).

Summarising the discussion thus far, the evidence of the impact of network size on the acquisition, transfer of intelligence and firm performance is clear. Hence, I propose that network size affects market intelligence use and the following hypotheses are posited:

*H<sub>9a</sub>: Network size is positively related to sales performance.*

*H<sub>9b</sub>: The positive effect of network size on sales performance is mediated by market intelligence use.*

### **Cost**

Finally I propose that there are costs involved in asking others for assistance (Borgatti & Cross, 2003). The process of acquiring market intelligence represents a cost to the provider of the knowledge, in terms of time and effort spent helping others to transfer the intelligence (Reagans & McEvily, 2003). In social relation theory, the involvement of cost is acknowledged where favours and gifts are exchanged and the terms of exchange are often diffuse (Adler & Kwon, 2002). Adler and Kwon (2002,

p.19) cite “a favour I do for you today is made in exchange for a favour and at a time yet to be determined.” An obligation resulting from an exchange is considered a form of cost (Adler & Kwon, 2002). Another potential significant cost of seeking information from others in an organisational setting lies with the interpersonal risks an individual takes by admitting ignorance on a given topic. Esteem and reputation issues come into play in seeking help from others as we are motivated to maintain positive images and so often seek out information that confirms a positive sense of self (Borgatti & Cross, 2003).

Hence, the following hypotheses:

*H<sub>10a</sub>: Network cost is negatively related to sales performance.*

*H<sub>10b</sub>: Network cost is negatively related to market intelligence use.*

### **Islamic Values and Managers' Performance**

There seems to be a consensus among scholars that religious beliefs influence the values system of individuals (Eysenck & Eysenck, 1985; Roccas et al., 2002; Weber, 1954). Based on these arguments I propose that Muslim account managers' personality, network size and ties, and emotional intelligence are affected by their Islamic beliefs and values, and these values subsequently play a role in influencing their work performance. Given the paucity of literature in sales management and organizational learning that examine the effect of Islamic values on firm and individual performance, I draw evidence from economic literature in presenting my arguments. The evidence from the economic literature generally supports the impact of Islamic values on economic performance (Barro & McCleary, 2003; Brammer, Williams & Zinkins, 2007; Noland, 2005). For example, Barro and McCleary (2003) found beliefs in Islam to be negatively associated with individual economic growth.

Several other studies found similar result of those of Barro and McCleary's study citing that in ability for the Muslims firms to attract customers from outside of the religious group, poor advice and limited capital were the key constraints limiting the growth of the firms (Altinay, 2008; Barrett et al., 2002; Jamal, 2005).

In a study of religion and attitudes toward social responsibility, Brammer, William and Zinkin (2007) found that the importance of economic responsibility and the attendant focus on material well-being was significantly more important to Muslims than to followers of other religions. Although the acquisitions of wealth and the profit motive are acceptable in Islam, Muslims are obliged to provide the poor with enough material goods or money to meet their needs (Cole, 2009; Farooqi, 2006; Rice, 1999). Islamic teachings stress justice, brotherhood and socio-economic justice as well as a balance between material and spiritual needs (Farooqi, 2006). Additionally Islam demands that its followers be moderate in all their dealings (Rice, 1999). Thus, it seems reasonable to hypothesise that Muslim account managers are more likely than non-Muslim managers to foster a culture aimed at building morale and cohesion with less of a focus on competitiveness and performance. Therefore, the following hypotheses are posited:

*H<sub>11i</sub>: The effect of extraversion on sales performance is weaker for Muslim managers than for non-Muslim managers*

*H<sub>11ii</sub>: The effect of conscientiousness on sales performance is weaker for Muslim managers than for non-Muslim managers*

*H<sub>11iii</sub>: The effect of emotional stability on sales performance is weaker for Muslim managers than for non-Muslim managers*

*H<sub>11iv</sub>: The effect of openness on sales performance is weaker for Muslim managers than for non-Muslim managers*

*H<sub>11v</sub>: The effect of agreeableness on sales performance is weaker for Muslim managers than for non-Muslim managers*



*H<sub>12</sub>: The effect of emotional intelligence on sales performance is weaker for Muslim managers than for non-Muslim managers*

The theory of homophily argues that the social contacts, social network size and social ties are numerous for similar people rather than for dissimilar people (McPherson et al., 2001). I argue that the same principle applies to Muslim managers; specifically, Muslim managers would be expected to limit their social ties and size to other managers who are also Muslims. If the network of Muslim managers is thus limited to Muslims, there would be redundancy<sup>1</sup> in the managers' social network (Burt, 1992), which, in turn, might lead to a greater intelligence overlap resulting in a smaller amount of intelligence transferred and used. Because the extent of the transfer and use of market intelligence depends on the size of the networks, it is reasonable to argue that individuals in smaller network size would have fewer alternatives for obtaining valued market intelligence and resources: this limitation, in turn, would adversely affect their performance. Therefore, the following hypotheses are posited:

*H<sub>13i</sub>: The effect of social network size on sales performance is weaker for Muslim managers than for non-Muslim managers*

*H<sub>13ii</sub>: The effect of average tie strength on sales performance is weaker for Muslim managers than for non-Muslim managers*

*H<sub>13iii</sub>: The effect of network cost on sales performance is weaker for Muslim managers than for non-Muslim managers*

---

<sup>1</sup> Burt (1992) uses the term 'structural hole' in discussing the impact of redundancy in social network size.

## **Summary**

Chapter Four presented the series of specific hypotheses. Detail hypotheses are presented in a model form in Figure 4.1. Seven exogenous variables, namely extraversion, agreeableness, conscientiousness, emotional stability, openness to experience, social network and emotional intelligence, are examined in this study. Objective and subjective sales performance play a role as the endogenous variable. The relationships between exogenous and endogenous are mediated by three variables: market intelligence use, improvisation in sales presentation and adaptive selling behaviour. Chapter Five presents the methodology used to test the research model and hypotheses. It details the research setting, measures, and statistical approach used in the study.

## **CHAPTER FIVE**

### **RESEARCH METHOD**

This chapter aims to describe the research design and data analysis techniques in four sections. The first section provides an overview of the research design. The second section details the sampling plan and administration procedures. The third section offers a detailed review of the measures employed in the study. Finally, the fourth section discusses the statistical techniques utilised to analyse the data and test the proposed hypotheses.

#### **Overview of the Research Design**

As the decisions made in this study were made by individuals and not a group, the unit of analysis for achieving the study's objective is the individual (Taylor, 1987). The primary aim of this study is to test the effect of account managers' personality, emotional intelligence and social network characteristics on sales performance. Secondly the study seeks to test the possible variables that mediate the relationship between independent and dependent variables. Finally the study aims to compare the effect of independent variables on dependent variables between Muslim and non-Muslim account managers. Therefore, testing the research model presented in the earlier chapter requires (1) a setting that has both Muslim and non-Muslim account managers, (2) an industry that uses relatively high levels of market intelligence, and (3) an industry that has a broad focus on sales and customer retention.

#### **Research Site and Sample**

I found the ideal research site for this study in a financial industry in Malaysia. The selected firms were those registered as finance companies in Malaysia.

For this study, I only focused only on a single industry that is finance to allow for controlling the discrepancies in business trade and cultures (Souchon & Diamantopolous, 1996). Specifically, the sampling frame for this study is account managers who are currently dealing with financial products such as shares, bonds, foreign exchange, future markets and unit trusts. I selected these account managers because they manage similar product ranges and are governed<sup>2</sup> by the same financial regulations in Malaysia. There are two types of fund managers in Malaysia: (1) a *remisier* who is generally a commissioned agent who receives a commission for each transaction handled (Kuala Lumpur Stock Exchange, 2007), and (2) salaried fund managers who is attached with the finance companies (or banks) on a full time basis. Regardless of their earnings, these account managers maintain a portfolio ranging from organisational (also known as corporate clients) to individual clients. Fund managers in Malaysia play important roles on the Kuala Lumpur Stock Exchange (KLSE) not only in terms of increasing investments, but also by educating and advising clients and investors (Kuala Lumpur Stock Exchange, 2007). Hence, it is fair to assume that they are experts in acquiring and using market intelligence in their day-to-day operations.

I obtained the list of these financial firms from the Central Bank (*Bank Negara*) and Kuala Lumpur Securities Commission. I also contacted the Remisier Association in Kuala Lumpur to verify the total number of registered *remisiers* in Malaysia. A total of 37 financial institutions were registered with Central Bank (*Bank Negara*) and Kuala Lumpur Securities Commission as of September 2007, each of which employs more than 200 account managers totalling approximately 9,500

---

<sup>2</sup> All *remisiers* in Malaysia need to register and obtain a dealer's licence with Kuala Lumpur Securities Commission.

managers (Bank Negara, 2007). Of 9,500 managers, about 4,000 are the registered stock brokering agents who specialise in share markets and unit trusts (Kuala Lumpur Securities Commission, 2007; Malaysia Remisier Association, 1977).

### **Data Collection Method**

I collected data in two stages. The first stage involved a pilot study with eighteen account managers randomly selected from five financial firms in Kuala Lumpur. The second stage included the survey, which consisted of a larger sample targeted at both Muslim and non-Muslim account managers to test the posited hypotheses.

#### **Stage One: Pilot**

The pilot study aimed to achieve several objectives, namely to gain access to firms; to gain an understanding of major sources of market intelligence in Malaysia; to better understand the key facets of the processes and operations of financial market in Malaysia; and to examine whether the length of the questionnaire would contribute fatigue. Eighteen account managers from five financial firms within Malaysia participated in the pilot study. Before conducting the study, I contacted each potential participant by telephone to assess the participant's ability to serve as a key informant by determining if he or she is involved in managing accounts; obtain cooperation; and verify the participant's address.

The pilot study took approximately one and a half weeks, lasting from 17 to 26 December 2007. I discovered several crucial insights from this stage. First, the pilot study revealed that the firms categorised their existing customer base along two dimensions: (1) corporate versus retail (individual clients) and (2) key accounts versus non-key accounts. Second, the account managers had a very large portfolio of

accounts, ranging from 300 to more than 1,000 accounts in each portfolio. Third, the account managers frequently used internal databases to gather information about their potential clients. Fourth, surprisingly, Muslim account managers deal with both Islamic and conventional financial products. Fifth, most of the account managers communicated with their clients in English. In fact, the official business language was English. This was important information that implied participants would be able to respond to an English-version questionnaire<sup>3</sup>. Finally, the survey's length did not result in excessive respondent fatigue. The survey took an average of 35 minutes to complete.

### **Stage Two: Survey**

The principle aim of the study for stages two was to collect data that I would then use to test the posited hypotheses. I developed a survey to measure managers' personality, social network characteristics, emotional intelligence, market intelligence use, improvisation and performance. It also asked various background questions (e.g. demographic information). Prior to distributing the questionnaire, I wrote to the head offices of 37 firms to ask for permission to access their personnel. Only five responded initially. I contacted the firm again and ultimately, 29 firms provided access. I distributed the survey to 2,122 account managers systematically drawn

---

<sup>3</sup> Initially I had two versions of questionnaire; one was in English and another was in the Malay language. Nonetheless all respondents responded to the English version questionnaire. I translated the questionnaire into the Malay language for two reasons: (1) to obtain participation from non-English-speaking managers and (2) to provide an option for the participants. I utilised the established forward-backward translation process procedures of Van de Vijver and Hambleton (1996) in the translation process, which involved three phases. In phase one; a professional translator translated the instrument into the Malay language. In phase two, a second professional translator back-translated the Malay version produced in phase one without having seen the original version. In phase three, a group of translators checked the discrepancies and made corrections. The Malay version was altered accordingly. The altered Malay translation was again re-translated into English, and differences were again checked. This forward-backward process was repeated until satisfactory agreement was attained.

randomly from 2,881 account managers who worked for the 29 finance companies in Malaysia that were registered with *Bank Negara* (Central Bank). I started fielding the survey in late December 2007 and finished in April 2008. Alongside with two research assistants, I approached the branch manager of each firm and provided the questionnaire to be distributed to the account managers. Participants were asked to complete the survey within ten working days. A ‘thank you card’ was also attached to the questionnaire. Instructions were also given orally to about 250 participants who I managed to meet in person. Although I encouraged their participation, it was explained that participation was voluntary. I gave the option of returning the questionnaire by mail (where I attached a return envelope) or to be collected in person (either by me or a research assistant).

The usable responses were received as early as in the first two weeks of fielding the survey. I made two rounds of follow up emails and telephone calls (when I had telephone contact details). Subsequently I received 562 replies. Of 562 replies, 68 were not completed, leaving 494 usable questionnaires yielding a 23.3 percent response rate. Of 494 replies, 280 were from Muslim account managers while the remaining 214 were from non-Muslim account managers. Fifty randomly selected non-responding managers were contacted by telephone to directly ascertain reasons for non-response. This revealed that the main reasons were (1) ineligibility, such as no longer having direct contact or making sales presentations to customers, or (2) time constraints, which prevented participation in the survey.

### **Measures**

The survey instrument used established measures. Based on respondents’ input during the pilot test, I added one item (“internal database”) to the market

intelligence use measures. The instrument included a total of 125 items, with 50 items addressing personality traits, 16 items addressing emotional intelligence, 5 items addressing social networks, 19 items addressing market intelligence use, 7 items addressing adaptive selling behaviour, 5 items addressing improvisation, 5 items addressing performance, and 10 items addressing demographic information including one question pertaining to religious belief.

## **Exogenous Variables**

### **Big Five**

I measured the Big Five personality traits using the International Personality Item Pool (IPIP) Inventory developed by Goldberg (1999). This measures the five domains of the Big Five Factor Model: agreeableness, conscientiousness, extraversion, emotional stability, and openness to experience. The scale consists of 50 items to which participants respond using a 5-point Likert scale format ranging from (1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree Nor Disagree, 4 = Agree, 5 = Strongly Agree). Sample items include 'I am the life of the party' addressing extraversion: 'I feel little concern for others' addressing agreeableness: 'I am always prepared' addressing conscientiousness: 'I get stressed out easily' addressing emotional stability: and 'I have a rich vocabulary' addressing openness. I chose this measure because it addresses the same domain constructs as the NEO-PI and has been extensively validated and utilised in empirical research over the years (Christiansen, Wolcott-Burnam, Janavocs, Burns & Quirk, 2005; Dudley, Orvis, Lebiecki & Cortina, 2006; Lucas & Diener, 2001; Wilkowski, Robinson & Meier, 2006). The scale reliabilities for the Big-five in the current study are presented in Table 5.1.



**Table 5.1:**  
**Scale Reliability Coefficients (Alphas) – Big Five**

Variables	Cronbach Alpha		
	$\alpha$		
	Muslim Sample	Non-Muslim Sample Model	No of items
Extraversion	.88	.86	10
Agreeableness	.74	.84	10
Conscientiousness	.91	.92	10
Emotional Stability	.86	.86	10
Openness to Experience	.85	.80	10

Since I was using the Structural Equation Modeling (discussed in more detail later) to test the hypothesis, the first step was to assess the factor loading of items on each Big Five trait. In assessing the factor loadings, I used Exploratory Factor Analysis.

Following the suggestion of Leech, Barret and Morgan (2008), since I wanted to understand the factor loadings for each item in order to derive fewer variables from a larger set of variables that can provide the same information, I have chosen Principal Component Analysis method in assessing them (Leech et al., 2008). The results of the loadings are presented in Table 5.2a – 5.2e. They are all substantial and statistically significant.

**Table 5.2a:  
Standardised Factor Loadings for Latent Extraversion**

Items	Muslim sample		Non-Muslim sample	
	Factor Loadings	Communalities	Factor Loadings	Communalities
IPIP31 - Talk to a lot of different people at parties	.86	.74	.85	.74
IPIP6 - Don't talk a lot	-.82	.69	-.81	.75
IPIP21 - Start conversations	.82	.71	.82	.78
IPIP1 - Am the life of the party	.79	.69	.78	.79
IPIP36 - Don't like to draw attention to myself	-.75	.56	-.65	.41
IPIP41 - Don't mind being the centre of attention	.69	.70	.68	.75
IPIP11 - Feel comfortable around people	.65	.60	.62	.70
IPIP26 - Have little to say	-.63	.40	-.66	.50
IPIP16 - I Keep in the background	-.53	.45	-.62	.47
IPIP46 - Am quiet around strangers	-.41	.53	-.57	.55
Determinant	.005		.008	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.856		.876	
Sigma	.000		.000	

**Table 5.2b:  
Standardised Factor Loadings for Latent Agreeableness**

Items	Muslim sample		Non-Muslim sample	
	Factor Loadings	Communalities	Factor Loadings	Communalities
IPIP47 – Make people feel at ease	.85	.82	.73	.83
IPIP7 – Am interested in people	.73	.69	.78	.71
IPIP2 – Feel little concern for others	.72	.66	.68	.64
IPIP17 – Sympathize with others' feelings	.72	.69	.73	.74
IPIP22 – Am not interested in other people's problems	-.67	.59	-.66	.66
IPIP27 – Have a soft heart	.58	.66	.62	.65
IPIP37 – Take time out for others	.53	.64	.53	.61
IPIP42 – Feel others' emotions	.46	.79	.55	.69
IPIP32 – Am not really interested in others	-.42	.68	-.41	.64
IPIP12 – Insult people	-.48	.78	-.543	.62
Determinant	.006		.002	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.678		.729	
Sigma	.000		.000	

**Table 5.2c:  
Standardised Factor Loadings for Latent Conscientiousness**

Items	Muslim sample		Non-Muslim sample	
	Factor Loadings	Communalities	Factor Loadings	Communalities
IPIP18 Make a mess of things -	-.78	.74	-.78	.63
IPIP3 - Am always prepared	.77	.69	.77	.61
IPIP8 - Leave my belongings around	-.76	.71	-.73	.52
IPIP33 - Like order	.74	.69	.73	.61
IPIP38 - Neglect my duties	-.69	.56	-.73	.61
IPIP28 - Often forget to put things back in their proper place	-.66	.70	-.63	.76
IPIP48 - Am exacting in my work	.62	.60	.71	.69
IPIP23- Get chores done right away	.61	.40	.68	.70
IPIP13 - Pay attention to details	.58	.45	.63	.52
IPIP43 - Follow a schedule	.63	.53	.68	.54
Determinant	.008		.011	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.850		.859	
Sigma	.000		.000	

**Table 5.2d:  
Standardised Factor Loadings for Latent Emotional Stability**

Items	Muslim sample		Non-Muslim sample	
	Factor Loadings	Communalities	Factor Loadings	Communalities
IPIP34 - Change my mood a lot	.76	.69	.76	.71
IPIP29 - Get upset easily	.75	.73	.75	.72
IPIP19 - Seldom feel blue	-.74	.56	-.68	.51
IPIP4 - Get stressed out easily	.74	.57	.76	.58
IPIP24 - Am easily disturbed	.70	.51	.72	.56
IPIP14 - Worry about things	.70	.61	.71	.64
IPIP49 - Often feel blue	.68	.47	.69	.48
IPIP44 - Get irritated easily	.64	.75	.71	.75
IPIP9 - Am relaxed most of the time	-.47	.35	-.62	.47
IPIP39 - Have frequent mood swings	.51	.81	.58	.78
Determinant	.008		.008	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.798		.835	
Sigma	.000		.000	

**Table 5.2e:  
Standardised Factor Loadings for Latent Openness to Experience**

Items	Muslim sample		Non-Muslim sample	
	Factor Loadings	Communalities	Factor Loadings	Communalities
IPIP25 - Have excellent ideas	.80	.76	.80	.77
IPIP20 - Am not interested in abstract ideas	-.80	.70	-.86	.71
IPIP15 - Have a vivid imagination	.80	.65	.74	.66
IPIP30 - Do not have a good imagination	-.76	.69	-.79	.69
IPIP50 - Am full of ideas	.75	.60	.74	.59
IPIP10 - Have difficulty understanding abstract ideas	-.78	.61	-.61	.42
IPIP35 - Am quick to understand things	.75	.69	.79	.71
IPIP5 - Have a rich vocabulary	.73	.54	.76	.56
IPIP45 - Spend time reflecting on things	.60	.51	.57	.62
IPIP40 - Use difficult words	.57	.47	.55	.56
Determinant	.005		.005	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.820		.854	
Sigma	.000		.000	

## Emotional Intelligence Measures

To measure EI, I used the self-rating emotional intelligence Wong and Law (2002) Emotional Intelligence Scale (WLEIS) (Wong & Law, 2002). The response format of this measure is a 5-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree Nor Disagree, 4 = Agree, 5 = Strongly Agree). The 16 items of WLEIS measure four EI-related subscales: self-emotions appraisal, others- emotions appraisal, use of emotion, and regulation of emotion - each of which has four items. Sample items include ‘I have a good sense of why I have certain feelings most of the time’ (Self-Emotion Appraisal): ‘I always know my friends’ emotions from their behaviour’ (Others-Emotions Appraisal): ‘I am a self-motivating person’ (Use of Emotion): and ‘I am quite capable of controlling my own emotions’ (Regulation of Emotion). Table 5.3 presents the scale reliabilities for the emotional intelligence constructs.

**Table 5.3:**  
**Scale Reliability Coefficients (Alphas)**  
**Emotional Intelligence**

Variables	Cronbach Alpha		
	$\alpha$		
	Muslim Sample	non-Muslim Sample	No of items
EI - Self Emotions	.84	.89	4
EI – Others Emotion	.87	.91	4
EI – Self Regulations	.92	.89	4
EI – Emotions to facilitate Performance	.87	.87	4

I also used Exploratory Factor Analysis testing to examine whether the four emotional intelligence dimensions would emerge as separate factors. Because I am more interested in understanding the correlations among constructs and have

expected these constructs somewhat correlated to each other, Principal Factor Analysis method with Varimax rotation was selected as the rotation method (Leech et al., 2008). Sixteen (16) emotional intelligence items were factored and four rotations were used. Whilst the four factors in sample 1 account for 64.80% of the variance in total; where factor 1 (self regulation) accounts for 18.50 %, factor 2 (emotions to facilitate performance) accounts for 16.48%, factor 3 (others emotions) accounts for 15.22% and factor 4 (self emotions) accounts for 14.59%; sample 2 accounts for 69.64% of the variance. The factor analysis results provide strong support for the separation of emotional intelligence items into four distinct variables – EI self emotions, EI others emotions, EI self regulations and EI to facilitate performance. Both samples display a strong Kaiser-Meyer-Olkin measure of sampling of adequacy, KMO (.813 for sample 1; .795 for sample 2). Tables 5.4a and 5.4b display the items and factor loadings for the rotated factors with loading less than .40 omitted to improve clarity.

### **Network Size**

Network size was measured by the actual network size (also called degree) (Borgatti, 1997; Burt, 1992). The question for the actual network size was:

Please identify up to fifteen people that are important in terms of providing you with information to do your work or helping you to think about complex problems posed by your work. These may or may not be people you communicate with on a regular basis and can come from within (the organisation) or outside (e.g., clients, friends in other organisations, former work colleagues, family) (Borgatti, 1997, p. 38).



Actual network size is the number of people a manager lists in response to this question. An upper limit of 15 was chosen (1) to minimise respondents' fatigue and (2) because previous research has suggested that managers' networks generally have fewer than 15 ties (e.g., Anderson, 2007; Cross & Sproull, 2004; Seibert et al., 2001).

**Table 5.4a:  
Exploratory Factor of Emotional Intelligence  
(Muslim Sample)**

Items	Factor 1	Factor 2	Factor 3	Factor 4	Com munal ities
I always tell myself I am a competent person	.84				.74
I am a self motivation person	.82				.70
I always set goals for myself and try my best to achieve them	.81				.68
I would always encourage myself to try my best	.79				.69
I can always calm down quickly when I am angry		.81			.67
I am able to control my temper so that I can handle difficulties rationally		.78			.66
I am quite capable in controlling my own emotions		.78			.68
I have a good control of my own emotions		.71			.67
I am a good observer of others emotions			.81		.62
I always know my friend emotions from their behaviour			.77		.60
I have a good understanding of the emotions of people around me			.75		.59
I am sensitive to the feelings and emotions of people around me			.74		.56
I really understand what I feel				.83	.65
I have a good understanding of my own emotions				.68	.56
I have a good sense of why I have certain feelings most of the time				.65	.50
I always know whether or not I am happy				.65	.51
% of variance	18.51	16.48	15.22	14.59	

Determinant = .003

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .813

Sigma = .000

**Table 5.4b:**  
**Exploratory Factor of Emotional Intelligence**  
**(non-Muslim Sample)**

Items	Factor 1	Factor 2	Factor 3	Factor 4	Com munal ities
I always tell myself I am a competent person	.78				.78
I am a self motivation person	.73				.76
I always set goals for myself and try my best to achieve them	.69				.78
I would always encourage myself to try my best	.69				.55
I can always calm down quickly when I am angry		.80			.71
I am able to control my temper so that I can handle difficulties rationally		.78			.83
I am quite capable in controlling my own emotions		.75			.63
I have a good control of my own emotions		.61			.73
I am a good observer of others emotions			.88		.76
I always know my friend emotions from their behaviour			.81		.73
I have a good understanding of the emotions of people around me			.69		.68
I am sensitive to the feelings and emotions of people around me			.69		.59
I really understand what I feel				.73	.65
I have a good understanding of my own emotions				.69	.77
I have a good sense of why I have certain feelings most of the time				.67	.74
I always know whether or not I am happy				.45	.55
% of variance	23.75	16.62	15.09	14.20	

Determinant = .003

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .793

Sigma = .000

### **Average Tie Strength**

The tie strength measure used was adopted from Krackhardt (1992) and Hansen (1999). The concept of ties strength is a continuous therefore dichotomising the variable into weak and strong ties is methodologically unsound variable (Anderson, 2008; Hansen, 1999; Marsden & Campbell, 1984; Morrison, 2002). Tie strength was operationalised based on the three critical elements recommended by Krackhardt (1992): (1) interaction or communication frequency, (2) affection, and (3) history of interaction. I undertook the same process as Anderson's (2008) in measuring the average tie strength. Specifically in each of the ties listed, account managers responded to three items. The item for interaction or communication frequency was: 'How frequently do you communicate with each person on average?' This was measured on a 6-point scale, with the endpoint anchors being 'Daily' and 'Twice a Year'. The item for closeness or affection was 'How close are you with each person?' This was measured on a 5-point scale ranging from 'Acquaintance' to 'Very Close Friend'. The item for history of interaction was: 'How many years have you known this person?' These three items were combined to determine the overall measure of tie strength for each individual in the manager's network. Finally, the average tie strength for each account manager was determined by taking the average of the tie strengths for each individual.

### **Cost**

The measure for cost was adopted from Borgatti and Cross (2003). As is typical in network research, cost was measured using a single network item (e.g., Borgatti & Cross, 2003; Ibarra, 1995). Although some have rejected the practice of asking a

single socio-metric question to measure theoretical constructs (Rogers & Kincaid, 1981), a study by Marsden (1990) implies that these indices are largely reliable when appropriate procedures are followed to help individuals accurately report their network links. The question for cost was ‘Please indicate the extent to which you feel that seeking information or advice from this person is costly’. This was measured on a 5-point scale with the points being (1) Not At All Costly, (2) Costly, (3) Quite Costly, (4) Very Costly and, (5) Extremely Costly.

### **Mediating Variables**

#### **Instrumental/Conceptual Intelligence Use**

The measure of market intelligence use that I used is from Diamantopoulos and Souchon (1999). This 19-item scale measures both the instrumental and conceptual use of market intelligence use and the symbolic use of market intelligence. Items were measured on a 5-point Likert scale, i.e. 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree Nor Disagree, 4 = Agree, 5 = Strongly Agree. The items included: ‘I collected information in this way to solve a specific decision at hand’ (Instrumental and Conceptual Use); and, ‘‘If information is difficult to obtain, I make guesses’ (Symbolic Use). Table 5.5 shows the reliability for instrumental and conceptual use in the sample.

**Table 5.5:**  
**Scale Reliability Coefficients (Alphas)**  
**Market Intelligence Instrumental/Conceptual Use, and Symbolic Use**

Item	Cronbach Alpha		
	$\alpha$		
	Muslim Sample	Non-Muslim Sample	No of items
Instrumental/Conceptual Use	.77	.81	11
Symbolic Use	.73	.83	8

Table 5.6a and 5.6b display the factor loadings and communalities for instrumental and conceptual market intelligence use measures for Muslim and non-Muslim samples respectively. The Principal Component Analysis method was chosen. The results show that all factor loadings are substantial and significant. The determinants were higher than .001 (.008 for Muslim Sample; .009 for non-Muslim Sample), indicating the absence of collinearity problem (Hair, Black, Babin, Anderson & Tatham, 2006). The result for Kaiser-Meyer-Olkin Measure of Sampling Adequacy accounts for more than .70 (.820 for Muslim sample; .823 for non-Muslim Sample), indicating sufficient items for each factor (Kline, 2005). However, I could not claim that the factor analyses results were perfect. First, the ranking ordering of the loading factors is not consistent across two samples. For example item two, ‘My confidence in making decision is increased as a result of information collected in this way’ had the highest loading factor in Muslim but not in non-Muslim Sample. Second, item six, ‘I do not often consider information gathered in this way in the making of decisions for which it was initially requested,’ shows in consistency loading factors where it had low loading on both samples at (-.11 Muslim sample; -.33 non-Muslim). As a result I dropped this item from further analysis. Despite these minor discrepancies, the results conform the goodness-of-fit model for exploratory

factor analysis (e.g. communalities  $\geq .3$ ; Eigenvalue  $\geq 1.00$ ; factor loadings  $\geq .4$  except for item 6).

**Table 5.6a:**  
**Exploratory Factor of Market Intelligence Use**  
**(Muslim Sample)**

Item	Factor 1	Factor 1	Communalities
2 My confidence in making decisions is increased as a result of information collected this way	.93		.94
19 I translate information collected in this way into significant practical action	.90		.93
5 I do not use the majority of information gathered in this way	-.89		.89
18 I use the same piece of information collected this way for more than one decision	.85		.87
8 I use information collected this way to solve a specific decision at hand	.85		.75
15 My certainty associated with sales activity is greatly reduced by information acquired in this way	.84		.63
16 I would not make a decision without information collected in this way	.80		.74
17 I store information in this way for use by other individuals	.79		.71
4 I would make very different decisions without information collected in this way	.75	.36	.60
11 Decision based on information collected in this way are more accurate than wholly intuitive one	.72	.52	.78
9 Information that is gathered in this way often has little decision relevance	-.49	.41	.68
7 I sometimes take into account information acquired in this way to justify the cost of having acquired it		-.94	.91
1 I use information collected this way to justify decision already made		.92	.93
3 I often combine my instinct/intuition with information collected in this way when making decisions		.92	.92
13 I use information collected in this way to back up hunches, prior to implementation of a particular decision	.42	.77	.72
10 If information is difficult to obtain in this way, I make guesses		.54	.51
14 I manipulate information collected in this way to justify decisions already made on the basis on instinct		.50	.54
12 I frequently use information collected this way to support decision already made on other grounds		.50	.55
6 I do not often consider information gathered in this way in the making of decisions for which it was initially requested		-.11*	.01
% of variance		4.44	
Determinant = .008		Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .820	
Sigma = .000		*Low factor loading	

**Table 5.6b:**  
**Exploratory Factor of Market Intelligence Use**  
**(non-Muslim Sample)**

Item	Factor 1	Factor 2	Communalities
19 I translate information collected in this way into significant practical action	.91		.95
18 I use the same piece of information collected this way for more than one decision	.88		.93
2 My confidence in making decisions is increased as a result of information collected this way	.85		.84
5 I do not use the majority of information gathered in this way	-.84	-.35	.88
16 I would not make a decision without information collected in this way	.83		.79
17 I store information in this way for use by other individuals	.84		.88
15 My certainty associated with sales activity is greatly reduced by information acquired in this way	.81		.85
11 Decision based on information collected in this way are more accurate than wholly intuitive one	.80		.88
8 I use information collected this way to solve a specific decision at hand	.77		.86
4 I would not make a decision without information collected in this way	.53	.34	.66
9 Information that is gathered in this way often has little decision relevance	-.52	.43	.45
13 I use information collected in this way to back up hunches, prior to implementation of a particular decision		.91	.95
1 I use information collected this way to justify decision already made		.88	.95
3 I often combine my instinct/intuition with information collected in this way when making decisions		.87	.96
7 I sometimes take into account information acquired in this way to justify the cost of having acquired it		.84	.94
10 If information is difficult to obtain in this way, I make guesses		.83	.93
12 I frequently use information collected this way to support decision already made on other grounds	.55	.74	.72
14 I manipulate information collected in this way to justify decisions already made on the basis instinct	.45	.65	.73
6 I do not often consider information gathered in this way in the making of decisions for which it was initially requested		-.33*	.34
% of variance	34.13	15.02	

Determinant = .009

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .823

Sigma = .000

\*Low factor loading

## Adaptive Selling Behaviour

Adaptive selling behaviour was measured using seven items from the adaptive selling scale (ADAPTS), first developed by Spiro and Weitz (1990). The items for adaptive selling behaviour include ‘I treat all customers pretty much the same.’ This was measured on a 5-point Likert scale with the endpoint anchors being ‘Strongly Disagree’ and ‘Strongly Agree’. The measure also proved to be adequately reliable by its coefficient alpha .78 for the Muslim sample and .80 for the non-Muslim sample. Table 5.7 presents factor loadings for adaptive selling behaviour items for both Muslim and non-Muslim sample. The results are all substantial and statistically significant.

**Table 5.7:**  
**Standardised Factor Loadings for Latent Adaptive Selling Behaviour**

Items	Muslim Sample		Non-Muslim Sample	
	Factor Loadings	Communalities	Factor Loadings	Communalities
ASB7 - I change my approach from one customer to another	.77	.73	.78	.65
ASB5 - I treat all customers pretty much the same	-.74	.70	-.58	.59
ASB6 - I like to experiment with different sales approaches	.70	.792	.79	.67
ASB1 - I am flexible in the selling approach I use	.67	.65	.63	.64
ASB4 - I do not use a set sales approach	.62	.74	.64	.48
ASB2 - I can easily set a wide variety of selling approaches	.61	.65	.68	.73
ASB3 - I vary my sales style from situation to situation	.61	.68	.72	.55
Determinant	.243		.139	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.771		.779	
Sigma	.000		.000	



### **Improvisation to Sales Presentation**

Previous research has argued that improvisation would be best measured by the length of time between the planning and the execution of action (Akgun et al., 2007; Moorman & Miner, 1998). As such, Akgun et al.'s (2007) and Moorman and Miner's (1998) concept of improvisation was adopted in developing a measure for improvisation to sales presentation. Five items were included in the measure, including 'I figure out my sales presentation as I go along' and 'I improvise when making my sales presentation'. This was measured on a 5-point Likert scale ranging from 'Strongly Disagree' to 'Strongly Agree'. The mean of these items was used to assess the improvisation in sales presentation. The reliability of the sample for improvisation had a coefficient alpha of .71 for the Muslim and .72 for the non-Muslim sample. Table 5.8 presents factor loadings for improvisation measures and results shown are statistically significant.

**Table 5.8:  
Standardised Factor Loadings for Latent Improvisation**

Items	Muslim Sample		Non-Muslim Sample	
	Factor Loadings	Communalities	Factor Loadings	Communalities
IMP1 - I figure out my sales presentation as I go along	.76	.58	.79	.68
IMP3 - I improvise when making my sales presentation	.72	.52	.80	.65
IMP4 - I strictly follow my sales presentation plan	-.67	.45	-.61	.37
IMP5 - My sales presentation is an ad-libbed action	.65	.42	.77	.59
IMP2 - I follow a rigid, well defined sales presentation plan	-.56	.31	-.70	.49
Determinant	.439		.256	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.732		.806	
Sigma	.000		.000	

### Endogenous Variable

#### Performance

Churchill et al., (1985) affirm, as a result of their meta-analysis of sales performance determinants, that self-reported measures of sales performance do not demonstrate any particular upward bias. Meanwhile, other researchers have found inadequacies of performance measures in general between subjective and objective measures (Behrman & Perreault, 1982; Landy & Farr, 1980). In rationalising the inconsistency findings in numerous studies, Pransky et al. (2006) suggest that it is likely that subjective performance and objective performance emphasise different aspects of performance with particular biases. In order to address the concern discussed, I adopted both subjective and objective performance measures. The objective performance measure is defined as the percentage of accounts held over the

annual target for the current and previous two years. The item for objective performance was ‘What were your actual sales during each of the last three years expressed as a percentage?’ Subjective performance was measured by a self-assessed general performance measure developed by Farh et al. (1991). Four items were included, such as ‘I make sales with the highest profit margin’. The reliability of the sample has a coefficient alpha of .92 for the Muslim and .91 for Non-Muslim sample. Result of factor loadings for performance measures is shown on Table 5.9 and they are all statistically significant.

### **Demographic Information**

One question pertaining religion, “what is your religion?” was included, to assess as whether the respondent was a Muslim or a non-Muslim. To help ensure that important variables were not missed, I included several other demographics information such as age, gender, education level, and tenure of service.

**Table 5.9:  
Standardised Factor Loadings for Latent Subjective Sales Performance**

Items	Muslim Sample		Non-Muslim Sample	
	Factor Loadings	Communalities	Factor Loadings	Communalities
S3 - I generate a high level of dollar sales	.90	.81	.89	.78
S4 - I maintain a high level of current customer retention	.87	.76	.85	.72
S2 - I make sales with the highest profit margin	.87	.75	.85	.72
S5 - I find and develop new customer relationships	.85	.73	.85	.72
S1 - I produce a high market share for this company in a specific territory	.85	.72	.83	.69
Determinant	.026		.042	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.867		.867	
Sigma	.000		.000	

## Treatment of Data

### Statistical Analyses – Structural Equation Modeling

The Statistical Package for Social Sciences (SPSS), 15.0 (released 2006) and Analysis of Moment Structures (AMOS), 7.0 (released 2006) software packages were used to conduct an analysis of variance, correlation, factor analyses and multiple regression techniques for testing the hypotheses and to acquire the reliability of the instrument. Specifically, I used Structural Equation Modeling (SEM) to test the research hypotheses. I adopted a two step SEM modelling approach (James, Mulaik & Brett, 1982; Anderson & Gerbing, 1988) in analysing the study data, I first assessed the measurement model by Confirmatory Factor Analysis followed by the full model. Unlike Multiple Regression, SEM is about assessing the whole model. The end result is whether to accept, reject or modify the proposed model. The structural equation model for this study is shown as:

$$\Pi = \beta\Pi + \delta\zeta + \zeta$$

where  $\beta$  is the matrix of regression weights relating to endogenous ( $\Pi$ ) variables, sales performance and market intelligence use to the mediating variables improvisation and adaptive selling behaviour.  $\delta$  is the matrix of regression weights relating to exogenous ( $\zeta$ ) variables, personality traits, emotional intelligence and social network. Usually the traditional method in structural equation modeling is to perform a chi-square test of the null hypothesis and that the observed and expected

matrices are identical. The model is thus accepted if the test fails to reject null hypothesis.

## **Measures**

Measurement model for CFA test includes two kinds of variables: indicators (observed) and latent (unobserved). “Indicators can take the form of individual items, arbitrarily grouped subsets of items (i.e. parcels), subscales or complete scales” (Hoyle, 2007, p. 445). I used parcels as indicators of constructs because the focus of this study is not to seek understanding between the exact individual items. A parcel is an aggregate level indicator comprising the sum (or average) of several single items. Parcelling has a few advantages: (1) the various indexes of models based on parcelled data are expected to be more acceptable rather than each item because of the psychometrics and estimation advantages of parcels, (2) the models based on parcelled data are more parsimonious and have fewer chances for residual to be correlated or dual loadings (Little, Cunningham, Shahar & Widaman, 2002; MacCallum, Widaman, Zhang & Hong, 1999).

I adopted the ‘item-to-construct balance’ parcelling technique proposed by Little et al. (2002) where items were parcelled according to their factor loadings. The rationale behind this approach is ‘to derive parcels that are equally balanced in term of their difficulty and, intercept and slope’ (Little et al., 2002, p. 166). Using loading as a guide, I choose three items with the highest loadings to anchor the three parcels. Following that, the three items with the next highest loadings were added to the anchor in an inverted order. For example, I assessed Extraversion using 10 items, but the number of indicators was reduced to 3; that is 3 composites were shaped up by

averaging 2 sets of 3, and I used a set of 4 items. The parcelling result is shown on Table 5.10.

**Table 5.10:  
Parcelling Result for Extraversion**

Items	Composite 1	Composite 2	Composite 3
IPIP31 - Talk to a lot of different people at parties	.86		
IPIP26 - Have little to say	-.68		
IPIP36 - Don't like to draw attention to myself	-.64		
IPIP46 - Am quiet around strangers	-.58		
IPIP6 - Don't talk a lot		-.82	
IPIP41 - Don't mind being the centre of attention		.69	
IPIP11 - Feel comfortable around people		.63	
IPIP21 - Start conversations			.82
IPIP1 - Am the life of the party			.78
IPIP16 - I Keep in the background			-.61

To sum up, composite 1 of extraversion, EI consists of IPIP31, IPIP26, IPIP36 and IPIP46: composite 2, E2 consists of IPIP6, IPIP41 and IPIP11: and composite 3, E3 consists of IPIP21, IPIP1 and IPIP16. I parcelled the rest of the measures using this procedure.

### **Distribution of Data**

The structural equation modeling is based on several assumptions (Byrne, 2001), these are the normal distribution of data, consistency of measurements, and no significant relationships between unrelated variables should hold. Therefore, I inspected these assumptions prior to conducting structural equation modeling test. In assessing the normality of the data, I examined the skewness and kurtosis. Skewness refers to the level of symmetry of data distribution while kurtosis refers to the flatness of the distribution (Hair et al., 2006; Kline, 2005). Hair et al. (2006) suggest the absolute value of 2.58 as the cutoff value for normal distribution (symmetrical distribution) for both kurtosis and skewness. Klein (2005) suggests that an absolute value greater than 10 implies a problem and, an absolute value greater than 20 implies a critical case. It was found that all skewness and kurtosis values are in the normal range (.35 to 2.46 for Muslim sample; .29 to 2.33 for non-Muslim sample).

I used Reliability Analysis, Cronbach's alpha to establish the internal consistency of each dimension of the entire instrument that was measured on scale. The value of less than .70 Cronbach Alphas is considered as unreliable (Nunnally, 1978). In addition, I conducted an Exploratory Factor Analysis to identify the relationships among scale variables in a simple (more parsimonious) way. This is chosen because Exploratory Factor Analysis can best explain or account for the

correlations among indicators (Leech et al., 2008). It was also used to identify, via factor rotation, the most plausible factor solution, and to provide an interpretation for the common factors. As presented in the earlier section the results value range from between 0.71 to 0.94; all of these values were greater than 0.70 the acceptable figure commonly held by Nunnally and Bernstein's (1994) standard.

The significant relationship between unrelated variables was tested by examining the multicollinearity between variables. Multicollinearity occurs when there are high intercorrelations among some sets of predictor variables. It happens when two or more predictors contain much of the same information (Leech et al., 2008) which potentially lead to measuring the same domains. The value of .85 from the bivariate correlation is the cutoff value, indicating a definite problem with multicollinearity (Kline, 2005). However, other statistician such as Leech et al.(2008) argue that any correlation values above .60 represent a potential multicollenearity problem. The problem of multicollinearity problem will be further discussed and tested in Chapter Six.

### **Model Fitness**

Following the suggestion of Hair et al. (2006), and Hu and Bentler (1999), I assessed the measurement model fit and full model fit through various fit indices namely chi squares  $\chi^2$  ( $\chi^2$  /degree of freedom < 3 is acceptable), Goodness of Fit Index GFI (GFI > .90 is good), Comparative Fit Index CFI (CFI > .90 is acceptable) and Root Mean Square Error of Approximation RMSEA (RMSEA < .05 is good; RMSEA < .08 is acceptable) (Hu & Bentler, 1999). The poor fit of a model can be revised by assessing modification indices or the standard of residual (Byrne, 2001; Kline, 2005). Additionally when there is supporting evidence of model fit, I assessed



the parameter estimates. Parameter estimates are admissible when no variance is negative, and covariance matrices are positively defined (Byrne, 2001).

### **Missing Data**

Prior to data analysis, I evaluated the data sets to identify problems related to missing data (non-response item). A total of 23 non-response items occurred in various sections, coming from 6 Muslim and 5 non-Muslim respondents. I handled the missing data using the maximum likelihood (ML) estimation (Arbuckle, 1996; Arbuckle & Wothke, 1999; Jamshidian & Bentler, 1999). The theory of maximum likelihood (ML) estimation was based on Arbuckle (1996) and Jamshidian and Bentler (1999). Although the ML estimation is the only approach that is allowed in AMOS programme, treating incomplete data using maximum ML estimation, offers several important advantages over both listwise and pairwise deletions estimates (Arbuckle, 1996; Byrne, 2001):

- 1) If the unobserved values are missing completely at random (MCAR)<sup>4</sup>, the treatment using both listwise and pairwise estimates is consistent but not efficient compared to the treatment using ML estimation where it is consistent and efficient;
- 2) If the unobserved values are missing at random (MAR)<sup>5</sup>, the treatment using both listwise and pairwise can be biased. In contrast, ML estimates are systematically unbiased; and

---

<sup>4</sup> MCAR – Missing completely in random refers to the most restrictive assumption; missingness is independent of both the unobserved values and the observed values of all other variables in the data (Byrne, 2001).

<sup>5</sup> MAR – Missing at random is less restrictive than MCAR; missingness is independent only at the missing values and not of the observed values of other variables in the data where their missingness can be linked to the observed values of other variables in the data.

- 3) Compared to ML estimation, pairwise and listwise estimations are not able to yield standard error estimates or to provide a method for testing hypothesis.

Several other social sciences researchers also supports theoretically and empirically using the maximum likelihood estimates over pairwise and listwise deletions estimates in treating non-response data (Arbuckle & Wothke, 1999; Jamshidian & Bentler, 1999).

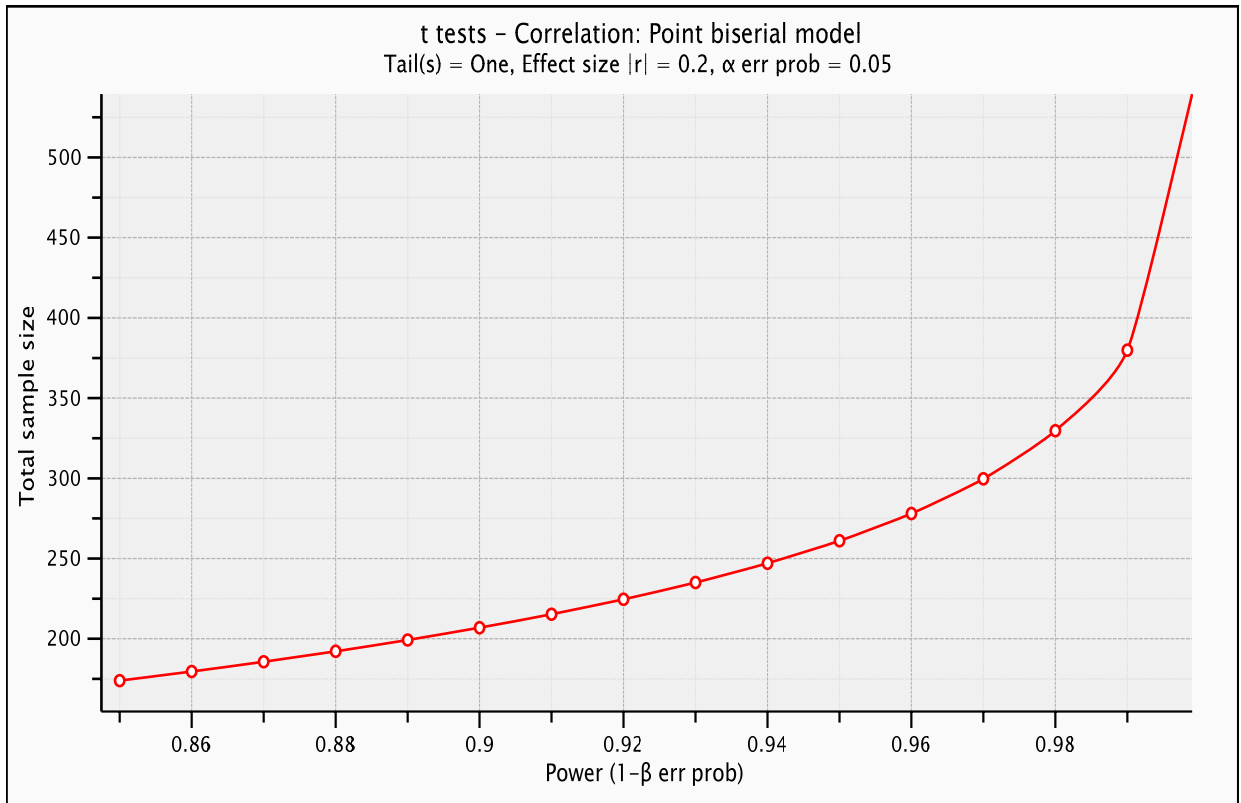
### **Statistical Power**

In this section, I present an analysis of the statistical power of the regression model. The power of the statistical test is the probability of rejecting the null hypothesis ( $H_0$ ) when the alternative hypothesis ( $H_1$ ) is true (Myors, 2006). Significant tests that lack statistical power are of limited use because they cannot reliably discriminate between the null hypothesis and the alternative hypothesis (Faul, Erdfelder, Lang & Buchner, 2007). Therefore, it is important to determine how much statistical power the sample size in this study provides in order to know how likely it is that the test of hypotheses will be able to find effects that exist in the population. Statisticians have established that statistical power in multiple regression analysis is determined by four factors: (1) the sample size (N), (2) the significant level ( $\alpha$ ), (3) the effect size (r), and (4) the number of predictor variables in the model (Cohen, 1992; Faul et al., 2007; Myor, 2006).

I used G\*Power 3.0 to calculate the power values and to plot a graph of these values (Faul et al., 2007). Following the suggestion of Cohen (1992), I have selected an alpha ( $\alpha$ ) of .05 to minimise the possibility of Type 1 errors. Cohen (1992) has also recommended aiming for a power ( $1 - \beta$ ) of .8 and more to get an 80 percent and

more chance of success. With regards to effect size ( $r$ ), Cohen (1992) has specified the large effects correspond to effect sizes of .5, medium effects correspond to effect sizes of .3, and small effects correspond to effect sizes of .1 (Cohen, 1992). I have chosen small to medium effect size i.e. .2, for this study. This was chosen because arguably the most effects in the social sciences are medium to small (Cohen, 1992; Ferguson & Ketchen, 1999; Mazer et al., 1987). Additionally Lipsey and Wilson (1993), collated effect size over 300 meta-analyses treatments and found 85% of the effect sizes were above .2 (Cohen's definition of small effect) and half were above .5 (Cohen's definition of medium effect). Figure 5.1 illustrates for the sample size of 494 (the non-Muslim Sample), the SEM model will be able to detect almost 99% probability respectively at the effect size ( $r$ ) of .2 and an alpha ( $\alpha$ ) of .05. Comparatively for Muslim sample, for the size of 280, the SEM model will be able to detect almost 96% probability at effect size  $r$  of .2 and an alpha ( $\alpha$ ) of .05.

**Figure 5.1: Sample Size**



### Summary

Chapter Five has presented the research setting, data collection, and data analysis procedures that I used in testing the proposed hypotheses as discussed in Chapter Four. A three-stage study that utilised a survey as the primary approach to data collection was described. I also explained each measure used and how they were operationalised. After that, I presented the reliability analyses and exploratory factor analyses results. Additionally, I discussed the statistical analyses and statistical power adopted in this study. The results of these analyses will be presented in Chapter Six.

## CHAPTER SIX

### RESULTS

This chapter presents the results and findings of the statistical analyses used to test the hypotheses discussed in earlier chapters. This study seeks to extend the literature on the impact of personality traits, social network characteristics and emotional intelligence on performance by comparing theoretically derived models across two different cultural groups. Specifically the following four research questions are addressed.

#### Research Question 1:

To what extent do social network characteristics, personality traits, and emotional intelligence influence the sales performance of account managers?

#### Research Question 2:

What conditions facilitate or constrain the influence of social network characteristics, personality traits and emotional intelligence on the sales performance of account managers?

#### Research Question 3:

Are the relationships between social network characteristics, personality traits, emotional intelligence and sales performance mediated by market intelligence use, improvisation and adaptive selling behaviour?

#### Research Question 4:

Do the relationships between social network characteristics, personality traits, emotional intelligence and sales performance differ between Muslim and non-Muslim account managers in Malaysia?

This chapter is organised into the following sections: preliminary analyses and basic descriptive statistics, results of confirmatory factor analyses related to the fits of alternatives baseline model, result for the measurement invariant model, and structural equation modeling results for the research hypotheses. In presenting the results, I analyse the differences in the model using the multi-sample approach and conceptualisation as suggested by Byrne (2001), French and Finch (2006) and Steenkamp and Baumgartner (1998).

### **Preliminary Test (t-test)**

I conducted several preliminary analyses to determine the possible differences in demographic variables (e.g. gender, age, experience, and educational background) and constructs of interests (e.g. personality traits, emotional intelligence, social network structures and sales performance) across the two groups; Muslim and non-Muslim managers. First, I examined, whether Muslim and non-Muslim managers differ in demographic variables, using *t-tests*. Results revealed statistically significant differences between non-Muslim and Muslim managers in the study on age, gender and level of education. (Age  $t(494) = 2.27, p = .024$ ; Gender  $t(492) = 2.08, p = .038$ , Education,  $t(494) = 3.11, p = .002$ ). On average, the non-Muslim managers ( $M = 40.12, SD = 4.37$ ) are slightly older than Muslim managers ( $M = 39.15, SD = 4.98$ ) though the effect size is small,  $d = .21$  (Cohen, 1988; large than typical = .8, medium or typical = .5, smaller than typical = .2). Additionally the *t-test* reveals that on average the non-Muslim managers obtained higher degree than the Muslim managers though the effect size is also smaller than typical,  $d = .29$  (Cohen, 1988).

A separate *t-test* was conducted on sales performance. There were no statistically significant differences between the level of objective sales performance

of Muslim and non-Muslim managers in the study,  $t(494) = -.78, p = .434$ , Muslim managers ( $M = 116.08, SD = 42.00$ ) and non-Muslim ( $M = 113.41, SD = 33.62$ ). As for subjective performance, results indicate a significant difference in the subjective performance,  $t(494) = 2.96, p = .003$ , though the effect size,  $d = .20$  is small (Cohen, 1988). Non-Muslim managers ( $M = 3.91, SD = .49$ ) reported slightly higher performance than Muslim managers ( $M = 3.74, SD = .71$ ). The confidence interval for the difference between the means was .08 to .41 showing that the difference could be as small as .1 and as large as .4 which indicates no practical important difference.

Another set of preliminary analyses of *t-test* were conducted; to check for possible differences across the two groups in personality traits, social network structures, and emotional intelligence. Results show no significant differences in the level of conscientiousness ( $t(494) = 1.02, p = .306$ ), emotional stability ( $t(494) = 1.87, p = .071$ ), and agreeableness ( $t(494) = 1.29, p = .198$ ) across the two groups. However, extraversion ( $t(494) = 2.09, p = .037$ ), and openness ( $t(492) = 3.059, p = .001$ ), were found to be statistically difference across the two samples though the effect is smaller than typical,  $d = .20$  and  $d = .29$ , respectively (Cohen, 1988). Additionally, network size ( $t(494) = 3.44, p = .001$ ), network cost ( $t(492) = -6.70, p = .001$ ), and emotional intelligence ( $t(494) = 4.34, p = .001$ ), appear to be statistically different between the two groups; with the effect size,  $d = .31$  (network size),  $d = .41$  (emotional intelligence) and  $d = .60$  (network cost).

The fact that results from the *t-tests* revealed that there were somewhat differences between the two samples - Muslims and non-Muslim account managers - indicates that it was appropriate to precede with multi-group comparisons analyses.

Detailed information about the demographic profiles of the respondents is summarised in Table 6.1.

**Table 6.1:  
Demographic Profile**

Variable	Measure	Muslim	%	Non - Muslim	%	TOTAL	(%)
Gender	Male	118	23.9	149	30.2	267	54.1
	Female	162	32.8	65	13.1	227	45.9
TOTAL		280	56.7	214	43.3	494	100
Education	High School	4	0.8	3	0.6	7	1.4
	Diploma	30	6.1	4	0.8	34	6.9
	Bachelor Degree	182	36.8	126	25.5	308	62.3
	Post Graduate	37	7.5	65	13.1	102	20.6
	Master Degree	27	5.5	16	3.2	43	8.7
	PhD	0	0	0	0	0	0
TOTAL		280	56.7	214	43.2	494	100
Age Group	19-25	1	0.2	0	0	1	0.2
	26-30	9	1.9	0	0	9	1.9
	31-35	48	9.7	19	3.8	67	13.5
	36-40	117	23.7	116	23.5	233	47.2
	41-45	85	17.2	50	10.1	135	27.3
	46-50	19	3.8	22	4.5	41	8.3
	51 +	1	0.2	7	1.4	8	1.6
TOTAL		280	56.7	214	43.3	494	100
Experience	0-5	9	1.8	8	1.6	17	3.4
	6-10	151	30.6	113	22.9	172	34.5
	11-15	108	21.9	80	16.2	188	38.1
	16-20	12	2.4	13	2.6	25	5.0
	21+	0	0	0	0	0	0
TOTAL		280	56.7	214	43.3	494	100



## Descriptive Statistics

Table 6.2a and Table 6.2b present the means, standard deviations and correlations between variables for the Muslim and non-Muslim samples. Several interesting characteristics of the data are noteworthy. In both samples, conscientiousness correlated consistently with extraversion ( $r = 0.24$ ,  $p < 0.01$  for the Muslim sample and  $r=0.25$ ,  $p < 0.01$  for the non-Muslim sample), emotional stability ( $r = 0.49$ ,  $p < 0.01$  for the Muslim sample and  $r= 0.29$ ,  $p < 0.01$  for the non-Muslim sample), openness ( $r = 0.39$ ,  $p < 0.01$  the Muslim sample and  $r = 0.28$ ,  $p < 0.01$  for the non-Muslim sample), emotional intelligence ( $r= 0.24$ ,  $p < 0.01$  for the Muslim sample and  $r = 0.29$ ,  $p < 0.01$  for the non-Muslim sample), and sales performance ( $r= 0.40$ ,  $p < 0.01$  for the Muslim sample 1 and  $r = 0.28$ ,  $p < 0.01$  for the non-Muslim sample). This observation is consistent with previous empirical studies such as Bonzionelos (2004), Costa and McCrae (1992b), Gelissen and de Graaf (2005), Mount and Barrick (1995) and Witt et al. (2002). Other personality trait variables that correlated consistently across the two samples for sales performance were emotional stability and openness to experience.

With regard to emotional intelligence, the means were slightly higher than for the Big-Five variables, and ranged from a low 3.55 in the non-Muslim sample to a high of 3.72 in the Muslim sample. In both samples, emotional intelligence did not correlate with Big Five variables at a value higher than 0.30. Over the years, there have been serious discussions among scholars on whether Emotional Intelligence is an elusive constructs (Davies et al., 1998) and whether it should be considered as a dimension of personality (Mayer & Salovey, 1997). While this was not the focus of this study, it is important to note that the correlation results lend to support the claim

that the measure for emotional intelligence is meaningfully different from the measure for personality traits (Law et al., 2004).

The characteristics of the social networks of subjects reveal some interesting findings. Firstly, the 280 respondents in the Muslim sample who completed the social network section of the questionnaire reported 1,894 network ties, the lowest response being 2 ties and the highest 15 ties (this was the upper limit). In comparison, the 214 respondents in the non-Muslim sample that completed the social network section of the questionnaire reported 3,503 network ties, the lowest response being 2 ties and the highest 13. The average sizes of the managers' networks were 6.8 for the Muslim sample and 5.1 for the non-Muslim sample. This falls within the range reported by other researchers: Anderson, 2007 reported an average network size of 8.0; Carrol and Teoh, 1996, reported an average of network size of 3.4; Siebert et al., 2001, reported an average network size of 5.3. Network cost was measured on a scale from 1 (not at all costly) to 5 (extremely costly). Interestingly, the mean value for network cost was 1.52 with a standard deviation of .27 for the Muslim sample. Similarly the mean value for the non-Muslim sample was 1.36 with a standard deviation of .29, indicating that account managers regarded seeking information or advice from their social network as being not to be costly. The average tie strength correlates strongly with network size in both samples ( $r = -.37$  Muslim sample;  $r = -.22$  non-Muslim sample) and the effect is in the opposite direction implying that account managers with larger networks are more likely to have weaker network ties. These results are consistent with Moran (2005) who found that managers with closed networks have a smaller network. Network cost and network size was found to correlate on both samples ( $r = .17$ ,  $p \leq .05$  Muslim sample;  $r = .11$ ,  $p \leq .05$  non-Muslim sample).

However as indicated, the relationship is not strong, only significant at .05 showing the possibility that account managers in the current study do not pay attention to the cost of having a larger network. Nonetheless, an empirical study testing the relationship between network cost and network size would be useful in the future.

The mean values for market intelligence instrumental and conceptual use were 4.18 for the Muslim sample and 4.02 for the non-Muslim sample, with standard deviations of 0.25 and 0.50, respectively, showing that the values are statistically similar. The account managers in both samples had, on average, a high level of market intelligence use. The standard deviation results indicate small variations of market intelligence use among managers. In contrast, the means for market intelligence symbolic use were 2.33 for the Muslim and 2.47 for the non-Muslim sample, with standard deviations of .86 and .74, respectively. This shows that account managers do not use market intelligence symbolically as much as they use market intelligence instrumentally and conceptually. In both samples, market intelligence instrumental/conceptual use correlates significantly with market intelligence symbolic use although the effect is less in the non-Muslim sample ( $r = .24, p < .01$  Muslim sample;  $r = .12, p < .05$  non-Muslim sample). Interestingly, while market intelligence instrumental/conceptual use correlates strongly with average sales performance in both samples ( $r = .27, p < .01$  Muslim sample,  $r = .40, p < .01$  non-Muslim sample), the results are not the same with market intelligence symbolic use ( $r = -.14, p < .05$  Muslim sample;  $r = -.09$  non-significant for non-Muslim sample).

Performance was rated quite highly in the both samples. In the Muslim sample, the average value for objective performance (measured by sales performance) over three years was 116.1% (16.1% above the targeted sales) compared to 113.40%

(13.4% above the targeted sales) in the non-Muslim sample, with standard deviations of 42% and 33.62% respectively. Subjective performance was measured on a 5-point Likert scale, and the means were 3.74 for the Muslim sample and 3.91 for the non-Muslim sample. It is worth noting at this stage that the performance achievement for both samples appeared to be statistically similar. Interesting effects were also observed on performance. First, objective performance and subjective performance correlated very significantly across both of the samples ( $r = 0.69$ ,  $p < 0.01$  for the Muslim sample;  $r = 0.63$ ,  $p < 0.01$  for the non-Muslim sample). On the subject of multicollinearity, Leech et al. (2008) suggest there would be a potential for a multicollinearity problem should any bivariate correlations value be above .60. Given the bivariate correlations between subjective performance and objective performance were above 60 for both samples ( $r = .69$  Muslim samples;  $r = .63$  non-Muslim sample), the possibility of a multicollinearity problem exists. Should this be proven a problem, the testing of CFA model would uncover this, hence, at this stage I did not address this.

Although not central to the research questions addressed in this dissertation, the comparison of my results with those of Pransky et al. (2006) is interesting and important. Pransky et al. (2006) suggest that objective performance and subjective performance are distinct from one another; and that both tend to emphasise different aspects of performance, each with particular biases. However, the findings of the current study lean toward the argument that objective performance and subjective performance measure similar criteria, indicating that they appear to be one dimension (Viswesvaran et al., 1996). It is also worth noting that improvisation was significantly related to subjective performance in both samples ( $r = 0.49$ ,  $p < 0.01$  for

the Muslim sample;  $r = 0.30$ ,  $p < 0.01$  for the non-Muslim sample). Adaptive selling behaviour showed a significant correlation with improvisation in the both samples ( $r = 0.15$ ,  $p < 0.05$  Muslim sample;  $r = 0.29$ ,  $p < 0.01$  non-Muslim sample).

**Table 6.2a**  
**Means, Standard Deviations and Correlations Between Variables**  
**Muslim Sample**

Variables	Mean	S.D	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Extraversion	3.10	.73	1.00														
2. Agreeableness	3.47	.46	-.09	1.00													
3. Conscientiousness	3.53	.62	.24**	-.03	1.00												
4. Emotional Stability	3.37	.67	.35**	-.35**	.49**	1.00											
5. Openness	3.30	.63	.03	.28**	.39**	-.02	1.00										
6. Emotional Intelligence	3.72	.37	.01	-.04	.24**	.10*	.28*	1.00									
7. Network Size	6.76	2.24	-.04	-.26**	.25**	.32**	-.05	.12*	1.00								
8. Network Cost	1.52	.27	-.02	.03	.02	.06	-.10	.04	.17*	1.00							
9. Tie Strength	.04	.37	.09	.02	-.09	-.08	.04	-.07	-.37*	-.18*	1.00						
10. Ins/Concept Use	4.18	.25	.02	-.02	.25**	.23**	.21**	.17*	.27**	-.21*	-.07	1.00					
11. Symbolic Use	2.33	.86	-.01	.10	-.01	-.02	.01	-.04	.01	.07	-.06	.24**	1.00				
12. Adaptive Selling Behaviour	3.75	.29	-.04	.00	.16*	.03	.10	.23**	.08	-.01	.13*	.08	.08	1.00			
13. Improvisation	4.14	.39	.00	-.04	.41**	.26**	.15*	.20**	.12*	-.10	.01	.29**	-.23*	.15*	1.00		
14. Average Sales Performance	116.1	42.0	-.15*	-.02	.40**	.24**	.35**	.19*	.14*	-.24*	.04	.37**	-.14*	.23**	.33**	1.00	
15. Subjective Sales Performance	3.74	.71	-.16*	-.03	.35**	.16*	.22**	.16*	.14*	-.14*	.10	.39**	-.12*	.16*	.49**	.69**	1.00

\*p< .05, \*\*p<.01

**Table 6.2b**  
**Means, Standard Deviations and Correlations Between Variables**  
**non-Muslim Sample**

Variables	Mean	S.D	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Extraversion	3.24	.71	1.00														
2. Agreeableness	3.52	.51	-.17*	1.00													
3. Conscientiousness	3.59	.65	.25**	.04	1.00												
4. Emotional Stability	3.27	.46	.29**	-.16*	.29**	1.00											
5. Openness	3.51	.64	.20**	-.05	.28**	.16*	1.00										
6. Emotional Intelligence	3.55	.46	.19**	.07	.29**	.19**	.27**	1.00									
7. Network Size	7.70	2.49	-.09	.05	.16*	.15*	.20**	.13*	1.00								
8. Network Cost	1.36	.29	-.12*	.11*	.02	.06	-.07	.04	.11*	1.00							
9. Tie Strength	.01	.93	.21**	.16*	.07	.14*	.18*	.05	-.22*	-.11*	1.00						
10. Ins/Concept Use	4.02	.50	.16*	.00	.22*	.22**	.22**	.07	.29**	-.19*	.12	1.00					
11. Symbolic Use	2.36	.49	-.01	.02	.15*	-.12*	.12*	.14*	.04*	.11	.05	.12*	1.00				
12. Adaptive Selling Behaviour	3.53	.42	-.12	.12	-.04	.05	.12*	.25**	.18*	-.03	-.02	.10	.11	1.00			
13. Improvisation	3.54	.50	.11	.01	.27**	.23**	.27**	.21**	.14*	.08	.01	.27**	-.01	.29**	1.00		
14. Average Sales Performance	113.4	33.62	.10	-.14*	.28**	.24**	.47**	.16*	.14**	-.21*	.14*	.40**	-.09	.19*	.33**	1.00	
15. Subjective Sales Performance	3.91	.49	-.02	.10*	.29**	.18**	.30**	.12*	.17**	-.18*	.11*	.31**	-.10	.21**	.30**	.63**	1.00

\*p< .05, \*\*p<.01

## **Baseline Measurement Model**

In this section, I present the Confirmatory Factor Analyses (CFA) and the revision results for the baseline measurement model. The general strategy and the concept for building the baseline measurement model for the multi sample was adopted from Byrne (2001), French and Finch (2006), and Steenkamp and Baumgartner (1998). Due to the diversity of the study samples (Muslim versus non-Muslim samples), in building the baseline measurement model, it is “customary to establish the baseline models separately for each group understudy” (Byrne, 2001, p. 176). Once the baseline model is established, I then assess the invariant (equivalence) of the measurement across samples. The invariant measurement testing will be discussed in detail in the following section.

The description for the following baseline model is for the Muslim sample. The baseline model consists of the following variables: the independent variables of the Big Five, emotional intelligence and social network; the dependent variable of sales performance; and the mediating variables of market intelligence use, adaptive selling behaviour and improvisation. When the measurement model was not appropriately fit, I revised the result by assessing the parameter estimates and the modification indices (or standard residual). As suggested by Byrne (2001), I then eliminated and/or re-estimated the errors and/or parameters accordingly. To begin, with I examined the measurement model by conducting CFA on thirteen latent variables (extraversion, conscientiousness, openness to experience, emotional stability, agreeableness, social network, and emotional intelligence, market intelligence instrumental/conceptual use, symbolic use, adaptive selling behaviour, improvisation, objective sales performance and subjective sales performance) and



thirty nine indicators (made up of two indicators each for improvisation and subjective sales performance; three indicators each for extraversion, agreeableness, conscientiousness, emotional stability, openness, social network, adaptive selling behaviour, market intelligence symbolic use and objectives sales performance; and four each for emotional intelligence and market intelligence instrumental/conceptual use). The measure of Maximum Likelihood was chosen and the parameters were freely estimated.

The Goodness Fit of Index indicated that the initial model did not fit the data well ( $\chi^2 = 3298.45$ ;  $df = 1056$ ;  $\chi^2/df = 3.124$ ; NNFI = .819; GFI = .826; CFI = .901; RMSEA = 0.078;  $p$ -Value = .000). Therefore, I investigated the parameter estimates and modification indices of the model. I found that the primary reason for the first run not fitting was that the model solution was not admissible. This was because the covariance matrix among the factors was not positive definite. Specifically, the covariance between subjective sales performance and objectives sales ( $r = 1.315$ ) and, extraversion and emotional stability ( $r = .542$ ) were excessively high, indicating possible problems with multicollinearity. Byrne (2002, p.150) states “multicollinearity is often the major contributing factor to the formulation of the non-positive definite matrix.” Multicollinearity arises from the situation where two or more variables are so highly correlated that they both possibly represent the same underlying construct (Byrne, 2001; Leech, et al., 2008).

In addressing the possibility of the multicollinearity problem, I first dealt with the problem that arose between subjective and objective performance because the estimate results showed this to be the largest, most severe case. From the review of the modification index (M.I) for the regression weight, I also found a high cross

loading of objectives sales performance on composite 2 subjective sales performance, SP2 (M.I. 79.837; Par Change 2.318) pointing towards a redundancy in the measures. I rechecked the bivariate correlation results between subjective and objective performance and found that the correlation was significantly high ( $r = .69$  for the Muslim sample;  $r = .63$  for the non-Muslim sample) indicating the possibility of multicollinearity. This redundancy has been noted in previous studies where some found objective and subjective performance measures to measure similar criteria, indicating that they appear to be one dimension (Allen & Bunn, 2003; Tett et al., 1991, Viswesvaran et al., 1996). Following the suggestion of Kline (2005) in dealing with multicollinearity, I combined the two constructs into one; that is I dropped objective sales performance latent from the model but its observed indicators were parcelled into one and were loaded onto the subjective sales performance, where I name the new latent, sales performance. In addition, I assessed the modification indices and found high cross loading of extraversion composite 1, E1 on emotional stability composite 2, ES2 (M.I. = 66.12; Par Change = .562), E1 on conscientiousness composite 2, C2 (M.I. = 63.18; Par Change = .469) and EI on openness composite 1, O1 (M.I. = 52.21; Par Change = .394). As a result I eliminated E1 from the model. Then I re-estimated error correlation 14 (for emotional stability for composite 3, ES3) and error correlation 16 (for openness composite 2, O2) because the index indicated this to be a misfit. Finally I ran the model on 11 latent and 32 indicators. The remedies taken in this round resulted in a significant decrease of the  $\chi^2$  values.

Although the RMSEA fit value was found to be above the cutoff value (RMSEA < .05 indicates good fit; RMSEA = .05 to .08 represent reasonable errors,;

RMSEA > .08 represents poor fit – MacCallum et al., 1996) in the second run, the GFI values fell below the acceptable fit, revealing evidence of misfit of the measurement model ( $\chi^2 = 2432.46$ ;  $df = 816$ ;  $\chi^2/df = 2.980$ ; NNFI = .832; GFI = .869; CFI = .912; RMSEA = 0.068;  $p$ -Value = .000). Following that, I assessed the modification indices for covariance between estimated errors. I found error 18 (network size) to have a high modification index (M.I. = 71.12; Par Change = .834) with error 16 (openness composite 2, O2); and error 16 to have a high modification index (M.I. = 69.21; Par Change = .469) with error 11 (conscientiousness composite 3, C3). I re-estimated the covariance between these errors. Finally, before running another model, I examined the regression modification index. I discovered high cross loading of emotional stability for composite 2, ES2 on conscientiousness composite 1, C1 (M.I. = 41.85; Par Change = .437), emotional stability for composite 2 on openness composite 2, O2 (M.I. = 39.24; Par Change = .232) and emotional stability for composite 2 on network size, size (M.I. = 41.37; Par Change = .423). Instead of re-estimating ES2, I eliminated it from the model.

The third run resulted in a better fit ( $\chi^2 = 2057.49$ ;  $df = 746$ ;  $\chi^2/df = 2.758$ ; NNFI = .856; GFI = .895; CFI = .935; RMSEA = 0.055;  $p$ -Value = .000). Although the covariance matrix was also found to be definite positive, results for GFI values (GFI = .895) in this run still indicated evidence of misfit. In assessing the misfit model, I studied the regression and covariance modification indices. Subsequently, I re-estimated two covariance errors i.e. error 26 (instrumental/conceptual use composite 2, U2) and error 28 (instrumental/conceptual use composite 4, U4) (M.I. = 36.21; Par Change .391); and error 11 (conscientiousness composite 3, C3) and error 6 (agreeableness composite 1, A1) (M.I. = 35.65; Par Change = .333). Additionally,

agreeableness composite three, A3 had high factor loadings on emotional intelligence, emotional stability and conscientiousness, indicating multicollinearity. As a result I dropped A3 from the model.

The model for the fourth run was found to have adequate fit. All indices were above the cut off values ( $\chi^2 = 1698.30$ ;  $df = 688$ ;  $\chi^2/df = 2.468$ ; NNFI = .901; GFI = .926; CFI = .944; RMSEA = 0.048;  $p$ -Value = .000). However the modification indices between covariance factors were still high, revealing that there had been a misfit in the model. As a result, I re-estimated two covariance errors i.e. error 24 (emotional intelligence composite 4), and error 4 (extraversion composite 2) (M.I. = 49.89; Par Change = .393), and error 6 (agreeableness composite 1) and error 4 (extraversion composite 2) (M.I. = 39.42; Par Change = .331). Finally I ran the test with 12 latent and 33 indicators and this resulted in better fit than the fourth model ( $\chi^2 = 1604.52$ ;  $df = 684$ ;  $\chi^2/df = 2.345$ ; NNFI = .931; GFI = .948; CFI = .959; RMSEA = 0.045;  $p$ -Value = .000).

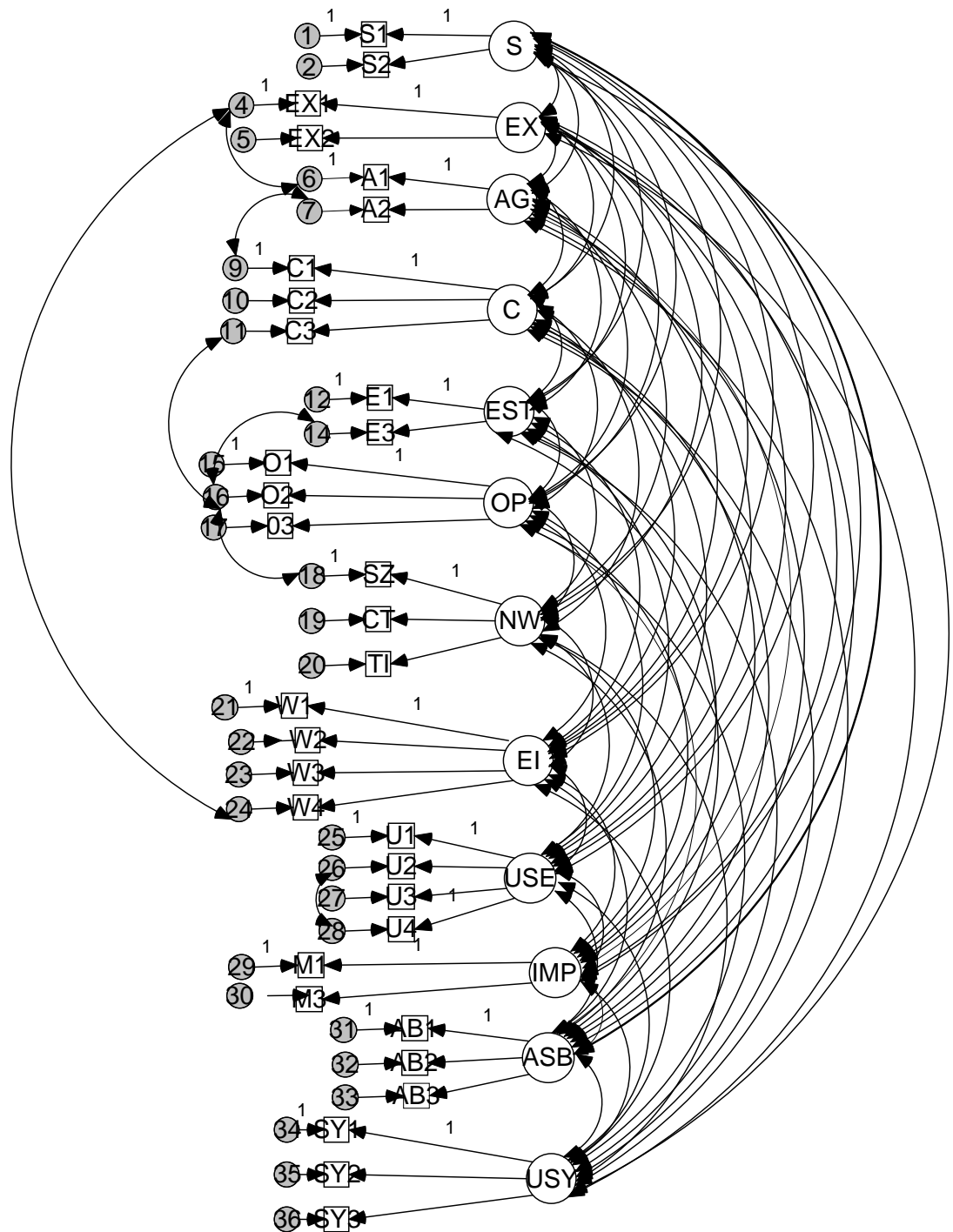
The final model was then cross-validated for an independent sample of non-Muslim and it was found that the baseline model yielded one that was similarly specified for the Muslim sample. A summary of the baseline measurement model is depicted in Table 6.3 whilst Figure 6.1 shows the finalised baseline diagram imported direct from AMOS programme. For the sake of clarity, I have excluded the values of covariance and variance from the model. The final baseline model has 12 latent and 33 indicators. Although the baseline model is similar (or identical) for both Muslim and non-Muslim samples, it is possible that the tenability of invariance does not hold; that is the link between the item and its target factors differs across the groups (Byrne, 2001). Therefore, following Byrne's (2001) recommendation, I statistically

assessed the measurement invariant tests to ensure that the measurement invariant holds. The results for the measurement invariant are discussed in the next section.

**Table 6.3:**  
**Summary of CFA and Revisions Result for the Baseline Model**

Model	Changes	Goodness of Fit Index
1 <sup>st</sup>	Run 13 latent with 39 indicators.	$\chi^2 = 3298.45$ ; $df = 1056$ ; $\chi^2/df = 3.124$ ; NNFI = .819; GFI = .826; CFI = .901; RMSEA = 0.078; $p$ -Value = .000
2 <sup>nd</sup>	Eliminated objective performance and extraversion composite 2, E2 measures. Re-estimated error 16*14. Run 12 latent with 35 indicators.	$\chi^2 = 2432.46$ ; $df = 816$ ; $\chi^2/df = 2.980$ ; NNFI = .832; GFI = .869; CFI = .912; RMSEA = 0.068; $p$ -Value = .000
3 <sup>rd</sup>	Eliminated emotional stability composite 2, ES2. Re-estimated error 18*16, error 9*7 and error 16*11. Run 12 latent with 34 indicators.	$\chi^2 = 2057.49$ ; $df = 746$ ; $\chi^2/df = 2.758$ ; NNFI = .856; GFI = .895; CFI = .935; RMSEA = 0.055; $p$ -Value = .000
4 <sup>th</sup>	Eliminated agreeableness composite 3, A3. Re-estimated error 26*28, and error 11*6. Run 12 latent with 33 indicators.	$\chi^2 = 1698.30$ ; $df = 688$ ; $\chi^2/df = 2.468$ ; NNFI = .901; GFI = .926; CFI = .944; RMSEA = 0.048; $p$ -Value = .000
5 <sup>th</sup>	Re-estimated error 24*4 and error 6*4. Run 12 latent with 33 indicators.	$\chi^2 = 1604.52$ ; $df = 684$ ; $\chi^2/df = 2.345$ ; NNFI = .931; GFI = .948; CFI = .959; RMSEA = 0.045; $p$ -Value = .000

**Figure 6.1: Baseline Measurement Model**



Note:

S	Sales Performance	EX	Extraversion	AG	Agreeableness
C	Conscientiousness	EST	Emotional Stability	O	Openness
NW	Network	EI	Emotional Intelligence	USY	Symbolic Use
IMP	Improvisation	ASB	Adaptive Selling Behaviour		
USE	Instrumental/Conceptual Intelligence Use				

## Testing for Measurement Invariance

Following the setting up of the baseline model, I ran a test on the measurement invariance. Testing measurement invariance is critically fundamental in studies involving multi-samples (Byrne, 2001; Cheung & Rensvold, 2002; French & Finch, 2006; Steenkamp & Baumgartner, 1998). Measurement invariance is defined as “whether or not under difference conditions of observing and studying phenomena, measurement operation yield measures of the same attribute” (Horn & McArdle, 1992, p.117). In stressing the importance of measurement invariance testing in multi-sample approach analysis, Steenkamp and Baumgartner (1998) noted that “if evidence supporting a measure’s invariance is lacking, conclusion based on the scale are at best ambiguous and at worst erroneous” (p.78).

In general, I followed the procedure for testing measurement invariance recommended by Byrne (2001), and French and Finch (2006). Byrne (2001, p.175) suggested that in testing the measurement invariance across groups, a set of parameters are put to the test in a logically ordered and increasingly restrictive way where it involves comparison of models by sequentially constraining various matrices to be invariant (equal) across groups. Of importance for testing metric invariance is the difference in goodness-of-fit chi squares ( $\chi^2$  values) between all constrained estimated parameters and metric invariance. If the imposition of additional constraints results in the significant differences, it indicates that the some equality constraints in the measure do not hold. Therefore, the next step is to run subsequent tests for invariance to locate the noninvariance (Byrne, 2001; Cheung & Rensvold, 2002; Steenkamp & Baumgartner, 1998). By and large there are three sets of parameters that are most commonly being assessed in order to establish the measurement

invariance: (1) Factor loading path, (2) Factor variance/covariance and, (3) Structural regression path (Byrne, 2001; French & Finch, 2006). Although, traditionally the equivalence of factor loadings has been suggested as the minimum acceptable criterion for measurement invariance (Byrne, 2001; Byrne et al., 1989), others argue that the evaluation measurement invariance using the comparison of the change in chi squares ( $\chi^2$ ) is likely to yield significant differences given the sensitivity of goodness-of-fit chi squares to sample size (e.g. Cheung & Rensvold, 2002). These scholars have suggested the alternative is to assess the incremental fit indices between the baseline model and subsequent restricted invariance models. Therefore in this present study in an attempt to locate the noninvariance in the model, I used both methods; that is the comparison of change in goodness-of-fit, chi squares ( $\chi^2$ ) and the comparison of incremental fit indices, GFI, CFI and RMSEA.

In testing for the invariance model, first I estimated a model by constraining all items, factor loadings, factor variances and covariances ( $\chi^2 = 1738.70$ ;  $df = 738$ ). This model differed statistically from the initial model (baseline model) in which no equality constraints were imposed ( $\chi^2 = 1604.52$ ;  $df = 684$ ), while witnessing only slight differences in GFI (.945), CFI (.955) and RMSEA (.048). This comparison yielded a  $\chi^2$  differences value at 134.18 with a degree of freedom differences value at 54, which was statistically significant at the  $p < 0.01$  probability level (see Table 6.5 for detailed values), indicating that some equality constraints in the measurement model do not hold. As recommended by Byrne (2001), I then designed all subsequent tests to locate for the non-invariance.

The next step that I made was constraining equally all factor loadings in the model ( $\chi^2 = 1635.68$ ,  $df = 698$ ). The comparison to the baseline model resulted in a  $\chi^2$



differences value at 31.16 with a degree of freedom differences value at 14, which was statistically significant at the  $p < 0.01$  probability level, showing that some equality constraints in the measurement model still do not hold. In an attempt to locate the non-invariances, I then constrained factor loadings on S (sales performance). This yielded a  $\chi^2$  value at 1622.52 with a degree of freedom value at 690 and the model was not found to be significant, indicating that the results provided support for the invariance. I named this Model 2.

After that I estimated Model 2 with factor loadings on USE (instrumental and conceptual market intelligence use). This resulted in a significant model with a  $\chi^2$  difference value at 77.09 with a degree of freedom differences value at 11 in comparison to Model 2, which was statistically significant at the  $p < 0.01$  probability level. This result shows that some equality constraints in the model do not hold. In order to locate for the non-invariance parameter I assessed the subsequent tests as I had in the earlier model. I continued the orderly process of testing the invariance of parameters until all targeted parameters had been tested. A summary of the results are shown in Table 6.4.

Overall, I found support for the measurement invariance. Therefore, the results suggest that the measurement aspect of the model is invariant across the Muslim and non-Muslim samples at the structural level with the exception of the non-invariant factor loadings of item (parcel) U4, O3 and W2. These results permit a meaningful comparison of structural parameters for the Muslim and non-Muslim samples.

**Table 6.4:**  
**Summary of Fit for Measurement Invariant Models**

Model Description	Groups	Comparative Model	$\chi^2$	<i>df</i>	$\Delta\chi^2$	$\Delta df$	Significant <i>p</i>	GFI	CFI	RMSEA
1. Hypothesized model (Model 1)	Muslim, non-Muslim		1604.52	684	-	-		.95	.96	.045
2. Factor loadings, variances, and covariances constrained equal	Muslim, non-Muslim	Model 1	1748.70	738	144.18	54	<i>P</i> < .01	.95	.96	.048
3. Factor Loadings constrained equal	Muslim, non-Muslim	Model 1	1735.68	728	131.16	44	<i>P</i> < .01	.95	.96	.048
4. Factor Loadings on S constrained (Model 2)	Muslim, non-Muslim	Model 1	1622.52	690	18.00	4	n.s.	.95	.95	.049
5. Model 2 with Factor Loadings on USE constrained equal	Muslim, non-Muslim	Model 2	1639.61	701	77.09	11	<i>P</i> < .01	.94	.95	.049
6. Model 2 with Factor Loadings of item (parcel) U2, U3 on USE constrained equal	Muslim, non-Muslim	Model 2	1631.43	700	8.91	10	n.s.	.94	.95	.050
7. Model 2 with Factor Loadings on IMP constrained equal (Model 3)	Muslim, non-Muslim	Model 2	1633.51	698	10.99	8	n.s.	.94	.95	.051
8. Model 3 with Factor Loadings on ASB constrained equal (Model 4)	Muslim, non-Muslim	Model 3	1641.34	702	7.83	4	n.s.	.93	.94	.055
10. Model 4 with Factor Loadings on EX constrained equal (Model 5)	Muslim, non-Muslim	Model 4	1655.85	704	14.51	2	n.s.	.92	.94	.055
11. Model 5 with Factor Loadings on AG constrained equal (Model 6)	Muslim, non-Muslim	Model 5	1668.32	708	12.47	4	n.s.	.92	.94	.058

Model Description	Groups	Comparative Model	$\chi^2$	<i>df</i>	$\Delta\chi^2$	$\Delta df$	Significant <i>P</i>	GFI	CFI	RMSEA
13. Model 6 with Factor Loadings on C constrained equal (Model 7)	Muslim, non-Muslim	Model 6	1683.01	714	27.16	10	n.s	.92	.93	.058
14. Model 7 with Factor Loadings on EST constrained equal (Model 8)	Muslim, non-Muslim	Model 7	1696.43	718	13.42	4	n.s	.92	.93	.060
15. Model 8 with Factor Loadings on OP constrained equal	Muslim, non-Muslim	Model 8	1722.11	726	25.68	8	<i>P</i> < .01	.92	.93	.060
16. Model 8 with factor loadings of item O2 on OP constrained equal (Model 9)	Muslim, non-Muslim	Model 8	1699.46	720	3.03	2	n.s	.91	.93	.060
17. Model 8 with Factor Loadings on NW constrained equal (Model 9)	Muslim, non-Muslim	Model 8	1712.21	721	12.75	1	n.s	.91	.92	.060
18. Model 9 with Factor Loadings on EI constrained equal	Muslim, non-Muslim	Model 9	1724.32	728	12.11	9	<i>P</i> < .01	.91	.92	.060
19. Model 9 with factor loadings of item W3, W4 on EI constrained equal (Model 10)	Muslim, non-Muslim	Model 9	1717.90	723	5.69	2	n.s	.90	.91	.063
20. Model 10 with Factor Loadings on USY constrained equal	Muslim, non-Muslim	Model 10	1723.90	725	6	2	n.s	.90	.91	.065

S Sales Performance; EX Extraversion; AG Agreeableness  
 C Conscientiousness; EST Emotional Stability; O Openness  
 NW Network; EI Emotional Intelligence; USE Market Intelligence Use  
 IMP Improvisation; ASB Adaptive Selling Behaviour;  
 $\Delta\chi^2$  Differences in  $\chi^2$   $\Delta df$  Differences in *df*

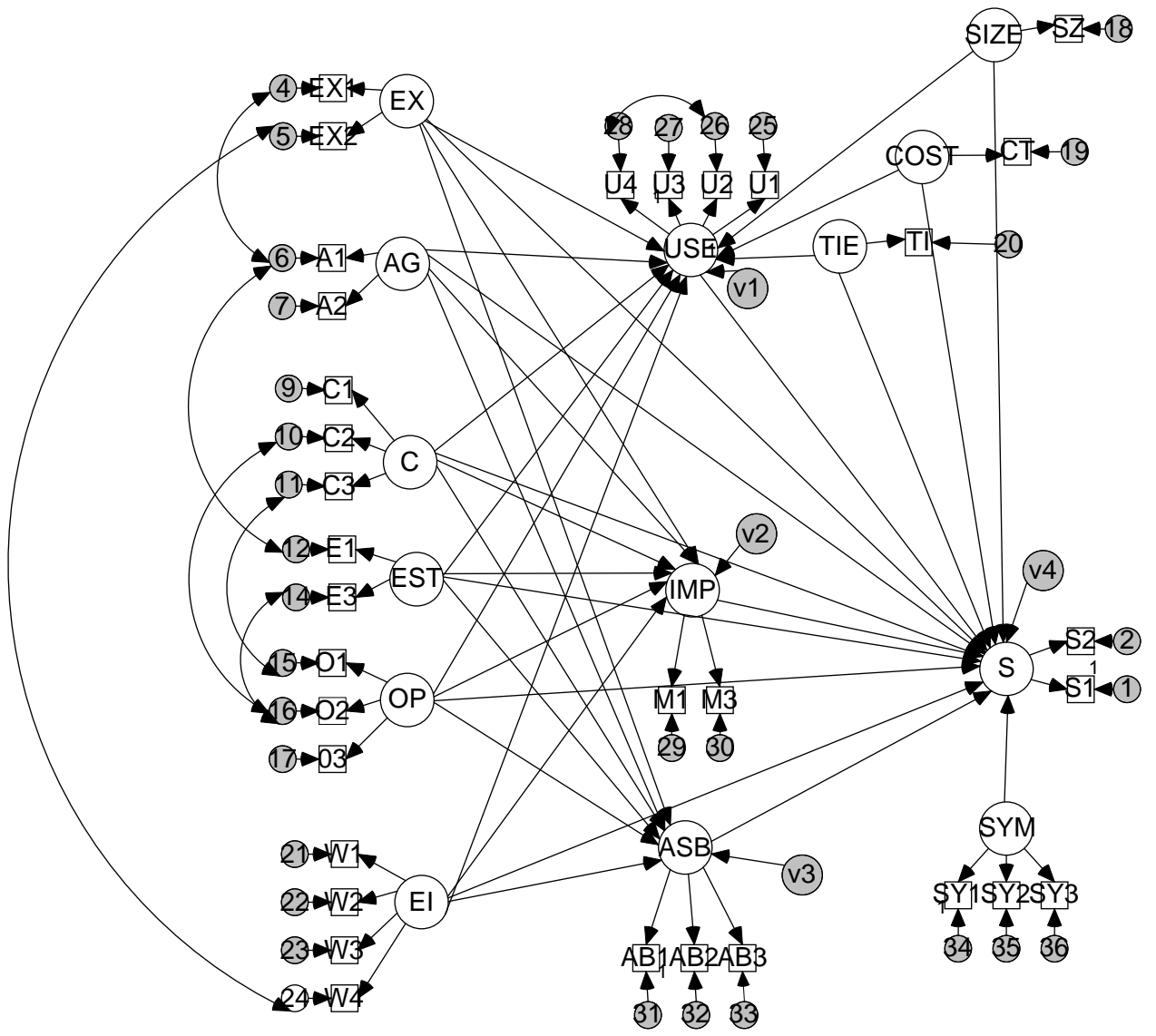
## Testing Structural Equation Modeling

I used the measurement invariant model to test the posited hypotheses on the multi-sample models. The proposed structural equation model is depicted in Figure 6.2. The independent variables (exogenous) were permitted to correlate with one another and the hypothesised paths between exogenous variables, mediating variables, and an endogenous variable were estimated as path coefficients. Results from the first run indicated that the hypothesised model had alternatives. One possible path was suggested by the modification index; paths from market intelligence instrument/conceptual use to improvisation. The second run resulted in an acceptable model with admissible parameter estimates; there were no negative variances and all covariance and correlation matrices were positive definite. Thus, I stopped fitting the model. Table 6.5 shows the results of the structural equation model fits.

**Table 6.5:**  
**Overall SEM Model Fit – Multi Sample**

Run	Added Path	Evidence of Model Fit
1 <sup>st</sup>	Run the hypothesized Model	$\chi^2 = 1729.90$ ; $df = 725$ ; $\chi^2/df = 2.386$ ; $GFI = .895$ ; $CFI = .909$ ; $RMSEA = 0.055$ ; $p$ -Value = .05
2 <sup>nd</sup>	USE → Improvisation	$\chi^2 = 1732.23$ ; $df = 734$ ; $\chi^2/df = 2.359$ ; $GFI = .911$ ; $CFI = .929$ ; $RMSEA = 0.048$ ; $p$ -Value = .05

Figure 6.2: Tests of the Proposed SEM



Note:

EI – Emotional Intelligence	EST – Emotional Stability	C – Conscientiousness
ASB – Adaptive Selling Behaviour	USE – Intelligence Instrumental/Conceptual Use	
OP – Openness	TIE – Tie strength	COST – Network Cost
IMP – Improvisation	SYM – Intelligence Symbolic Use	SIZE – Network size

## Hypotheses Results

Table 6.6 presents the regression weights results for the first set of hypotheses; H1a, H1b, H1c - H10a. The hypotheses were developed to test the effects of exogenous variables (extraversion, agreeableness, conscientiousness, emotional stability, openness, network structure and emotional intelligence, market intelligence symbolic use) on an endogenous variable (sales performance); as well as the mediating variables (market intelligence instrumental/conceptual use, improvisation and adaptive selling behaviour) on sales performance.

In both samples, the direct effect of mediating variables (i.e. market intelligence use, improvisation, adaptive selling behaviour) on sales performance were found to be significant (Market Intelligence Use  $\beta = .311$ ,  $p \leq .001$  for Muslim sample;  $\beta = .426$ ,  $p \leq .01$  for non-Muslim sample; Improvisation  $\beta = .308$ ,  $p \leq .001$  for Muslim sample;  $\beta = .223$ ,  $p \leq .01$  for non-Muslim sample; Adaptive Selling Behaviour  $\beta = .183$ ,  $p \leq .05$  for Muslim sample;  $\beta = .155$ ,  $p \leq .05$  for non-Muslim sample). As indicated by the multiple squared correlations ( $R^2$ ) values, the entire group of variables predicted sales performance at ( $R^2 = .53$  Muslim sample;  $R^2 = .48$  non-Muslim sample) indicating that 53% Muslim sample (45% non-Muslim sample) of the variance in sales performance could be predicted by the differences in openness to experience, emotional stability, conscientiousness, network cost, market intelligence use, improvisation and adaptive selling behaviour combined. This is a large effect according to Cohen (1988). Surprisingly, the impact of market intelligence symbolic use on sales performance was not found significant for either samples ( $\beta = .093$ ,  $p > .05$  for Muslim sample;  $\beta = .97$ ,  $p > .05$  for non-Muslim

sample). These results are inconsistent with the market intelligence use theory of Souchon and Diamantopoulos (1996; 1999) and Vyas and Souchon, 2003 claiming that market intelligence symbolic use is detrimental to performance. This lack of significance will be discussed in detail in Chapter Seven.

The result for the squared multiple correlations ( $R^2$ ) for market intelligence use values at  $R^2=.19$  for Muslim sample and  $R^2=.18$  for non-Muslim sample signified that 19% (Muslim) and 18% (non-Muslim) of the variance in market intelligence use was explained by the model. As for improvisation the  $R^2$  value was higher than market intelligence use at  $R^2 = .26$  (Muslim) and  $R^2 = .23$  (non-Muslim). Finally, the  $R^2$  value for adaptive selling behaviour was found at  $R^2 = .07$  (Muslim),  $R^2 = .07$  (non-Muslim) indicating that only 7% of the differences in adaptive selling behaviour was explained by the effect of emotional intelligence.

**Table 6.6:**  
**Regression Weights: Impact of Exogenous Variables (X) and Mediating Variables (M)**  
**on Sales Performance (Y)**

Path	Muslim Sample				Non-Muslim Sample			
	Std (β)	UnStd (β)	S.E.	C.R. (t-value)	Std (β)	UnStd (β)	S.E.	C.R. (t-value)
USE → Sales Performance	.311***	.328***	.087	3.766	.426**	.434**	.149	2.867
Symbolic Intelligence Use → Sales Performance	.093	.088	.071	1.241	.097	.083	0.075	1.106
IMP → Sales Performance	.308***	.356***	.098	3.633	.223**	.267**	.095	2.812
ASB → Sales Performance	.183*	.198*	.101	1.961	.155*	.186*	.095	1.965
Extraversion → Sales Performance	-0.11	-.012	.029	-.402	-.104	-.106	.117	-.904
Agreeableness → Sales Performance	-.102	-.099	.116	.850	-.035	-.033	.026	1.269
Conscientiousness → Sales Performance	.299***	.298***	.068	4.382	.305***	.304***	.092	3.304
Emotional Stability → Sales Performance	.163*	.211*	.075	2.818	.191*	.213*	.072	2.963
Openness → Sales Performance	.217*	.188*	.095	1.989	.229*	.191*	.094	2.027
Emotional Intelligence → Sales Performance	.083	.088	.062	1.419	.075	.073	0.061	1.196
Network Size → Sales Performance	.099	.097	.072	1.357	.075	.062	.051	1.216
Network Cost → Sales Performance	-.177*	-.168*	.075	-2.234	-.256**	-.237**	.088	-2.693
Tie Strength → Sales Performance	-.138	-.139	.099	-1.395	.149	-.142	.153	-.928
Multiple Squared Correlation ( $R^2$ )				$R^2 = .53$				$R^2 = .48$

\* $p \leq .05$  \*\* $p \leq .01$  \*\*\* $p \leq 0.001$

Std Standardized coefficient UnStd Unstandardized coefficient  
S.E. Standard Error C.R. (t-value) Critical Ratio  
USE Intelligence Instrumental/Conceptual Use IMP Improvisation  
ASB Adaptive Selling Behaviour



## **Impact of Personality on Sales Performance**

Of five personality variables tested in the present study, I found support for three; conscientiousness – sales performance, openness to experience – sales performance, and emotional stability – sales performance relationships. As anticipated, the results revealed that conscientiousness was a significant predictor of sales performance for both samples ( $\beta = .309$ ,  $p \leq .001$  Muslim sample;  $\beta = .305$ ,  $p \leq .001$  non-Muslim sample). Similarly openness to experience was found to affect sales performance for both samples ( $\beta = .217$ ,  $p \leq .05$  Muslim sample;  $\beta = .229$ ,  $p \leq .05$  non-Muslim sample). Consistent with my expectations I also found emotional stability to be a positive predictor of the sales performance in both samples ( $\beta = .163$ ,  $p \leq .001$  Muslim sample;  $\beta = .191$ ,  $p \leq .01$  non-Muslim sample). These results are consistent with Mount and Barrick's (1995) meta-analytic in which they concluded that conscientiousness and emotional stability are the most consistent among the personality trait variables that affect job performance. Surprisingly, the effect of extraversion on sales performance was not found significant ( $\beta = -.087$ ,  $p \geq .05$  Muslim sample;  $\beta = -.096$ ,  $p \geq .05$  non-Muslim sample) failing to support hypothesis H<sub>4a</sub>. These results are non-consistent with several other studies that involve the study of extraversion traits and performance among salespeople in the sales management literature (Barrick et al., 2001; Mount et al., 2006). I will discuss the implication of these non-significant results in detail in Chapter Seven.

Although the magnitude for conscientiousness on sales performance apparently appeared to be slightly stronger in non-Muslim ( $\beta = .305$ ) than in Muslim ( $\beta = .299$ ), the strength of path coefficient is not. This is because the standard error (S.E.) is smaller in Muslim than in non-Muslim (S.E = .068 versus .092) resulting in

the larger C.R. (*t*-value) for the Muslim sample (Muslim C.R. = 4.382 versus the non-Muslim sample C.R. = 3.304), indicating that they are both statistically significant at  $p < .001$ . Similar patterns were observed on the openness to experience - sales performance and emotional stability - sales performance relationships. Hence, there were no differences in the impact of certain personality traits on sales performance when Muslim and non-Muslim samples were compared; failing to support hypothesis  $H_{11}$ .

### **The Impact of Emotional Intelligence on Sales Performance**

The path from emotional intelligence was not found to affect sales performance in either sample ( $\beta = .083n$ , C.R. = .844 < 1.96,  $p \leq .05$  Muslim sample;  $\beta = .075$ , C.R. = 1.169 < 1.96,  $p \leq .05$  non-Muslim sample) failing to support hypothesis  $H_{7a}$  and  $H_{12}$ .

### **The impact of Social Network Characteristics on Sales Performance**

Three hypotheses were tested involving social network characteristics; tie strength – sales performance, network size – sales performance and network cost – sales performance relationships. Interestingly, only one was found significant, network cost – sales performance relationship. The path of network cost was found to significantly affect sales performance and the effect was at the opposite direction as predicted ( $\beta = -.219$ ,  $p \leq .01$  Muslim sample;  $\beta = -.280$ ,  $p \leq .01$  non-Muslim sample). Although the magnitude for beta appears to be larger in the non-Muslim sample, both path coefficients were statistically significant at  $p \leq .01$  (Muslim C.R. (*t*-value) = - - 2.763, S.E = .078; non-Muslim C.R. (*t*-value) = -2.545, S.E. = 0.110) signifying that

no differences were found when Muslim and non-Muslim samples were compared. Therefore hypothesis H<sub>13</sub> is not supported.

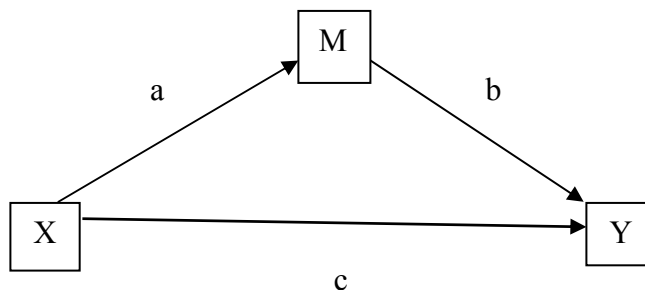
### Mediating Variables

Prior to Baron and Kenny's (1986) classic article, mediation was often confused with moderation and the two terms were often used interchangeably. But clearly the concept and statistical considerations of the two are different. In this study, I borrowed the concept of mediation from MacKinnon et al. (2002) and Iacobucci (2008). Mediation is defined as:

a set of statistical procedures used to investigate whether a particular data exhibits a mediational structure. A mediational structure posits a particular conceptualisation of the mechanism through which an independent variable might affect a dependent variable not directly but rather through the intervening process, captured by the mediator variable (Iacobucci, 2008, p.1).

The basic relationships chain involved in a mediating situation is depicted in Figure 6.3.

**Figure 6.3: The chain diagram of a mediator**



To establish the effect of a mediator, the first step is to test the effect of X on M, M on Y and X on Y. Some extent of mediation is indicated when both  $X \rightarrow M$  and  $M \rightarrow Y$  coefficients are significant (Iacobucci, 2008; MacKinnon et al., 2002).

The equations below illustrate the three equations:

$$M = \epsilon_1 + cX \quad (1)$$

$$Y = \epsilon_2 + aX \quad (2)$$

$$Y = \epsilon_3 + bM \quad (3)$$

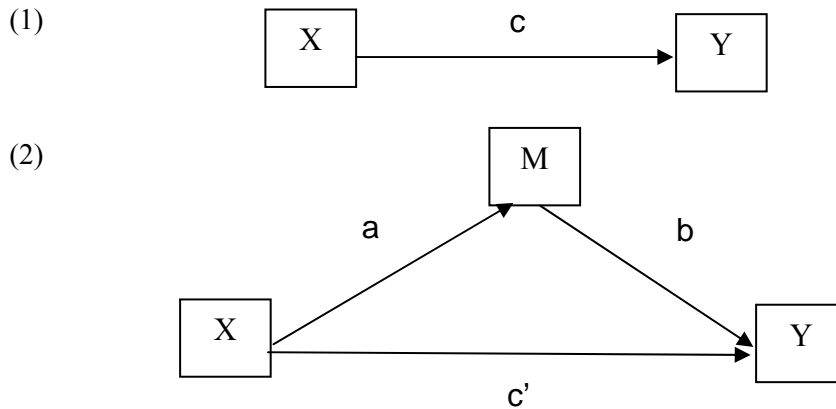
M     Mediating Variable  
Y     Dependent Variable  
X     Independent Variable

Hypothesis  $H_{2b}$  was taken as an example, which reads as follows:

*$H_{2b}$ : The positive effect of openness on sales performance is mediated by market intelligence use*

Establishing mediation would require finding that (1) openness is a significant predictor of market intelligence use (in equation 1), and (2) market intelligence use is a significant predictor of performance (in equation 3). A direct effect is established if openness is found to be a significant predictor of performance (in equation 2). Figure 6.4 illustrates the direct and indirect effects of this.

**Figure 6.4:**  
**(1) Illustration of a direct effect. X affects Y (1).**  
**(2) Illustration of a mediation effect. X affects Y through M**



To test mediation via structural equation model, Iacobucci (2008, p. 69) suggests “testing the mediation effect simultaneously by fitting it on one model.” The reason behind this is to estimate either effect while partialling out or statistically controlling for the other. Some mediation is indicated when both the  $X \rightarrow M$  and  $M \rightarrow Y$  coefficients are significant. If either one is not significant, then there is no mediation effect. To assess the complete mediation, the next step is to compute the  $Z$  test as shown on below:

$$Z = \frac{a \times b}{\sqrt{b^2 S_a^2 + a^2 S_b^2}}$$

Where:

- a = the regression weights estimate for  $X \rightarrow M$
- b = the regression weights estimate for  $M \rightarrow Y$ ,
- $S_a$  = standard error of a
- $S_b$  = standard error of b.

The Z test then compares directly whether the mediated path  $a \times b$  exceeds the strength of the direct path  $c$  (Iacobucci, 2008, p. 25). The following are the conclusions that can be made:

- (1) If the Z is significant and the direct path coefficient  $X \rightarrow Y$  is not, then the mediation is complete.
- (2) When both Z and direct path coefficient  $X \rightarrow Y$  are significant, then the mediation is partial.
- (3) If Z is not significant but the direct path coefficient  $X \rightarrow Y$  is, then the mediation is partial in the presence of a direct effect.
- (4) If neither the Z nor the direct path coefficient  $X \rightarrow Y$  is significant, the mediation is partial in the absence of a direct path (Iacobucci, 2008, p. 69)

### **Market Intelligence Use as a Mediating Variable**

The second set of hypotheses (H2b - H9b) were developed to assess the mediating effects of market intelligence instrumental/conceptual on the relationships between each exogenous variable (Big Five, emotional intelligence and social network variables), and sales performance. While I found support for hypotheses H3b, H5b and H9b, hypotheses H2b, H4b, H7b and H8b were not supported. As reported in the earlier section, market intelligence instrumental/conceptual use was found to affect sales performance ( $\beta = .311, p \leq .001$  Muslim sample;  $\beta = .426, p \leq .01$  non-Muslim sample), signifying the effect of  $M \rightarrow Y$  holds. In both samples the path from conscientiousness was found to significantly affect market intelligence instrumental/conceptual use ( $\beta = .229, C.R. = 1.97 > 1.96, p \leq .01$  Muslim sample;  $\beta = .266, C.R. = 2.022 > 1.96, p \leq .01$  non-Muslim sample). Following the result, I conducted a Z test to assess the full mediation: this revealed that Z ( $Z = .811 < 1.96,$

Muslim sample;  $Z = .413 < 1.96$ , non-Muslim sample) was not significant at  $p < .05$  for both samples. Therefore, I concluded that only partial mediation exists. Similar to H3b, in both samples the effect of network size on sales performance, and the effect of emotional stability on market intelligence instrumental/conceptual use were found only partially mediated by market intelligence use.

### **Improvisation as a Mediating Variable**

The third set of hypotheses (H2c-H9c) were developed to assess the effect of improvisation as a mediating variable on the relationships between exogenous variables (the Big Five, emotional intelligence and social network variables), and sales performance. In assessing the significance of path  $M \rightarrow Y$  (in this case, M was represented by improvisation and Y was represented by sales performance), I found that the path was significant in both samples ( $M \rightarrow Y$ :  $\beta = .218$ ,  $p \leq .05$  for the Muslim sample;  $\beta = .238$ ,  $p \leq .05$  for the non-Muslim sample). Hypotheses H2c, H4c and H8c were not supported.

Interesting effects were observed for conscientiousness. While conscientiousness was observed to significantly affect improvisation for both samples ( $\beta = .255$ ,  $p \leq .05$  Muslim sample;  $\beta = .117$ , C.R. =  $.059 < 1.978$ ,  $p \leq .05$  non-Muslim sample), the mediation effect was only partial for the Muslim sample. However in conducting the Z tests for the non-Muslim sample, I found the Z value to be  $7.480 > 3.25$ ; signifying the relationship to have  $p < .001$ . Therefore, a complete mediation was observed for the non-Muslim sample.

The effect of emotional stability on improvisation was significant in both samples ( $\beta = .199$ ,  $p \leq .05$  for the Muslim sample;  $\beta = .198$ ,  $p \leq .05$  for the non-Muslim sample). The results were somewhat interesting as the effects were similar in

both samples. The Z test ( $Z = 1.734 < 1.96$  Muslim sample;  $Z = 1.694 < 1.96$  non-Muslim sample) revealed that it was not significant at  $p < .05$  thus showing that only partial mediation existed in both samples in the presence of direct effects.

The emotional intelligence path was a significant predictor of improvisation ( $\beta = .191, p < .05$  Muslim sample;  $\beta = .188, p < .05$  non-Muslim sample). Following the results, I conducted a Z test to assess the full mediation: this revealed that  $Z = .904 < 1.96$  was not significant at  $p < .05$  (Muslim sample):  $Z = .981 < 1.96$  was not significant at  $p \leq .05$  (non-Muslim sample) thus leading to the conclusion that only partial mediation was found with the absence of direct effects on both Muslim and non-Muslim samples.

### **Adaptive Selling Behaviour as a Mediating Variable**

Table 6.9 shows the results when adaptive selling behaviour was used to mediate the relationship between the exogenous variables - Big Five and emotional intelligence and the endogenous variable, sales performance. The third set of hypotheses ( $H_{2d}$ - $H_{9d}$ ) was developed to test these effects. In establishing the mediation effect, firstly adaptive selling behaviour (M) had to significantly affect sales performance (Y). In both samples, adaptive selling behaviour was found to affect sales performance significantly although the effect was somewhat not strong ( $\beta = .183, p \leq .05$  Muslim sample;  $\beta = .186, p \leq .05$  non-Muslim sample).

The second level of the test was to assess the path of  $X \rightarrow M$  (X was representing extraversion, openness to experience, conscientiousness, agreeableness, emotional stability and emotional intelligence; M was representing adaptive selling behaviour). Only one path was found to affect adaptive selling behaviour. It was the path of emotional intelligence ( $\beta = .292, p \leq .01$  Muslim sample;  $\beta = .233, p \leq .01$



non-Muslim sample). Given that only one variable that is the effect of emotional intelligence was found to affect adaptive selling behaviour, the variance ( $R^2$ ) shown for adaptive selling behaviour was fairly strong; at seven percents for both samples; indicating that seven percent of the differences in adaptive selling behaviour was explained by emotional intelligence. Consequently, Z tests were conducted on these effects to assess the full mediation, and results were found to be non-significant. This shows that only partial mediation holds in the absence of direct effect for emotional intelligence–sales performance relationship. The findings with regards to the lack of significance of adaptive selling behaviour as a mediating variable will be discussed in detail in Chapter Seven.

### **Hypotheses without Mediation Effects**

Results from both the Muslim samples and the non-Muslim samples disconfirmed hypotheses 6a – 6d as the path from agreeableness was found not to be significant to sales performance for H6a ( $\beta = -.102$ ,  $p \geq .05$  Muslim sample;  $\beta = -.025$ ,  $p \geq .05$  non-Muslim sample), H6b ( $\beta = -.088$ ,  $p \geq .05$  Muslim sample;  $\beta = -.059$ ,  $p \geq .05$  non-Muslim sample), H6c ( $\beta = -.112$ ,  $p \geq .05$  Muslim sample;  $\beta = -.116$ ,  $p \geq .05$  non-Muslim sample) and H6d ( $\beta = .093$ ,  $p \geq .05$  Muslim sample;  $\beta = .097$ ,  $p \geq .05$  non-Muslim sample).

Network cost was found to significantly affect sales performance in both samples ( $\beta = -.177$ ,  $p \leq .001$  for the Muslim sample;  $\beta = -.256$ ,  $p \leq .01$  Non-Muslim sample). The interaction between network cost and market intelligence use was also significant for both samples ( $\beta = -.219$ ,  $p \leq .05$  Muslim sample;  $\beta = -.284$ ,  $p \leq .01$  non-Muslim sample). As predicted the direction of interaction for all effects were negative.

### **Added Path**

One additional path was added to the model as a result of indication provided by the modification index during the process of fitting the SEM model. This was the path of market intelligence instrumental/conceptual use to improvisation. The path of market intelligence use to improvisation was significant at  $\beta = .221$ ,  $p < .01$  (Muslim sample) and  $\beta = .229$ ,  $p < .05$  (non-Muslim sample). However, the Z test ( $Z = 1.275 < 1.96$ ,  $p > .05$  Muslim sample;  $Z = 1.380 < 1.96$ ,  $p > .05$  non-Muslim sample), revealed that they were both not significant, showing that improvisation mediates the relationship between intelligence use and sales performance only at a partial level in the presence of a direct effect. An in depth discussion of the rationale for this conclusion will be provided in Chapter Seven.

**Table 6.7: Regression Weights**  
**Impact of Exogenous Variables (X) on Market Intelligence Use (M)**

Path	Muslim Sample				Non-Muslim Sample			
	Std ( $\beta$ )	UnStd ( $\beta$ )	S.E.	C.R. (t-value)	Std ( $\beta$ )	UnStd ( $\beta$ )	S.E.	C.R. (t-value)
Extraversion → USE	-.087	-.077	.062	-1.254	-.101	-.096	.076	-1.267
Agreeableness → USE	.088	.083	.149	.559	.059	.073	.106	.690
Conscientiousness → USE	.229*	.228*	.116	1.978	.266*	.267*	.132	2.022
Emotional stability → USE	.244*	.247*	.101	2.445	.203*	.191*	.097	1.974
Openness → USE	.083	.062	.079	.783	.099	.079	.072	1.104
Emotional Intelligence → USE	.118	.117	.139	.844	.113	.098	.092	1.069
Network Size → USE	.112*	.111*	.056	1.985	.188*	.178*	.089	1.999
Network Cost → USE	-.219**	-.215**	.078	-2.763	-.284**	-.280**	.110	-2.545
Average Tie Strength → USE	.058	.043	.046	.933	.075	.069	.058	1.193
Multiple Squared Correlation ( $R^2$ )	$R^2 = .19$				$R^2 = .18$			

\* $p \leq .05$  \*\* $p \leq .01$  \*\*\* $p \leq 0.001$   
Std Standardized coefficient  
UnStd Unstandardized coefficient  
S.E. Standard Error  
C.R. Critical Ratio  
USE Market Intelligence Use

**Table 6.8:**  
**Regression Weights: Impact of Exogenous Variables (X) on Improvisation (M)**

Path	Muslim Sample				Non-Muslim Sample			
	Std ( $\beta$ )	UnStd ( $\beta$ )	S.E.	C.R. (t-value)	Std ( $\beta$ )	UnStd ( $\beta$ )	S.E.	C.R. (t-value)
Extraversion → IMP	-.096	-.102	.109	-0.934	-.099	-.098	.110	-.887
Agreeableness → IMP	-.112	-.106	.077	1.383	-.123	-.116	.080	-1.453
Conscientiousness → IMP	.117*	.129*	.059	1.978	.255*	.286*	.121	2.366
Emotional stability → IMP	.091	.178	.104	1.712	.110	.079	.105	.753
Openness to Experience → IMP	.241*	.211*	.095	2.205	.211*	.201*	.474	2.109
Emotional Intelligence → IMP	.191*	.211*	.104	2.031	.188*	.203*	.103	1.976
#USE → IMP	.221*	.285*	.101	2.831	.229*	.237*	.099	2.399
Multiple Squared Correlation ( $R^2$ )	$R^2 = .26$				$R^2 = .23$			

*\*p ≤ .05 \*\*p ≤ .01 \*\*\*p ≤ 0.001*

Std	Standardized coefficient	UnStd	Unstandardized coefficient
S.E.	Standard Error	C.R.	Critical Ratio
USE	Market Intelligence Use	IMP	Improvisation
#	Added Path		

**Table 6.9: Regression Weights**  
**Impact of Exogenous Variables (X) on Adaptive Selling Behaviour (M)**

Path	Muslim Sample				Non-Muslim Sample			
	Std ( $\beta$ )	UnStd ( $\beta$ )	S.E.	C.R. (t-value)	Std ( $\beta$ )	UnStd ( $\beta$ )	S.E.	C.R. (t-value)
Extraversion → ASB	-.116	-.112	.109	-1.028	-.119	-.118	.105	-1.119
Agreeableness → ASB	.093	.096	.102	.945	.097	.099	.113	.877
Conscientiousness → ASB	.114	.132	.079	1.678	.123	.127	.081	1.567
Emotional stability → ASB	.092	.087	.071	1.222	.091	.084	.064	1.313
Openness to Experience → ASB	.089	.095	.140	.677	.087	.078	.101	.774
Emotional Intelligence → ASB	.292**	.232**	.084	3.481	.233**	.235**	.065	3.615
Multiple Squared Correlation ( $R^2$ )	$R^2 = .07$				$R^2 = .07$			

\* $p \leq .05$  \*\* $p \leq .01$  \*\*\* $p \leq .001$

Std Standardized coefficient

UnStd Unstandardized coefficient

S.E. Standard Error

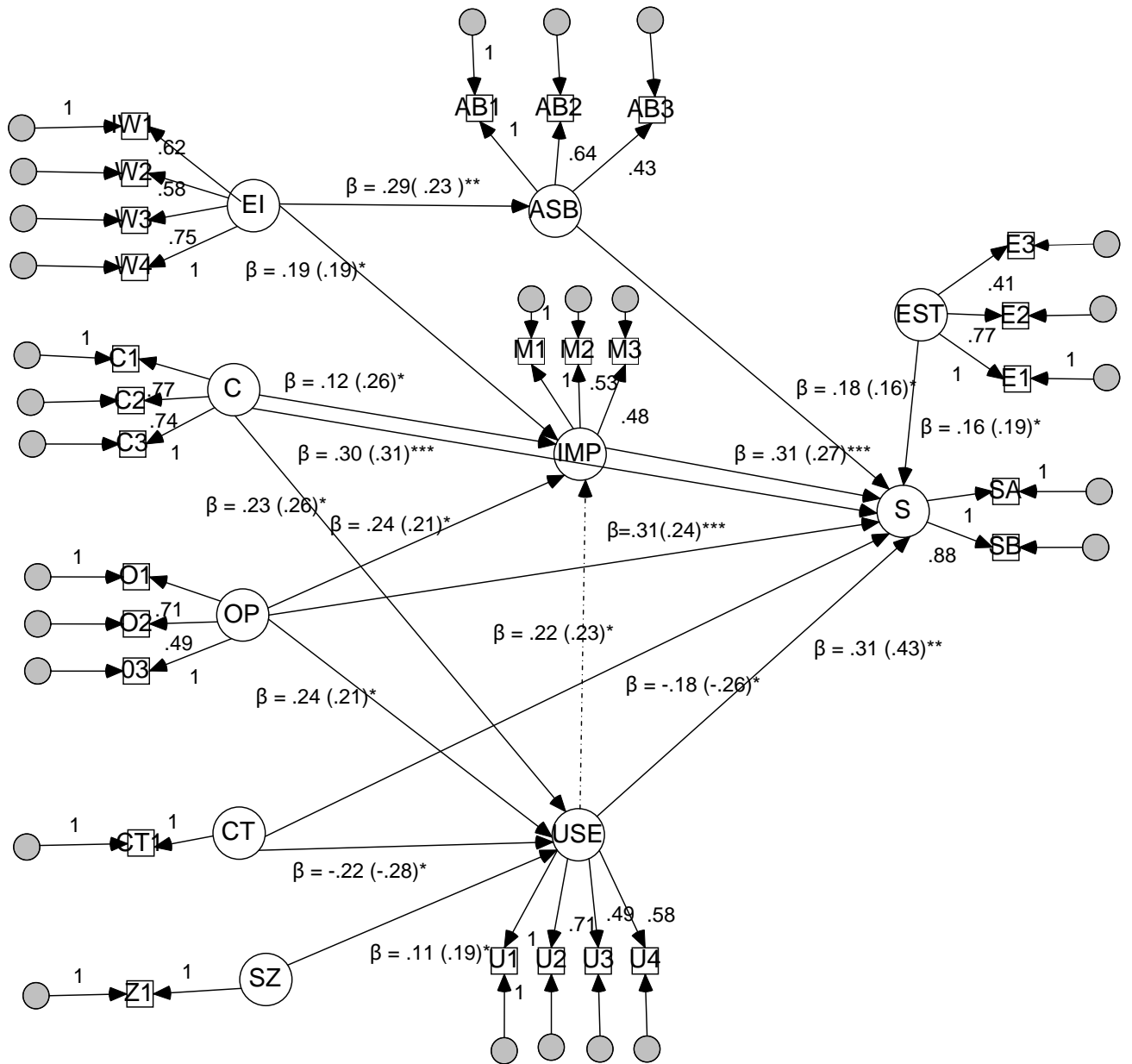
C.R. Critical Ratio

USE Market Intelligence Use

IMP Improvisation

ASB Adaptive Selling Behaviour

Figure 6.5: Results for Hypotheses



Note:  
 EI – Emotional Intelligence      EST – Emotional Stability      C – Conscientiousness  
 SZ – Network Size                  ASB – Adaptive Selling Behaviour  
 USE – Instrumental/Conceptual Intelligence Use      OP – Openness  
 CT – Network Cost                  IMP – Improvisation  
 \* $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$   
 Values in parentheses represent  $\beta$  for the non-Muslim sample.  
 Added path - - - - - ►

**Table 6.10:**  
**Effect of Exogenous Variables (X) and Mediating Variables (M) on Sales Performance**

HYPOTHESIS	SUPPORTED	
	Muslim	Non-Muslim
H <sub>1a</sub> : Market intelligence instrumental/conceptual use is positively related to sales performance	Yes	Yes
H <sub>1ai</sub> : Market intelligence symbolic use is negatively related to sales performance	No	No
H <sub>1b</sub> : Adaptive selling behaviour is positively related to sales performance	Yes	Yes
H <sub>1c</sub> : Improvisation is positively related to sales performance	Yes	Yes
H <sub>2a</sub> : Openness is positively related to sales performance.	Yes	Yes
H <sub>3a</sub> : Conscientiousness is positively related to sales performance.	Yes	Yes
H <sub>4a</sub> : Extraversion is positively related to sales performance.	No	No
H <sub>5a</sub> : Emotional stability is positively related to sales performance	Yes	Yes
H <sub>6a</sub> : Agreeableness is negatively related to sales performance	No	No
H <sub>7a</sub> : Emotional intelligence is positively related to sales performance	No	No
H <sub>8a</sub> : Average tie strength is positively related to sales performance	No	No
H <sub>9a</sub> : Network size is positively related to sales performance	No	No
H <sub>10a</sub> : Network cost is negatively related to sales performance	Yes	Yes

**Table 6.11:  
Mediation Effects**

Hypothesis	Supported		Comment
	Muslim	Non-Muslim	
H <sub>2b</sub> : The effect of openness on sales performance is mediated by market intelligence use	Yes	Yes	Partial mediation in the presence of direct effects
H <sub>3b</sub> : The effect of conscientiousness on sales performance is mediated by market intelligence use	Yes	Yes	Partial mediation in the presence of direct effects
H <sub>4b</sub> : The effect of extraversion on sales performance is mediated by market intelligence use	No	No	
H <sub>5b</sub> : The effect of emotional stability on sales performance is mediated by market intelligence use	No	No	
H <sub>7b</sub> : The effect of emotional intelligence on sales performance is mediated by market intelligence use	No	No	
H <sub>8b</sub> : The effect of average tie strength on sales performance is mediated by market intelligence use	No	No	
H <sub>9b</sub> : The effect of network size on sales performance is mediated by market intelligence use	Yes	Yes	Partial mediation in the absence of direct effects
H <sub>2c</sub> : The effect of openness on sales performance is mediated by improvisation	Yes	Yes	Partial mediation for both samples
H <sub>3c</sub> : The effect of conscientiousness on sales performance is mediated by improvisation	Yes	Yes	Complete mediation for non-Muslim sample
H <sub>4c</sub> : The effect of extraversion on sales performance is mediated by improvisation	No	No	
H <sub>5c</sub> : The effect of emotional stability on sales performance is mediated by improvisation	No	No	
H <sub>7c</sub> : The effect of emotional intelligence on sales performance is mediated by improvisation	Yes	Yes	Partial mediation in the absence of direct effects



H <sub>2d</sub> : The effect of openness on sales performance is mediated by adaptive selling behaviour	No	No	
H <sub>3d</sub> : The effect of conscientiousness on sales performance is mediated by adaptive selling behaviour	No	No	
H <sub>4d</sub> : The effect of extraversion on sales performance is mediated by adaptive selling behaviour	No	No	
H <sub>5d</sub> : The effect of emotional stability on sales performance is mediated by adaptive selling behaviour	No	No	
H <sub>7d</sub> : The effect of emotional intelligence on sales performance is mediated by adaptive selling behaviour	Yes	Yes	Partial mediation for both sample in the absence of direct effects

**Table 6.12: Effect of Agreeableness and Network Cost**

Hypothesis	Supported	
	Muslim	Non-Muslim
H <sub>6b</sub> : Agreeableness is negatively associated with market intelligence use	No	No
H <sub>10b</sub> : Network cost is negatively associated with market intelligence use	Yes	Yes
H <sub>6c</sub> : Agreeableness is negatively associated with improvisation	No	No
H <sub>6d</sub> : Agreeableness is negatively associated with adaptive selling behaviour	No	No

**Table 6.13: Comparative Observations between Muslim and non-Muslim sample**

Hypothesis	Supported
H <sub>11i-11v</sub> : The effect of personality traits on sales performance is weaker for Muslim managers than for non-Muslim managers	No
H <sub>12</sub> : The effect of emotional intelligence on sales performance is weaker for Muslim managers than for non-Muslim managers	No
H <sub>13i-13iii</sub> : The effect of social network characteristics on sales performance is weaker for Muslim managers than for non-Muslim managers	No

## **Summary**

Chapter Six has presented the results of the study. It first presented the demographic and basic statistics results, followed by the result of confirmatory factor analyses, measurement invariant and structural equation modelling analyses. It then presented the results of each hypotheses test. In the next chapter, I will discuss in detail the significance of the supported hypotheses as well as those that were not supported.

## **CHAPTER SEVEN**

### **DISCUSSION AND CONCLUSION**

The current chapter will discuss the results presented in Chapter Six, emphasising their theoretical and managerial implications. Prior to discussing these implications, the findings of the study will be summarised. Thereafter, the chapter will explore the limitations of the study and then outline future directions within this domain of study.

This study advances research on the work performance impact of individual differences in terms of personality traits, emotional intelligence, and social network characteristics. First, it developed a conceptual framework to examine the extent of the influence of personality traits, social network characteristics and emotional intelligence on sales performance. Second, it examined conditions that may facilitate or constrain the influence of these factors on sales performance. Third, it assessed the variables that may mediate the relationship between dependent and independent variables. Finally it observed whether the relationships between personality traits, emotional intelligence, social network characteristics, and sales performance differ between Muslim and non-Muslim account managers. The proposed conceptualisation is validated using data collected from Muslim and non-Muslim account managers in Malaysia. Overall, the results provide fairly strong support for the proposed conceptual model. Although several variables were found to be not significant, the findings support the expectation that the use of instrumental and conceptual market intelligence use, improvisation and adaptive selling behaviour can mediate the effects

of certain relationships: personality traits sales-performance, emotional intelligence-sales performance, and social network characteristics-sales performance.

The major findings are listed below:

- Personality Traits - Sales Performance Relationship. Three of the personality traits variables - conscientiousness, emotional stability and openness to experience - were found to significantly impact sales performance directly, and the effects were all positive.
- Emotional Intelligence - Sales Performance Relationship. No significant direct effect was found.
- Social Network Characteristics - Sales Performance. Of the three social network characteristics examined - network size, network cost and tie strength - only social network cost was found to significantly affect sales performance and the effect was negative.
- Instrumental/conceptual market intelligence use was found to mediate the relationship between openness to experience and sales performance, conscientiousness and sales performance, and network size and sales performance.
- Improvisation was found to mediate the relationship between emotional intelligence and sales performance, openness to experience and sales performance, conscientiousness and sales performance, and network size and sales performance.
- Adaptive selling behaviour was found to mediate the relationship between emotional intelligence and sales performance.

- Muslims - non-Muslims account managers. No significant statistical differences were observed when Muslim and non-Muslim managers were compared in terms of the impact of personality traits, social network characteristics and emotional intelligence on sales performance.

### **Theoretical Implications**

Perhaps one of the most surprising findings derived from this research is that there are no statistical differences found when Muslim and non-Muslim managers are compared in terms of the impact of social network characteristics, personality traits, and emotional intelligence on sales performance. The impact of personality traits, social network characteristics and emotional intelligence on sales performance on Muslim account managers is very similar to that of non-Muslim account managers. Using structural equation modeling, 43 hypotheses were tested across two samples - the Muslim sample versus the non-Muslim sample and the results were similar. Conservative analyses of mean scores on measures of sales performance also revealed no significant statistical differences between Muslim and non-Muslim managers.

One explanation could lie in the fact that a finance industry in Malaysia was the sample source for both Muslim and non-Muslim account managers who participated in the current study. These account managers are governed by the same industry policies and procedures and are working in the same work environment and under the same conditions. It could be said that whether salespersons are Muslim or non-Muslim does not play a major role in their sales performance when Muslim and non-Muslim alike work under a similar work environment and system.

On the methodological front, the measures used to measure personality traits, emotional intelligence, market intelligence use, social network characteristics, adaptive selling behaviour and sales performance hold measurement invariance for both Muslim and non-Muslim samples, which implies that the present study provides convincing psychometric evidence that supports the cross-culture stability of the scales used, such as the IPIP Goldberg (1999) scales for personality traits, the WLEIS Wang and Law (2002) for emotional intelligence, the scales developed by Diamantopoulos and Souchon (1999) for market intelligence use, and the SV-ADAPTS Spiro and Weitz (1990) for adaptive selling behaviour. Thus, these scales could be further used in subsequent research involving a cross-culture study.

### **Mediating Variables**

The current study has theoretically and empirically justified the role of market intelligence use, improvisation, and adaptive selling behaviour as mediating variables in the relationship between some personality traits, social network characteristics and emotional intelligence on sales performance. These results contribute to the understanding of the role of mediators in the workplace. In the case of emotional intelligence and network size, the relationship between these variables and sales performance was found only through the mediating variables, signifying the importance of mediation in the relationship between these variables. Although over the last decade scholars have come to an agreement regarding the importance and usefulness of personality, emotional intelligence and social network characteristics for predicting job performance and other organizational criteria, such as the use of information [intelligence] (Anderson, 2008; Anderson & Nichols, 2007; Barrick & Mount, 1991; Judge et al., 1999; Law & Wang, 2002; Lucas & Diener, 2001; Tett et

al., 1991; Thoresen et al., 2004), the empirical studies involving such relationships as personality trait performance, social network characteristics performance and emotional intelligence performance have provided mixed results. These present results indicate that the mediating variables are the more important attributes when compared to the independent variables in the choice of a candidate for a particular job.

### **Instrumental and Conceptual Market Intelligence Use**

This study contributes to the theoretical implications of market intelligence use in several ways. First, the results of the current study found that the instrumental and conceptual use of intelligence impact sales performance positively while the impact of symbolic use on sales performance was not found to be significant, thereby demonstrating that market intelligence use is a multi-dimensional construct, affirming several other studies such as Menon and Varadarajan (1992), Diamantopoulos and Souchon (1999), Toften (2005), Souchon et al. (2003), and Citrin et al. (2007). The present study also adds to the body of literature that suggests a sales person's performance lies in the effective use (i.e. instrumental and conceptual use) of market intelligence (Citrin et al., 2007; Song et al., 2005). Only when market intelligence is used instrumentally and conceptually, does it impact positively on sales performance, a fact which highlights the need for the sales persons to use market intelligence effectively.

The results have shown that the constructs of instrumental and conceptual use, improvisation, adaptive selling behaviour and sales performance have both convergent and discriminant validity when tested on both Muslim and non-Muslim samples. The applied structural model also fits well with the data. The account

managers who used more instrumental and conceptual market intelligence were shown to perform better, thereby demonstrating the importance of effective market intelligence use in a sales person's day-to-day work. As an account manager uses more market intelligence instrumentally and conceptually, he or she develops more specific and detailed information about the market, competitors, customers, etc., which in turn facilitates the development of sales strategies and tailored customer solutions (Strieter et al., 1999; Toften, 2005). When account managers understand customers' specific expectations and needs, they are better informed and better prepared to interactively develop customised solutions to meet those expectations and requirements (Weitz & Bradford, 1999). Furthermore, account managers' skill levels and knowledge (which are arguably driven by market intelligence used instrumentally and conceptually) have been found to influence sales performance (Brown et al., 1997), further affirming the concept of the cognitive selling paradigm that suggests that sales performance is linked to differences in account managers' knowledge structures and the richness of information they have (Sujan et al., 1988). Market intelligence use is especially critical for account managers who deal with financial products, a domain involving greater environmental diversity and turbulence. Account managers are likely to attempt to compensate for the greater uncertainty arising from this environmental turbulence by using more market intelligence. In addition, when dealing with limited resources and limited financial power, it is critical to identify ways in which information-processing capabilities can be optimised to ensure rational dispersion of resources as well as limit the risks associated with investment operations.



In harmony with the results of Kiefer et al. (2004), which indicated that the work environment can mediate the personality performance relationship, the current study suggests that instrumental and conceptual market intelligence use mediates the personality sales performance relationship. In addition, the current study found that instrumental and conceptual market intelligence use mediates the relationship between network size and sales performance. These findings are noteworthy in strengthening the claim that instrumental and conceptual market intelligence use is a function of direct and indirect effect of performance (Birgelen et al., 2002; Menon & Varadarajan, 1992; Diamantopoulos et al., 2003; Toften, 2005).

The results show that symbolic market intelligence use was not found to impact on sales performance. Given the nature of the symbolic intelligence use, such as the distorted use of intelligence exemplified by taking conclusions out of context to justify decisions already made, one would expect that it would be detrimental to sales performance (Menon & Varadarajan, 1992; Souchon & Diamantopoulos, 1996). Several likely explanation for the fact that it did not prove to be so in this context are possible. First, account managers in the study might not use market intelligence instrumentally and conceptually, and symbolically in a similar degree. Inspection of magnitudes of mean show that salespersons under study relied more on instrumental and conceptual use than on symbolic use. Account managers use market intelligence conceptually to solve specific problems or enhance their overall knowledge of market situations and procedures. Meanwhile, they, at times use it symbolically to pursue a hidden agenda, such as to provide a rationale for decisions made based on intuition. Intelligence can also be used distortedly (symbolically) as a result of market uncertainty and that distortion is used within the context of implementing and

sustaining market orientation (Bettis-Outland, 1999). Diamantopoulos et al. (2003), in their cross-national study found that firms from different countries use intelligence to a different degree, concluding that there is a possibility for culture to moderate the relationship between intelligence use and performance. For example, in their study, symbolic use was found to be highly detrimental to export performance in Austria resulting in less use compared to its use in the United States of America. The use of symbolic intelligence is more common in the USA than in other countries understudied (Diamantopoulos et al., 2003). This phenomenon could also explain the surprising finding of the current study in which the degree of instrumental and symbolic use was not employed at the same level by the account managers in Malaysia. Why this is the case is an interesting question that falls outside the scope of the current study. Further research into this area could explore the reasons behind this phenomenon.

A second explanation could lie in the multi-dimensionality of the symbolic use measure. The current study adopted the market intelligence symbolic use measure developed by Souchon and Diamantopoulos (1999)—a uni-dimensional measure. Other scholars, such as Vyas and Souchon (2003), conceptualise symbolic use as a multi-dimensional construct. Vyas and Souchon claim “that symbolic intelligence use can occur when managers use intelligence in order to justify a decision already made on the basis of intuition and experience as well as when intelligence is distorted beyond its original meaning to support an opinion” (2003, p. 71). When comparing the relative risks of using intelligence for the reason between the former and latter reasons, one would expect that it is riskier to distort intelligence beyond its original meaning than to use intelligence to justify decisions based on intuition and

experience, which discrepancy in turn could result in a varying degree of impact on sales performance.

## **Improvisation**

Although the concept of improvisation is still in its infancy in the sales management literature, it has been increasingly accepted by scholars and practitioners in other fields outside sales management (see Miner et al., 2001; Moorman & Miner, 1998; Vera & Crossan, 2005; Weick 1993). The current study contributes to the body of knowledge in this area in several ways. First, since much theory and research on improvisation has focused on teams and organisational improvisation (e.g. Miner et al., 2001; Vera & Crossan, 2005), the present study contributes to the body of knowledge by providing empirical evidence of individuals' improvisation. Although Miner et al. argued that "the distinct competencies in improvisation did not appear to reside in specific individuals; rather, they flowed from broader organisational routine, cultures and collective capabilities" (2001, p. 327) the findings of the present study have failed to support this argument. Indeed, this present study found the evidence of improvisational behaviour among better performing salespeople. This present study is also one of the few studies that has attempted to measure improvisation, and to my knowledge is the first empirical study to test the mediating effects of improvisation on sales performance.

Second, the results show that improvisation is positively related to sales performance. The account managers who reported improvising more had higher levels of sales performance. Indeed, this result provides theoretical implications for sales management literature in the sense that improvisation may bring additional dimensions to learning processes among account managers (salespeople). Although

not explicit, there are implicit connections to the fields of learning process and improvisation. The results of the current study reflect that success in selling is based on matching customer needs with what is available as well as a firm's capabilities (Szymanski, 1988). If new information about the customer needs is gathered during the sales presentation, the account manager must respond in an impromptu manner in order to win the sales.

Third, conceptually, this study affirms the mediating role of improvisation between the relationship of emotional intelligence and sales performance, openness to experience and sales performance and conscientiousness and sales performance. In so doing, it provides another dimension in which researchers may examine the effect of personality traits and emotional intelligence on sales performance. In this sense, merging improvisation and personality traits, and improvisation and emotional intelligence, brings new perspectives to the literature. All in all, the present study highlights the importance of improvisation in explaining the differences in salespersons' sales performance.

Both instrumental and conceptual market intelligence use, and improvisation play important roles in mediating the relationship between certain personality trait variables and sales performance, certain social network characteristics and sales performance, and emotional intelligence and sales performance relationship. In addition, the bivariate correlation analysis has found that market intelligence use correlates significantly with improvisation. Although the relationship between market intelligence use and improvisation was not hypothesised, the model seems to indicate that market intelligence use impacts on improvisation. These results have revealed a new dimension in organisational learning in that the differences in market intelligence

use explain the differences in improvisational skills, suggesting that the more individuals use market intelligence the more confident they become in improvising. Nonetheless, the task lies with future study to test the relationship between market intelligence use and improvisation.

Finally, previous studies have indicated that experienced managers improvise more than those with less experience (Leybourne, 2002; Leybourne & Sadler-Smith, 2006). Although such is not the focus of the current study, a bivariate correlation analysis between improvisation and experience was used to test this claim; the findings indicated that they correlate significantly at  $r = .38$ . Thus, a relationship exists between improvisation and level of experience. This finding indicates the relationship between experience and improvisation may be explainable in terms of the extent to which account managers are drawing upon conscious expertise, skills, and tacit knowledge. Nevertheless, these are also issues that future study might seek to explicate in greater depth.

### **Mediating Variables: Adaptive selling behaviour**

Three interesting implications were drawn by the study in relation to adaptive selling behaviour. First, the findings of the current study support the contingency theory of adaptive selling behaviour proposed by Weitz (1982) and Weitz et al. (1986) that claimed adaptive selling behaviour is an important determinant of a sales performance among salespeople. When tested individually, the results of the current study have shown that adaptive selling behaviour explains about 8% of the variations in sales performance. This is conspicuous compared to the meta analysis study by Churchill et al. (1985) that found the average of variation in sales performance associated with adaptive selling behaviour is less than 4%. These results serve not

only to add clarity to a number of previously unclear and contentious relationships but also to extend the understanding of the overall adaptive selling behaviour process.

Second, the findings have also shown that adaptive selling behaviour serves as a mediator between emotional intelligence and sales performance. These findings are noteworthy and support the notion of Spiro and Weitz (1990) who argued a salesperson's traits such as empathy, self-motivation and a locus of control are related to the practice of adaptive selling. This study employs the WLEIS scale to measure emotional intelligence. Among other things, the scale assesses the level of self-motivation, understanding the emotion of others, and the ability to control one's temper and emotions, indicating that if a person scores high in emotional intelligence, he or she is self-motivated, has good understanding of the emotions of others, including customers, and is able to control his or her own emotions.

Third, it is also worth noting that the results of the current study support the claim of Giacobbe et al. (2006) that adaptation during the sales presentation is an activity engaged in by most salespeople in a context where the buying units and offerings are complex and each customer affords a significant medium-to long-term profit potential. The mean rating for adaptive selling behaviour in the present study is significantly high for both samples (3.75 Muslim sample; 3.53 non-Muslim samples) indicating that the respondents are highly adaptive with regard to the sales presentation. Also the industry studied here is financial firms that deal with complex investment products such as shares, debentures, unit trusts and bonds that arguably provide significant medium- to long-term profit potential.

## **Independent Variables**

### **Personality Traits**

The current study found that the effect of personality trait variables on sales performance varies. Whilst conscientiousness, openness to experience, and emotional stability were found to affect sales performance, no direct effect was found for extraversion and agreeableness. Interestingly, only conscientiousness and openness to experience have an indirect effect on sales performance through the mediating variables: market intelligence use, improvisation and adaptive selling behaviour. All three of the other personality traits, emotional stability, extraversion and agreeableness do not significantly impact on any of the three mediating variables studied here.

### **Openness to Experience**

The current results found that openness to experience significantly affected sales performance in a positive direction, demonstrating that differences in sales performance can be explained in part by differences in openness to experience. These results are consistent with those of several other studies such as those by Barrick and Mount (1991), Judge et al. (1999) and Thoresen et al. (2004). This finding makes sense, in light of the fact that salespeople with high openness to experience have excellent ideas, are rich in vocabulary, have a good imagination and are quick to understand things that make them easily understood by the customers; consequently, they would more easily get the buy-in which, in turn, would increase sales. Moreover, the salespeople studied here are working under a complex environment wherein the need to adopt new behaviours and ideas is high. This is consistent with the findings of

previous studies that predicted openness to experience may be more likely to be job-related for individuals working in an organisational context in which openness to experience and new learning is needed for successful job performance (Bing & Lounbury, 2000; Thoresen et al., 2004). Hence, the findings of the current study have strengthened the theoretical foundation that many other personality traits researchers have tried to explain for the lack of consistency in the openness performance relationship. Openness to experience would be expected to come into play in situations where a salesperson must adopt new behaviours and ideas in order to achieve a high level of sales performance.

The mediator analysis also suggests that openness has an indirect relationship with sales performance through its relationship with market intelligence use and improvisation. These findings support Thoresen et al. who observed that “highly open salespeople are better able to adapt their decision making and problem solving heuristics to changing situational cues” (2004, p. 838). Researchers like Moorman and Miner (1998) have conceptualised the relationship between improvisation and experience. This work is echoed by others such as Leybourne (2002) and Leybourne and Sadler-Smith (2006) who have found that the practice of improvisation is associated with confidence, experience, and a high level of expertise. An individual improvises when he or she feels confident and has an appropriate level of expertise and experience. The construct of openness to experience indicates that individuals with openness to experience individuals are high in ideas and understanding of abstract ideas, are quick to understand, and are open to learning new experiences, implying that individuals who have high openness to experience are experienced and have a sufficient level of expertise and confidence to improvise.



## **Conscientiousness**

In explaining the relationship between conscientiousness and sales performance, I considered both the direct and indirect effect of conscientiousness on sales performance. Conscientiousness was found to affect sales performance both directly and indirectly through the mediating variables improvisation and market intelligence use. These results are consistent with those of previous studies that have found conscientiousness to be the most consistent personality trait variable in having a positive influence on performance (Barrick & Mount, 1991; Barrick et al., 2001; 2002). In their meta-analysis study, Barrick et al. (2001) observed that the correlation between supervisor rating of work performance and measures of conscientiousness was among the strongest of all relationships between FFM and job performance measures across all types of occupations (e.g. salespeople, police, skilled or semiskilled occupations). A salesperson that scores high in conscientiousness is dedicated, responsible, persistent and achievement-oriented. Moreover, he or she is always prepared with solid information about his or her future client, exacting in his or her work, and pays attention to details. As such, that characteristic would put them in a good position to understand the client's needs, which in turn, renders them more able to provide solutions to those needs.

## **Extraversion**

Given that several studies in the past have found that extraversion positively influences sales performance (John & Srivastava, 1999), the most unexpected finding of all for the personality traits performance relationship in the current study is that extraversion was not related in any way to sales performance. Additionally, not only

did extraversion not affect sales performance, it did not affect the mediators; market intelligence use, improvisation, and adaptive selling behaviour indicating that extraversion was not found to be related to sales performance either directly or indirectly. An explanation is possible for this.

Psychologists are still uncertain as to the fundamental nature and defining characteristics of the extraversion personality dimension. Does extraversion represent a tendency to be sociable or is it a tendency to experience positive emotion? The instrument adopted in the current study came from Goldberg (1999), who defined extraversion as the tendency to be sociable. However, researchers like Lucas et al. argue that extraversion reflects a broader form than sociability, arguing that “sociability simply refers to individual differences in the enjoyment of social activities and the preference for being with others over being alone.....and this sociability component is clearly included in most theorists description of extraverts; but sociability is a narrower construct than extraversion” (2000, p. 453). Similarly, Costa and McCrae (1992) argue that social dominance and the enjoyment of leadership roles may become the constructs for extraversion. Given the arguments regarding the constructs for extraversion thus far, it is possible that the impact of extraversion is hidden due to the narrow concept of extraversion adopted in the current study.

### **Agreeableness**

Contrary to the findings of previous studies that indicated agreeableness impacts on job performance (e.g., Witt et al., 2002), the present study failed to identify noteworthy relationships between agreeableness and sales performance in either sample. Nonetheless, these findings correspond to meta-analytic results

reported by Vinchur et al. (1998) indicating that agreeableness was not related to sales performance. My results also demonstrate that market intelligence use, improvisation, and adaptive selling behaviour do not mediate the relationship between agreeableness and sales performance, showing that there was no indirect effect by agreeableness on sales performance. This finding suggests that a distinction in sales performance between performing and non-performing salespersons could not be explained in part by the differences in agreeableness traits. One possible explanation for the insignificance is that, as noted by Mount et al. (1998), agreeableness was most related to job performance in occupations that involved working with others where joint action and collaborations are needed. In the case of the present study, more than 65% of the salespeople here studied worked for themselves in terms of their earnings being based on the commissions earned indicating that these salespeople often made their decisions on their own.

### **Emotional Stability**

As expected, a positive relationship emerged between emotional stability and sales performance. The current study is consistent in this regard with previous studies, such as those of Malouff et al. (1990) and Judge and Ilies (2002). Individuals who score high in terms of emotional stability are described as being relaxed, stable, tolerant of stress and secure; these are some of the factors that are likely to develop a positive attitude toward work, which attitude, in turn, impacts on sales performance (Bauer & Mantelli, 1990; Judge & Ilies, 2002; Malouff et al., 1990; Schutte et al., 1990). The results also extend Barrick et al.'s (2001) meta-analysis study that found emotional stability (and conscientiousness) were the only personality predictors for direct overall work performance.

Contrary to my expectation, however, emotional stability was not related to improvisation, market intelligence use or adaptive selling behaviour, indicating there was no indirect relationship with sales performance through its relationship with these mediators. One explanation for this phenomenon is that a highly emotionally stable individual has the tendency to be overly relaxed, which state could lead to overestimating one's own performance. In a stressful work environment such as that of stockbroking houses, it is imperative to maintain a sense of emotional equilibrium, and thus it may be necessary for salespeople to take some time off when they find themselves in a situation that is affecting their stress level (Sawyer et al., 2009). However, if a salesperson is too relaxed, this state could lead to laidback behaviour subsequently moving him or her away from being market intelligence-orientated and flexible, which are among the biggest assets in terms of improvisational skills and adaptive selling behaviour.

### **Social Network Cost**

The emerging literature on social network acknowledges that networking is beneficial for both employees and employers (Baker, 2000). For example, Granovetter's (1973) social network theory suggested that social network structures are valuable due to the increased access to information provided. The current study affirms this claim. Network cost was found to negatively affect market intelligence use, improvisation, and sales performance. These findings make at least two theoretical contributions to social network literature. First, the extent to which actor A uses market intelligence sourced from actor B is a negative function of costs that actor A believes he or she will incur as a result of asking actor B for help. Borgatti and Cross (2003) pointed out that a potentially significant cost of seeking information

from others lies in the interpersonal risks an individual takes by admitting ignorance on a given topic. In addition, an obligation resulting from an exchange of information can also be considered a cost (Coleman, 1990). The findings of the present study support these theoretical assertions.

Second, in today's competitive world, account managers have no choice but to seek out market intelligence from others and use it to aid in making decisions. However, seeking out market intelligence from one's own social networks involves costs, implying that attentiveness to a particular networking strategy is a must in terms of its potential to optimise potential benefits offered through a specific network form and minimise potential risks. Account managers have to be selective in forming networks.

### **Network Size**

Past theory has suggested the beneficial aspects of social networks on information transmission (e.g., Burt, 1992); however, to date, research has failed to actively measure the information actors glean from their networks (Anderson, 2008; Siebert et al., 2001). The current study findings provide several theoretical contributions to the body of knowledge regarding social networks. Although no direct effect of network size on performance was identified, the indirect effect of network size on sales performance was established through the mediating variables; instrumental and conceptual market intelligence use and, improvisation. This study provides significant implications for social network research in that the network size sales performance interaction can be established through mediators such as market intelligence use and improvisation. Such findings strengthen the theoretical

foundation that many other social network researchers have tried to establish in this area (Siebert et al., 2001). This major finding could propel future sales management researchers to integrate network size and market intelligence and use and improvisation into their studies.

### **Tie Strength**

The lack of significant findings in the current study regarding tie strength and sales performance as well as the contrary results related to tie strength and market intelligence use, contradicts the findings of several other studies such as those of Hansen (2002) and Burt (1992). One explanation is that these non significant results could possibly stem from the way the market intelligence use was measured. The current study does not categorise, nor subsequently measure, market intelligence into tacit knowledge (intelligence) versus codified knowledge (intelligence). Several researchers have found that the impact of strong ties on intelligence use and the impact of weak ties on market intelligence use are evident in different situations, thereby affecting performance accordingly (Burt, 1992; Hansen, 1999; 2002; Reagans & McEvily, 2003). For example, Hansen (1999) argued that strong ties promote the transfer of complex knowledge (market intelligence) while weak ties promote the transfer of simple knowledge (.market intelligence). Similarly, Reagans and McEvily (2003) found that strong ties impacted on the transfer of tacit intelligence while weak ties were particularly important for the transfer of codified intelligence concluding that “each feature [strong and weak ties] made a distinct contribution to the knowledge [market intelligence] transfer” (Reagans & McEvily, 2003, p. 261). Mathematically, if positive is added to negative (presumably the level of positive and

negative is at par), the equation becomes null: hence, the non-significant result of the current study is explained. As theorised by Granovetter, “weak ties provide people with access to information (market intelligence) and resources beyond those available in their own circle” (1983, p. 113). If weak ties provide access to codified intelligence, it is fair to argue that weak ties impact the use of codified intelligence, which in turn could influence sales performance. On the other hand, individuals with insecure positions may prefer to access tacit intelligence through strong ties, which constitute a base of trust that can reduce resistance and provide comfort in the face of uncertainty (Krackhardt, 1990). Considering the concept of strong ties presented by Krackhardt and Pool, it is probable that strong ties provide access and use on tacit intelligence which, in turn, may impact on account managers’ sales performance. Based on these discussions, it is fair to argue that both weak ties and strong ties might affect the use of market intelligence in different manners (i.e. one in tacit and the other in codified), which, in turn, would affect sales performance. Should future studies also fail to find a significant link between strong and weak ties on intelligence use and/or performance, the existing social networks theory would need to be revised.

### **Emotional Intelligence**

Mediation for the emotional intelligence sales performance relationship is relatively easy to interpret. The results suggested that, at least in terms of predicting account managers’ sales performance, the validity of emotional intelligence variables can be extended through the inclusion of the mediating variables improvisation and adaptive selling behaviour. Although when considered separately, emotional intelligence is not related to sales performance, the results of the current study show

that emotional intelligence links to sales performance through improvisation, and adaptive selling behaviour, demonstrating partial mediation with the absence of direct effect. This finding indicates the importance of a synergistic combination of emotional intelligence and improvisational and adaptive skills, which, in turn, link emotional intelligence to sales performance indirectly. This finding contributes significant theoretical implications.

Emotionally intelligent individuals are adaptable and flexible in handling change (Goleman, 1995; Wang & Law, 2002). In addition, emotionally intelligent individuals have the ability to monitor others' feelings and emotions, discriminate among them, and use this evaluation to guide thinking and actions (Salovey & Mayer, 1990). Emotionally intelligent individuals are also high in self motivation (Wang & Law, 2002). Given the concept of emotional intelligence, in the case of emotionally intelligent salespeople, they have the ability to monitor others' feelings and needs and act accordingly to meet those needs. Moreover, they are highly motivated in making sales. Arguably, these are also some of the skills required to practise improvisation (Moorman & Miner, 1998) and adaptive selling behaviour (Spiro & Weitz, 1990). This phenomenon clarifies the rationale behind the current study's findings. To conclude, the relationship between emotional intelligence and sales performance is mediated by improvisational and adaptive selling behavioural skills. Therefore, researchers and practitioners should not completely discount the concept of emotional intelligence when studying the potential factors that contribute to sales performance among account managers.



## **Managerial Implications**

This study has several implications for sales managers. For sales managers, perhaps the most important finding stemming from this study is that about 53% of the differences in sales performance can be explained, in part, by differences in certain personality traits such as conscientiousness, emotional stability, and openness to experience as well as social network structures such as network size and cost. Additionally, differences in sales performance can also be explained by the differences in market intelligence use, adaptive selling behaviour and improvisational behaviour. Consequently, these findings indicate several managerial implications for recruitment and training, work practices, internal marketing and relationship marketing. These implications will be discussed in depth in the following sections. In the final part of this section, I also provide some guides on assessing sub-cultural issues in Malaysia.

### **Recruitment and Training**

Past research has claimed that personality traits (such as conscientiousness, emotional stability, and openness to experience) can be valid predictors for job performance (Barrick & Mount, 1991; Harris & Lee, 2004). The findings of the current study add to the evidence that such a claim is significant. The evidence calls for an evaluation of the importance of improvisational skills by the salesperson. Therefore, marketing managers should focus on designing training for improvisational and adaptive skills. Management and sales managers must agree that improvisational and adaptive skills should be a part of the performance evaluation and develop standards. First and foremost in the recruitment process, not only should

human resource managers permit the inclusion of the pre-existing nature of conscientiousness, emotional stability, openness to experience, and emotional intelligence in the instruments used for screening for potential account managers (Barrick et al., 2001; Barrick & Mount, 1991; Brown et al., 2002; Hurtz & Donovan, 2000; Vinchur et al., 1998), they should also include measures to assess the potential account manager's market intelligence use behaviour, his or her ability to improvise, and the ability to adapt selling behaviours. The identification of appropriate personality traits, improvisational skills and adaptive selling behavioural skills among potential account managers during the recruitment process is important for optimising on-going training costs.

As demonstrated by past research, sales managers can enhance sales performance by recruiting employees who have high conscientiousness due to this trait's potent and consistent validity (Barrick & Mount, 1991; Brown et al., 2002; Hurtz & Donovan, 2000; McCrae & John, 1991). Moving beyond past research, the current study results found that the relationship between personality traits and performance is mediated by market intelligence use and improvisation, suggesting that a high ability to improvise and a high ability to use market intelligence in appropriate manners, such as in instrumental and conceptual use, may compensate for less desirable personality characteristics. For example, in the recruitment process, should a human resource manager face two candidates that have similar levels of mental ability such as conscientiousness, openness to experience and emotional stability, the choice would then rest on the ability to improvise and adapt to different types of selling behaviours. Human resource managers may find it useful to use recruitment tools to assess the level of usage of market intelligence use, and the

ability to improvise. In addition, human resource managers should not overlook the element of adaptive selling behavioural skills. Hiring account managers with high levels of improvisational and adaptive selling behaviour skills adds an enormous value to the respective organisation. Moreover past research has found that improvisational skills correlate with innovation and creativity, which lead to enhanced team performance (Vera & Crossan, 2005) and the creation of new product development (Akgun et al., 2006).

Although the current results do not support emotional intelligence on its own as having an impact on sales performance, the relationship between emotional intelligence and performance is found to be mediated through adaptive selling behaviour and improvisation. This shows that an account manager [salesperson] that has significant emotional intelligence, for instance, but a low ability to improvise and a low ability to use market intelligence use effectively, may actually be detrimental rather than adding any value to the organisation. The current study also found a correlation between emotional intelligence and network size, indicating that account managers lacking in certain emotional intelligence competencies may present greater risks of having smaller network sizes which consequently impact on sales performance.

The present study also found that instrumental and conceptual use of market intelligence impacts on sales performance. However, the use of symbolic market intelligence does not. These findings offer managerial implications in the sense that sales managers might develop training programmes that focus on improving account managers' ability to be more selective and effective in using market intelligence. This can be achieved through both on-the-job and off-the-job training. A newly recruited

account manager may be assigned a mentor who can train as well as develop the new recruit to be more instrumentally and conceptually market-orientated when making decisions. In addition, the management needs to monitor and control the use of symbolic intelligence among its salespersons since symbolic use does not positively impact on performance.

The results of the present study also highlight the fact that adaptive selling behaviour contributes to sales performance as a mediating variable illustrating the important role that it plays in the emotional intelligence sales performance and personality traits sales performance relationships. Sales managers should encourage account managers (salespeople) to develop and implement adaptive behavioural skills. This can be achieved in several ways. When recruiting and hiring potential salespeople, managers should consider their potential for adaptive behavioural skills. Second, managers should develop structured training programmes that inculcate adaptive behavioural skills. Further, the culture of sales firms, the commitment of management and the firm's compensation programme should also reflect a learning orientation towards mastering adaptive behavioural skills.

### **Work Policy**

Perhaps firms can go one step further in encouraging their personnel to use instrumental and conceptual market intelligence in their day-to-day operations and when making decisions by having a work policy on market intelligence use. For example, a policy could be set that decision making that involves a certain level of cost will not be made without solid backup from accurate, timely, and trustable market intelligence. Marketing managers could be made to ensure that all sales personnel involved in the sale use market intelligence appropriately. The use of

market intelligence for instrumental and conceptual purposes could be encouraged. In contrast, the use of market intelligence for symbolic purposes could be kept to a minimum as a matter of policy, because it is detrimental to performance (Diamantopoulos & Souchon, 1999).

The current study also found that network cost impacts on market intelligence use and sales performance in opposite directions. Although the combination of some personality traits factors and market intelligence use are likely to be related to account managers' sales performance in general, under certain conditions they may not be critical. Market intelligence use requires the commitment of resources such as the cost of acquiring intelligence from particular networks. The practice is only useful if the benefits exceed the cost of those resources. Close attention should be given to the cost-benefit ratio. For example, if an account manager operates under conditions of limited competition, stable market preferences, and booming economies, market intelligence use may not be strongly related to account managers' sales performance (Kohli & Jaworski, 1990).

### **Relationship Marketing**

Although this study has focused on the impact of personality traits, emotional intelligence and social network characteristics on sales performance, its findings have wider implications, in areas such as relationship marketing. As suggested by Gummesson (2008), relationship marketing is an interaction in networks of relationship and relationship marketing emphasises the building and management of relationships within a social context. Consequently, the focus of analysis for account managers has changed from products and firms to people. Since the role of account managers is to develop long-term relationships with customers (Weitz & Bradford,

1999), they need a set of knowledge, skills and abilities that reflect the needs of relationship marketing. The current study suggests that there are numerous types of knowledge, skills and attributes that contribute to the increase of sales in this relationship marketing era. Account managers, when acting as relationship managers, need to have a highly developed knowledge of the marketing environment, and especially knowledge of the customers' needs in order to develop a competitive advantage (Gummesson, 2004). In terms of knowledge, the current study found that market intelligence gathering and use can be a good source of knowledge in understanding the marketing environment, and thus facilitate understanding and process of relationship marketing. Firms should focus on establishing good sources of market intelligence such as internal databases and other external sources such as from social networks, suppliers and formal market research. These sources of intelligence should be easily accessible to account managers.

DiMaggio and Louch (1998) suggest that in the absence of traditional communication activities (e.g. advertising) firms and account managers tend to rely solely on networks to supply market intelligence and facilitate exchange. The findings of this study concur with this and found that knowledge about the market can also be gathered through social network contacts. If account managers have more contacts, then they are likely to receive information from these contacts and be able to use it to their advantage. The interaction and relationship with social network contacts could also contribute to the development of customer relationship management. In fact, past research has found that the development of a social network is considered as an essential outcome of the relationship marketing (Gummerson, 2004; Jones, 2002). Therefore managing customer relationship marketing is imperative to the success of a

firm because it compels customers to stay, due to their relationship with the providers (Bendapudi & Berry, 1997; Sheth & Parvatiyar, 1995). Several studies also claim that a relationship exists between social network size and behaviour factors (Becker et al., 1997; Burt, 2000; Galaskiewicz, et al., 2004). The size of social network contacts dictates the behavioural ability of an account manager to be socialised and hence successfully manage customer relationships.

In today's highly competitive marketplace, personal selling is a critical factor in the ensuring the firm's success in understanding customers' needs which, in turn, increases the volume of profitable sales (Renolds & Arnold, 2000). Several studies have found that account managers play a key role in customer relationship management in terms of understanding, communicating and delivering value to customers: and thus, the focus of today's relationship marketing is on interpersonal communication building and maintaining the relationships with the customers as opposed to short-term sales (Gummerson, 2008; Papparoidamis & Guenzi, 2009; Weitz & Bradford, 1999). Good interpersonal communication skill is required for effective relationship account managers (Weitz & Bradford, 1999). Account managers need to have good interpersonal communication skills to communicate with both internal and external customers. This study's findings show that emotionally intelligent individuals are adaptable and flexible in handling change and have the ability to monitor others' feelings and emotions, discriminate among them, and use this evaluation to guide thinking and behaviour. Arguably, these are some of the elements needed to effectively develop good interpersonal communication skills with both internal and external customers. When account managers and customers are mutually committed to the relationship, they are motivated to maintain the

relationship's existence in the long run and strive for mutual benefit (Paparoidamis & Guenzi, 2009; Weitz & Bradford, 1999).

Additionally, this study found that a correlation exists between emotional intelligence and network size; this has several managerial implications. First, when recruiting account managers, firms need to focus on potential candidates who (a) can facilitate social interactions with target customers, (b) have a high level of emotional intelligence, and (c) have the ability and skills to practise relationship marketing. Firms should also provide training and motivation in order to impose and instil this skill in account managers. This has become especially important as traditional communication activities, such as TV and radio advertising have become very costly and competitive.

Several studies have established that relational behaviour of account managers, such as in adaptive selling, are the antecedents of relationship marketing which, in turn, affects the effectiveness of sales (Jones et al., 2003; Paparoidamis & Guenzi, 2009). In this study, I found that the behaviour of account managers, such as their ability to adapt selling technique and the ability to improvise, influences sales performance. This corroborates the findings of previous studies that have noted a relationship between relationship marketing and the relational behaviour of account managers (Paparoidamis & Guenzi, 2009). Consequently, firms need to recruit potential account managers who have the ability to adapt and to improvise when meeting the needs of relationship marketing. Nonetheless, this is an area that future study could develop further. It is hoped that this study will act as a catalyst to help further research address this gap.



## **Internal Marketing**

The findings within the current study have several implications for internal marketing. Firstly, the study found that emotional intelligence correlates positively with network size (social network) in both samples, which, in turn, affects sales performance. More specifically, the current study illustrates that, as account managers' emotional intelligence increases, the network size number also increases. Since emotionally intelligent account managers have the ability to monitor their own emotions, as well as the emotions of other people and discriminate amongst them, they can use this information to guide their thinking and actions (Mayer & Salovey, 1997). As a result, the correlation between network size and emotional intelligence was expected.

Weitz and Bradford (1999) claim that managing conflict rather than influencing customers will be the key interpersonal activity of account managers in a partnering era. Account managers with a high level of emotional intelligence use their abilities to develop good social relationships with others. These relationships could boost task performance through advice and social support (Wong & Law, 2002; Pearce & Randel, 2004). The ability to be empathetic and understand both one's own emotions, and the emotions of others, would enable an account manager to establish rapport with, and effectively manage, subordinates and others in the firm (Semadar et al., 2006). Furthermore, the ability to manage and control emotional states such as anger and frustration, can be conducive to a more stable working environment (Newsome et al., 2000). These relationships create the foundation for good internal marketing practices.

Gronroos (2000) recommended that it is necessary to succeed in internal marketing before succeeding in external marketing. Internal marketing can change an employee's attitude and behaviour; it can also establish corporate culture with customer service and satisfaction (Gonroos, 2000). Another researcher, Mudie (2003), maintained that employees (such as account managers) must understand other employees and treat them as customers operating in their work environment in order to be conscious of external customers. These findings are also consistent with Ahmed et al. (2003), who found that internal communications is the key in developing an understanding among employees.

Secondly, the study established that there is a correlation between market intelligence use and network size. The explanation behind this phenomenon is that as network size increases, account managers gather more market intelligence from these networks. As the gathering of market intelligence increases, account managers are able to use this intelligence more effectively for conceptual and instrumental use. Account managers may also extend the usage of market intelligence by sharing it with others in the firm. Consequently, the sharing of market intelligence with others in the firm will create a better relationship, which, in turn, improves internal marketing.

Internal marketing is about employees as customers, and how they become more committed, co-operative and enthusiastic (Mudie, 2003). This is, perhaps, a fair claim since researchers found that as the degree of interdependency, such as sharing market intelligence in the workplace, increases, the performance of the sales teams also increases (Weitz & Bradford, 1999). Performing well in marketing requires that account managers work collaboratively with others in the firm. They do this to access

and mutually interpret the rich experience of the staff, and their knowledge, and do so within a structured market intelligence-generating environment (Ballantyne, 2003). This also aligns with the views of Varey and Lewis (1999), who claim that internal marketing is relationship and knowledge management for the new organisation.

### **Assessing sub-cultural issues in Malaysia**

Assessing sub-cultural issues in Malaysia could prove a challenge for the multi-national firms. While Malaysians generally continue living in harmony, each ethnic group lives with their own sub-cultural values (Putti et al., 1989). Firms, and especially international based firms, should be aware of the sub-cultural differences in Malaysia and thus tailor their business cultures to meet those needs. For example Muslims celebrate *Eid fitr*. It is the end of marking the holy month *Ramadhan*. During *Ramadhan* all Muslims are required to fast from dawn to dusk for the duration of a month. The restaurants and cafes that cater for Muslims are closed during the day. Muslims in Malaysia will not tolerate with activities such as gambling, alcohol, or pork-based industries and they cannot indulge in speculation (Mastor et al., 2000; Williams & Sharma, 2005), and therefore these sorts of possessions and activities should be avoided when dealing with Muslims in Malaysia. In responding to such cultural needs, firms should supply eating places that sell only *halal* food. The *halal* and *non-halal* food should completely be separated; from the process of preparation to presentation at the table. This also applies to any function that involves Muslim employees. Additionally, firms should also provide a praying room for the Muslim employees to perform their prayers. It is advisable that the lunch break coincides with afternoon praying time to allow them perform their prayers. Firms should also observe and tailor to the values and needs of Malaysian Buddhists and Hindus. For

example, in terms of food, the Hindus and Buddhists do not eat beef therefore any dishes containing beef should not be presented to them. The Chinese in Malaysia are usually Buddhist. They celebrate Chinese New Year that normally falls in the second week of February. The Hindus celebrate *Divali* and this normally falls in November. Despite the hot weather in Malaysia, in terms of attire, all employees in Malaysia including Muslim and non-Muslim, would appreciate non-revealing attire.

With regards to recruitment and training for account managers, it is essential for firms to train the account management team to effectively sell their product while also meeting the diverse cultural needs of the market. For example, to effectively reach the Malaysian markets, firms should make themselves aware of the values, dos and don'ts of the Muslim, Buddhist, Hindu and Christian faiths.

Several researchers had indicated that Malays who are Muslim responded better to productivity increases if they saw benefits accruing not only to the organization but also to their family, community and nation (Abdullah, 1992). In contrast, the Chinese (non-Muslim) are more motivated by financial rewards. They value hard work, diligence, pragmatism, wealth or prosperity, harmony and risk taking (Abdullah, 1992). However this study found no differences on the impact of personality on performance when Muslim and non-Muslim account managers were compared. It is possible that alternative performance constructs that were not included in this study, such as intrinsic and other extrinsic motivation would exhibit differential predictions on the impact of personality, emotional intelligence and social network characteristics on performance of Muslim versus non-Muslim account managers. This could be the focus of future research.

## **Limitations**

Like any empirical study of complex organisational affairs, the current study is subject to several limitations. This section will discuss several limitations, namely, sampling, generalisation of the findings, and measurement issues.

### **Sample Size**

One of the recognised limitations has to do with sample size. Ideally, the number of participants participating in this study would have been larger, especially given the methodology of study analysis (i.e., Structural Equation Modeling). With a larger sample size, some of the non-significant findings might have become more significant. Nevertheless, it is less likely that the direction of the results would have changed. Changing the research procedure from a mail survey to another means (e.g., an online survey) and/or offering a longer response period would probably have resulted in an increased sample size.

### **Generalisation**

One potential limitation with regard to the generalisation of the study's findings should be acknowledged. This study concentrated on a single industry namely, financial firms. If this industry differs in significant ways from other industries, then its results could not be generalised to different industries. It would be interesting to examine whether the results of this study would extend to other industries. However, by concentrating on a single industry, this study is able to control the effect of environmental and market conditions, differences in job descriptions, and differences in industrial cultures (Lopez et al., 2005). Indeed, single

industry studies have provided significant contributions to theory and practice in marketing (Frankwick et al., 1994).

### **Measurement Issues**

In regards to the measures used, this study focused on cross-sectional data, a strategy which limits the ability to control fully for certain unobserved effects (Christen et al., 2006). Cross-sectional data do not allow for assertions of causation (Davis, 1985). When studying dynamic phenomena such as the relationship between variables, longitudinal studies provide for stronger inferences (Morgan & Hunt, 1994). Although such studies would overcome the inherent limitation, the longitudinal design also includes potential problems of high cost and an inability to capture a sufficiently large sample (Weiss, 1981).

A few concerns arose regarding personality testing as well. Personality testing is the more glamorous and ephemeral area of psychological testing, but the intuitively appealing nature of the concept does not guarantee that it is inherently correct (Piedmont et al., 2000). Moreover, personality testing relies only on self-reporting and subjective evidence; thus, responses are subject to various distortions, including the faking of answers or elements of bias (Stanton & Matthews, 1995). Several measures have been taken to remedy these concerns. First, this study has cautiously chosen a validated instrument. Over the years, psychologists have developed, improved, and validated instruments used to measure the personality trait constructs. This study has employed an instrument developed by Goldberg (1999) that was designed to assess the five domains of the Big Five. In addressing the self-reporting issue, this study endorses the work of Judge and Cable (1997), who presented two kinds of personality preference correlations, with personality being rated by both

respondents themselves and their peers. Results were extremely similar in both cases, and the researchers concluded that “observed relationships were independent of common method variance” (Judge & Cable, 1997, p. 385).

Third, this study used only self-reports of performance. Self-reported performance can be subjected to various distortions, including the faking of answers and/or elements of bias. However, previous studies have found that, when both peer and supervisor ratings were gathered, the results between the self and peer/supervisor ratings were similar (Law et al., 2004). Moreover, supervisor ratings pose a validity risk as indicators of true performance. For example, some supervisors are indiscriminately hard or easy across all participants or allow their personal opinions or grievances to enter into their ratings (Strauss et al., 2001). Hence, the use of self-reported performance in this study may constitute only a minor limitation. In addition, the adoption of both objective and subjective measures remedies the bias of this performance measure.

Fourth, parcelling was used to analyse the data with structural equation modeling. Opponents of the practice of parcelling are concerned about the dimensionality of the construct, which may sequentially contribute to the pitfalls of an incorrectly specified factor model. However, extra care has been taken when adopting parcelling to use the most consistent parcelling approach (Little et al., 2002). Little et al. note that “after detailing arguments pro and con, we conclude that the considered use of parcels cannot be dismissed out of hand” (2002, p.151).

### **Future Research**

There are several areas for possible future study. First, further replication is needed to determine how the findings reported herein correspond to the results of

studies conducted in other work environments. In particular, the degree of market intelligence use and improvisation requires further study to understand the affect of certain personality trait variables and social network characteristics on sales performance interactions. Consistently with previous studies, market intelligence is shown to be undoubtedly important in account managers' day-to-day operations and decision making. The current study found that account managers use market intelligence from selective sources of information. Future research could address the issue of variation in the quality of market intelligence, its dissemination, and individual response; these variations are clearly important and warrant consideration by both managers and researchers.

Second, this study found a variation in the improvisation practice explains differences in sales performance among account managers indicating that improvisational skill is vital to success in sales jobs. Therefore, further research is required (1) to explore the conditions under which and the reasons by which account managers may deploy improvisation, and (2) to examine the role that expertise and skills play in this process.

Third, this present study has determined that extraversion does not play a significant role in sales performance. Perhaps this is due to the multidimensionality of extraversion construct. This study conceptualised the extraversion domain as a tendency to be social (Goldberg, 1999) and did not consider the other domain—namely, to experience positive emotions—as suggested by Lucas et al. (2000). A clear direction exists for future research seeking to examine the core features of extraversion dimensions. Moreover, others have claimed that the reality of the relationship between extraversion and sales performance may be obscured as cross-



cultural evidence explains the differences in extraversion (Lucas & Diener, 2001; Lucas et al., 2000). Therefore, future research could study the pattern of differences that should emerge when comparing extraverts' and introverts' enjoyment of different situations.

Finally, future researchers may also find it useful to examine the interactive effects of the Big Five and mediating variables on other work outcomes, such as turnover, career progression, and merit increases.

### **Concluding Remarks**

This chapter concludes the examination of personality traits, social network structures, and emotional intelligence in sales performance by presenting implications, limitations, and directions for future study as derived from the study results. Theoretical and managerial implications suggest the relevance and currency of this study as firms seek to recruit, train, and retain high-performing account managers. Areas of general support as well as specific aspects that were not supported offer some directions for future research. Understanding the factors that affect account managers' sales performance is crucial to comprehending the bigger picture of firms' performance.

## REFERENCES

- Abdullah, A. (1992). The influence of ethnic values on managerial practices in Malaysia. *Malaysian Management Review*, 27(1), 3-18.
- Abrahams, D. S. (2007). Emotional intelligence and army leadership: Give it to me straight! *Military Review*, 87(1), 86-93.
- Abuznaid, S. (2006). Islam and Management: What can be learned? *Thunderbird International Business Review*, 48(1), 125-139.
- Adams, C. J. (1997). *Islamic religious traditions*. New York: Research and Scholarship in the Humanities and Social Sciences.
- Adler, P. S., & Kwon, S. W. (2002). Social capital: Prospect for new concept. *Academy of Management Review*, 27, 17-40.
- Adler, S. (1994). Personality tests for salesforce selection: Worth a fresh look. *Review of Business*, 16(1), 27-38.
- Agency, C. I. (2005). The world factbook. In U. Central Intelligence Agency (Eds.)
- Ahmed, P. K., Rafiq, M., & Saad, N. M. (2003). Internal marketing and the mediating role of organizational competencies. *European Journal of Marketing*, 37(9), 1221-1241.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interaction*. CA: Sage.
- Aiken, M., & Hage, J. (1968). Organization alienation: A comparative analysis. *Academy Social Review*, 33, 497-507.
- Akgun, A. E., Byrne, J. C., Lynn, G. S., & Keskin, H. (2007). New product development in turbulent environments: Impact of improvisation and unlearning on new product performance. *Journal of Engineering and Technology Management*, 24(3), 203 -218.
- Akgun, A. E., Lynn, G. S., & Yilmaz, C. (2006). Learning process in new product development teams and effects on product success: A socio-cognitive perspective. *Industrial Marketing Management*, 35(2), 210-228.
- Al-Habshi, S. O., & Syed Agil, S. O. (1994). *The role and influence of religion in society*. Kuala Lumpur: Institute of Islamic Understanding Malaysia.
- Ali, A. J. (2005). *Islamic perspectives on management and organization*. Northampton, Massachusetts: Edward Elgar Publishing Inc.

- Ali, A. J. (2009). Islamic perspectives on leadership: A model. *International Journal of Islamic and Middle Eastern Finance and Management*, 2(2), 160 - 180.
- Allport, G. W. (1937). *Personality: A psychological interpretation*. New York: Holt and Company.
- Allport, G. W., & Odbery, H. S. (1936). Trait names: A psycho-lexical study. *Psychological Monographs*, 47, 211.
- Altinay, L. (2008). The relationship between entrepreneur's culture and the entrepreneurial behaviour of the firm. *Journal of Small Business and Enterprise Development*, 15(1), 111 - 129.
- Ambler, T., & Kokkinaki, F. (1997). Measures of marketing success. *Journal of Marketing Management*, 5(13), 665-678.
- Ambler, T., & Riley, D. (2000). *Marketing metrics: A review of performance measures in the UK and Spain*. London: London Business School.
- Anand, V., Manz, C., & Glick, W. (1998). An organizational memory approach to information management. *Academy Management Review*, 23(October), 796-809.
- Anderson, C., Ciarlo, J., & Brodie, S. (1981). Measuring evaluation-induced change in mental health programmes In J. Ciarlo (Ed.), *Utilising evaluation, concept and measurement techniques*. Beverly Hills, CA: Sage Publication.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423.
- Anderson, M. H. (2008). Social networks and the cognitive motivation to realize network opportunities: a study of managers' information gathering behaviors. *Journal of Organizational Behavior*, 29(1), 51-78.
- Anderson, M. H., & Nichols, M. L. (2007). Information gathering and changes in threat and opportunity perceptions. *The Journal of Management Studies*, 44(3), 367-387.
- Andrews, J. C., Durvasula, S., & Netemeyer, R. G. (1994). Testing the cross-national applicability of U.S. and Russian advertising belief and attitude measures. *Journal of Advertising*, 23(1), 71-86.
- Anglin, K. A., Stolman, J. J., & Gentry, J. W. (1990). The Congruence of Manager Perception of Salesperson Performance and Knowledge-Based Measures of Adaptive Selling. *The Journal of Personal Selling & Sales Management*, 10(4), 81-91.

- Arbuckle, J. L. (1996). Full information estimation in the presence of incomplete data. In G. A. Marcoulides & R. E. Schumacker (Eds.), *Advanced structural equation modeling: Issues nad techniques* (pp. 243 - 277). Mahwah, New Jersey: Erlbaum Associates.
- Arbuckle, J. L., & Wothke, W. (1999). *AMOS user's guide*. Chicago: Smallwaters.
- Arun, S., Michael, L., & Heiner, E. (2007). The variance in sales performance explained by knowledge structures of salespeople. *The Journal of Personal Selling & Sales Management*, 27(2), 169-186.
- Austin, E. J. (2004). An investigation of the relationship between trait emotional intelligence and emotional task performance. *Personality and Individual Differences*, 36, 1855-1864.
- Azevedo, A., Drost, E. A., & Mullen, M. R. (2002). Individualism and collectivism: Toward a strategy for testing measurement equivalence across culturally diverse groups. *Cross Cultural Management*, 9(1), 19-31.
- Baileys, J. R. (1997). Need for cognition and response mode in the active construction of an information domain. *Journal of Economic Psychology*, 18, 69-85.
- Baker, T., Miner, A. S., & Eesley, D. T. (2001). Improvising firms: bicolage, account giving and improvisational competencies in the founding process. *Research Policy*, 32, 255-276.
- Baker, W. (1990). Market networks and corporate behaviour. *American Journal of Sociology*, 96, 589-625.
- Baker, W., & Sinkula, J. M. (1999). The synergistic effect of market orientation and learning orientation on organizational performance. *Journal of Academy of Marketing Science*, 27(4), 411-427.
- Baker, W., & Sinkula, J. M. (2002). Market orientation, learning orientation and product innovation: Delving into the organization's black box. *Journal of Market - Focused Management*, 5(1), 5.
- Bakker, A. B., Van Der Zee, K., Lewig, K. A., & Dollard, M. F. (2006). The relationship between the big five personality factors and burnout: A study among volunteer counsellors. *Journal of Social Psychology*, 146(1), 31-50.
- Ballantyne, D. (2003). A relationship-mediated theory of internal marketing. *European Journal of Marketing*, 37(9), 1242-1260.
- Banks, C. (1948). Primary personality factors in women: reanalysis. *Journal of Psychology and Statistics*, 1, 204-218.

- Bardzil, P., & Slaski, M. (2003). Emotional intelligence: Fundamental competencies for enhanced service provision. *Managing Service Quality*, 13(2), 97.
- Barlett, C., & Ghoshal, S. (1989). *Managing across borders: The transnational solution*. Boston, MA: Harvard Business School Press.
- Barlett, C., & Ghoshal, S. (2000). Going global: Lessons from late movers. *Harvard Business Review*(March- April).
- Barling, J., Slater, F., & Kelloway, E. K. (2000). Transformational leadership and emotional intelligence: An exploratory study. *The Leadership and Organizational Development Journal*, 21(1), 157-161.
- Bar-On, R. (1997). *Bar-on emotional quotient inventory: Technical Manual*. Toronto, Canada: Multi Health System.
- Bar-On, R. (2000). Emotional and social intelligence: Insights from the emotional quotient inventory. . In R. Bar-On & J. D. A. Parker (Eds.), *The Handbook of Emotional Intelligence: Theory, development, assessment, and application at home, school, and in the workplace* (pp. 363-388). San Francisco: Jossey-Brass.
- 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), 1173-1182.
- Barret, G. V., Miguel, R. F., Tan, J. A., & Hurd, J. M. (2001). *Emotional Intelligence: The Madison Avenue approach to science and professional practice*. Paper presented at the Annual Meeting of the Society for Industrial and Organisational Psychology, San Diego, CA.
- Barrick, M., Mount, M., & Judge, T. A. (2001). Personality and job performance at the beginning of new millennium: What do we know and where do we go next? *International Journal of Selection and assessment*, 9, 9-30.
- Barrick, M., Steward, G. L., & Piotrowski, M. (2002). Personality and job performance: Test of the mediating effects of motivation among sales representatives. *Journal of Applied Psychology*, 87(2), 43-51.
- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: A meta analysis. *Personnel Psychology*, 44(1), 1-26.
- Barrick, M. R., Mount, M. K., & Gupta, R. (2003). Meta-analysis of the relationship between the five-factor model of personality and Holland's occupational types. *Personnel Psychology*, 56(1), 45.

- Barrick, M. R., Mount, M. K., & Strauss (1993). Conscientiousness and performance of sales representatives: Test of the mediating effects of goal setting. *Journal of Applied Psychology, 78*(5), 715-722.
- Barrick, M. R., Parks, L., & Mount, M. K. (2005). Self monitoring as a moderator of the relationships between personality traits and performance. *Personnel Psychology, 58*(3), 745-768.
- Barro, R. J., & McCleary, R. M. (2003). Religion and economic growth across countries. *American Sociological Review, 68*(2), 760 - 781.
- Barry, B., & Stewart, G. L. (1997). Composition, process, and performance in self managed groups: The role of personality. *Journal of Applied Psychology, 82*(1), 62.
- Bates, T. C., & Rock, A. (2004). Personality and information processing speed:Independent influences on intelligent performance. *Intelligence, 32*, 33-46.
- Batjargal, B. (2003). Social capital and entrepreneurial performance in Russia: A longitudinal study. *Organization Studies, 24*(4), 535-556.
- Bauer, T. N., Erdogan, B. Z., Liden, R. C., & Wayne, S. (2006). A longitudinal study of the moderating role of extraversion: Leader-member exchange performance and turnover during new executive development. *Journal of Applied Psychology, 91*(2), 298.
- Baum, J. A., & Ingram, P. (1998). Survival enhancing learning in the Manhattan hotel industry, 1898-1980. *Management Science, 44*, 996-1016.
- Becker, G., Hagemann, D., Bartussek, D., Naumann, E., & Schneider, C. (2004). Stimulus analysis and response in organization in the CNV-paradigm: ERP studies about extraversion, cognitive information processing, and motor preparation. *Personality and Individual Differences, 36*, 983-911.
- Becker, K. (2004). Islam and Business: Cross-cultural and cross-national perspectives *Journal of Transnational Management Development, 9*(2/3), 21.
- Becker, T. (2003). Is emotional intelligence viable concept? *Academy of Management Review, 28*, 192-195.
- Behrman, D. N., & Perreault, W. D. (1984). A role stress model performance and satisfaction of industrial salesperson. *Journal of Marketing, 48*(Fall), 9-21.
- Belich, T. J., & Dubinsky, A. J. (1995). Factors related to information acquisition in exporting organizations. *Journal of Business Research, 33*(1), 1.
- Bell, S. T. (2007). Deep-level composition variables as predictors of team

- performance: A meta analysis. *Journal of Applied Psychology*, 92(4), 595 - 615.
- Bendapudi, N., & Berry, L. L. (1997). Customers' motivations for maintaining relationship with service providers. *Journal of Retailing*, 73(1), 15-37.
- Bendoly, E., Rosenzweig, E., & Stratman, J. (2009). The efficient use of enterprise information for strategic advantage: A data envelopment analysis. *Journal of Operations Management*, 27(4), 310.
- Bentler, P. M. (1990). Comparative fit indices in structural models. *Psychological Bulletin*, 107, 238-246.
- Bentler, P. M. (1994). A testing method for covariance structure analysis. *Multivariate Analysis and Its Application* Retrieved 01/01/2010.
- Bergh, D., & Lim, E. (2008). Learning how to restructure: absorptive capacity and improvisational views of restructuring actions and performance. *Strategic Management Journal*, 29(6), 593 - 616.
- Berman, W. C., & Motowidlo, S. J. (1993). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance*, 10, 99-109.
- Bettis-Outland, H. (1999). The impact of information distortion within the context of implementing and sustaining a market orientation. *Journal of Strategic Marketing*, 7(1), 45-59.
- Bienstock, C. C. (2002). Understanding buyer information acquisition for the purchase of logistic services. *International Journal of Physical Distribution & Logistics Management*, 32(8), 636.
- Bing, M. N., & Lounsbury, J. W. (2000). Openness and Job Performance in U.S.-Based Japanese Manufacturing Companies. *Journal of Business and Psychology*, 14(3), 515 - 522.
- Birgelen, M., Ruyter, K. d., & Wetzels, M. (2000). The impact of incomplete information on the use of marketing research intelligence in international service settings: An experimental study. *Journal of Service Research : JSR*, 2(4), 372.
- Birgelen, M., Ruyter, K. d., & Wetzels, M. (2001). What factors determine use of quality-related marketing research information? An empirical investigation. *Total Quality Management*, 12(4), 521.
- Birgelen, M., Ruyter, K. d., & Wetzels, M. (2001b). What makes service research centers effective? *Journal of Service Research : JSR*, 3(3), 265.
- Blackshear, T., & Plank, R. E. (1994). The impact of adaptive selling on sales

effectiveness within the pharmaceutical industry. *Journal of Marketing Theory and Practice*, 2(3), 106 - 127.

Blackson, C., Mottwani, J. G., & Levenburg, N. M. (2006). Understanding the patterns of market orientation among small businesses. *Marketing Intelligence and Planning*, 24(6), 572.

Boles, J. S., Babin, B. J., Brasher, T. G., & Brooks, C. (2001). An examination of the relationship between retail work environments, Salesperson selling orientation –customer orientation and job performance. *Journal of Marketing Theory and Practice*, 9(Summer), 1-13.

Bommer, W. H., Johnson, J. L., Risch, G. A., Podsakoff, P. M., & Mackenzie, S. B. (1995). On the interchangeability of objectives and subjective measures of employee performance: A meta-analysis. *Personnel Psychology*, 44(3), 587-606.

Bono, J. S., Boles, T. L., Judge, T. A., & Lauver, K. J. (2002). The role of personality in task and relationship conflict. *Journal of Personality*, 70, 311-344.

Bonzionelos, N. (2003). The big five of personality and work involvement. *Journal of Managerial Psychology*, 19(10), 69-81.

Boone, L. E., & Kurtz, D. L. (2002). *Contemporary marketing*. South Western Australia: Thomson Learning.

Boorum, M. L. (1994). *Involved listening as a salesperson skills variable and its impact upon adaptive selling and sales performance*. Unpublished PhD Dissertation, University of South Florida, Tampa.

Boorum, M. L., Goolsby, J., & Ramsey, R. P. (1998). Relational communication traits and their effect on adaptiveness and sales performance. *Academy of Marketing Science Journal*, 26(1), 16-30.

Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of Theory and Research for the Sociology of Education* (pp. 241). New York: Greenwood Press.

Borgatta, E. F. (1964). The structure of personality characteristics. *Behavioral Science*, 12(1), 8-17.

Borgatti, S. P. (1997). Structural holes: Unpacking Burt's redundancy measures. *Connections*, 20(1), 35-38.

Borgatti, S. P., & Cross, R. (2003). A relational view of information seeking and learning in social networks. *Management Science*, 49(4), 432-445.

Bozeman, B., & Murdock, A. (2007). Public managers' religiosity: Impacts on work



attitudes and perceptions of co-workers. *International Public Management Journal*, 10(3), 287.

- Bracket, M., & Mayer, J. D. (2003). Convergent, discriminant, and incremental validity of competing measures of emotional intelligence. *Personality and Social Psychology Bulletin*, 29, 1147-1158.
- Brammer, S., Williams, G., & Zinkin, J. (2007). Religion and attitudes to corporate social responsibility in a large cross-country sample. *Journal of Business Ethics*, 71(3), 229-243.
- Brand, C. R. (1984). Personality dimensions: An overview of modern trait psychology. In J. Nicholans & H. Beloff (Eds.), *Psychological Surveys* (Vol. 5 ed). Leichester, UK: Br. Psychological Society.
- Brass, D. J., Galaskiewicz, J., Greve, H. R., & Tsai, W. (2004). Taking stock of networks and organizations: A multilevel perspective. *Academy of Management Journal*, 47(December), 795-817.
- Bridges, W. P., & Villemez, W. J. (1986). Informal hiring and income in the labor market. *American Sociological Review*, 51, 574-582.
- Brooks, H., & Nafukho, F. M. (2005). Human resource development, social capital, emotional intelligence: An link to productivity? *Journal of Industrial Training*, 30(2), 117-128.
- Brossard, H. L. (1998). Information sources used by an organization during a complex decision making. *Industrial Marketing Management*, 71, 41-50.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84, 822 - 848.
- Brown, S. L., & Eisenhardt, K. M. (1998). *Competing on the edge: Strategy as structured chaos*. Boston, MA: Harvard Business School Press.
- Brown, S. P., Cron, W., & Slocum Jr, J. W. (1997). Effects of goal directed emotions on salesperson volitions, behaviour and performance: A longitudinal srudy. *Journal of Marketing*, 61(1), 39-50.
- Brown, S. P., & Peterson, R. A. (1993). Antecedents and consequences of salesperson job satisfaction: A meta-analysis and assessment of casual effects. *Journal of Marketing Research*, 30(Feb), 63-77.
- Brown, T., Mowen, J., Donovan, D. T., & Licata (2002). The customer orientation of service workers: Personality trait determinants and effect on self-and supervisor performance ratings. *Journal of Marketing Research*, 39(2), 110-119.

- Brown, W. F., & Moshavi, D. (2005). Transformational Leadership and Emotional Intelligence: A Potential Pathway for an Increased Understanding of Interpersonal Influence. *Journal of Organizational Behavior*, 27(7), 867-871.
- Bruce, W. (1994). Ethical people are productive people. *Public Productivity and Management Review*, 27(3), 241-252.
- Burke, R. J., & Bolf, C. (1986). Learning within organizations: Sources and content. *Psychological Reports*, 59, 1187-1196.
- Burt, R. (1983). Distinguishing relational contents In R. Burt & M. Minor (Eds.), *Applied network analysis: A methodological introduction* (pp. 35-74). London: Sage.
- Burt, R. (1992). *Structural hole: The social structure of competition*. Cambridge, Mass: Harvard University Press.
- Burt, R. (1998). The gender and social capital. *Rationality and Society*, 10(1), 5.
- Burt, R. (1999). The social capital of opinion leaders. *Annals of the American Academy of Political and Social Science*, 566, 37.
- Burt, R. (2000). The network structure of social capital. *Research in Organizational Behaviour*, 22, 345-423.
- Burt, R. (2001). Attachment, decay, and social network. *Journal of Organizational Behavior*, 22(6), 619.
- Burt, R. (2004). Structural holes and good ideas<sup>1</sup>. *The American Journal of Sociology*, 110(2), 349.
- Burt, R., Hogarth, R. M., & Michaud, C. (2000). The social capital of French and American managers. *Organization Science*, 11(2), 123.
- Butler, E. A., Lee, T. L., & Gross, J. J. (2009). Does expressing your emotion raise or lower your blood pressure? The answer depends on cultural context. *Journal of Cross Cultural Psychology*, 40(March), 244
- Byrne, B. (2001). *Structural equation modeling with AMOS: Basic concepts, applications and programming*. Mahwah, New Jersey: Lawrence Erlbaum.
- Byrne, B. M., Shavelson, R. J., & Muthen, B. (1989). Testing for the Equivalence of Factor Covariance and Mean Structures: The Issue of Partial Measurement Invariance. *Psychological Bulletin*, 105(3), 456-466.
- Cabrera, A., Collins, W. C., & Salgado, J. F. (2006). Determinants of individual engagement in knowledge sharing. *Journal of Human Resource Management*,

17(2), 245-264.

- Cacioppo, J. T., Chuan Feng, K., Petty, R. E., & Rodriguez, R. (1986). Central and Peripheral Routes to Persuasion: An Individual Difference Perspective. *Journal of Personality and Social Psychology, 51*(5), 1032.
- Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. *Journal of Personality and Social Psychology, 42*, 116-131.
- Cacioppo, J. T., Petty, R. E., Feinstein, J. A., & Jarvis, W. B. G. (1996). Dispositional differences in cognitive motivation: The life and times of individuals varying in need for cognition. *Psychological Bulletin, 119*(2), 197.
- Cacioppo, J. T., Petty, R. E., & Kao, C. F. (1984). The efficient assessment of need for cognition. *Journal of Personality Assessment, 48*, 306-307.
- Cadogan, J., Souchon, A., & Procter, D. (2008). The quality of market-oriented behaviors: Formative index construction. *Journal of Business Research, 61*(12), 1263.
- Cadogan, J. W., Diamantopoulos, A., & Siguaw, J. A. (2002). Export market-oriented activities: Their antecedents and performance consequences. *Journal of International Business Studies, 33*(3), 615.
- Calantone, R. J., & Cooper, R. G. (1981). New products scenarios: Prospect for success. *Journal of Marketing, 45*(Spring), 48-60.
- Campbell, D. (1989). An introduction of nonlinear dynamics. In D. L. Stein (Ed.), *Lectures in the science of complexity* (Vol. 13-22). Redwood, CA: Addison-Wesley.
- Caplan, N., Morrison, A., & Stambaugh, R. J. (1975). *The use of social science knowledge in policy decisions at the national Level*. Ann Arbor, MI: Institute for Social Research.
- Carter, S. L. (2000). *God's name in vain: The wrongs and rights of religion in politics*. New York: Basic Books.
- Cattell, R. B. (1946). *The description and measurement of personality*. Yonkers NY: World Books.
- Cattell, R. B. (1965). *The scientific analysis of personality*. Baltimore, MD: Penguin.
- Cavanagh, G. F. (1999). Spirituality for managers: Context and critiques. *Journal of Organizational Change Management, 12*(3), 186-200.
- Cavanagh, G. F., & Bandsuch, M. R. (2002). Virtue as benchmark for spirituality in business. *Journal of Business Ethics, 38*(1-2), 109-117.

- Chammoro-Premuzic, T., & Furnham, A. (2003). Personality traits and academic exam performance. *European Journal of Personality*, 17(3), 237-250.
- Chapra, M. U. (1992). *Islam and economic challenge*. Leicester: The Islamic Foundation Press.
- Chattopadhyay, S. P. (2007). Management education reform in a knowledge management environment. *Journal of American Academy of Business, Cambridge*, 11(1), 168-175.
- Chen, F. F. (2007). Sensitivity of Goodness of Fit Indexes to Lack of Measurement Invariance. *Structural Equation Modeling*, 14(3), 464.
- Cherniss, C., & Goleman, D. (2001). *The emotionally intelligent workplace*. San Francisco, CA. : Jossey-Bass,.
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating Goodness-of-Fit Indexes for Testing Measurement Invariance. *Structural Equation Modeling*, 9(2), 233-255.
- Childress, D. (2006). Traders east and west. *Calliope*, 16(6), 13.
- Chou, C. P., & Bentler, P. M. (1995). Estimates and tests in structural equation modeling. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, applications* (pp. 37-55). Thousand Oak, CA: Sage.
- Choudhury, M. A. (2007). development of islamic economic and social thought. In K. M. Hassan & M. K. Lewis (Eds.), *Handbook of Islamic Banking*. Northampton, MA, USA: Edward Elgar.
- Christen, M., Iyer, G., & Soberman, D. (2006). Job satisfaction, job performance, and effort: A reexamination using agency theory. *Journal of Marketing*, 70(1), 137-150.
- Christiansen, N. D., Wolcott-Burnam, S., Janavocs, J. E., Burns, G. N., & Quirk, S. W. (2005). The good judge revisited: Individual differences in the accuracy of personality judgements. *Human Performance*, 18(2), 123-149.
- Chrusciel, D. (2006). Considerations of emotional intelligence (EI) in dealing with change decision management. *Management Decision*, 44(5), 644-657.
- Chu-Mei, L., & Chen, K. J. (2006). Personality as antecedents of employee customer orientation: A case study in the hospitality industry. *International Journal of Management*, 23(3), 478.
- Churchill, G. A., Ford, N. M., Hartley, S. W., & Walker, O. C. (1985). The determinants of salesperson performance: A meta-analysis. *Journal of*

*Marketing Research*, 22(2).

- Churchill, G. A., Ford, N. M., Walker, O. C., Johnston, M. W., & Tanner, J. F. (2000). *Sales force management*. New York: McGraw-Hill.
- Ciarrochi, J. V., Chan, A. Y. C., & Caputi, P. (2000). A critical evaluation of the emotional intelligence construct. *Personality and Individual Differences*, 28(3), 539-561.
- Citrin, A. V., Lee, R. P., & McCullough, J. (2007). Information Use and New Product Outcomes: The Contingent Role of Strategy Type. *The Journal of Product Innovation Management*, 24(3), 259.
- Clark, B. H. (1999). Marketing performance measures: History and interrelationship. *Journal of Marketing Management*, 5(15), 711-732.
- Cohen, A. R., Stotland, E., & Wolfe, D. M. (1955). An experimental investigation of need for cognition. *Journal of Abnormal and Social Psychology*, 51, 291-294.
- Cohen, J. (1988). *Educational and psychological measurement and evaluation* (6<sup>th</sup> ed.). Englewood Cliff, NJ: Prentice Hall.
- Cohen, J. (1990). Things I have learned (so far). *American Psychologist*, 45, 1304-1312.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159.
- Cohen, J. (1994). The world is round ( $p < .05$ ). *American Psychologist*, 49, 997-1003.
- Cohen, J., Cohen, P., Aiken, L. S., & West, S. G. (2002). *Applied multiple regression/correlation analysis for the behavioural sciences* (3 ed.). Mahwah, NJ: Lawrence Erlbaum.
- Cole, N. (2009). Cross-Cultural Conceptions of Organizational Justice: The Impact of Eastern Religions/Philosophies. *The Business Review, Cambridge*, 12(2), 18.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94(Supplement), S95-S120.
- Coleman, J. S. (1990). *Foundation of social theory*. Cambridge, MA: Harvard University Press.
- Colquitt, J. A., Scott, B. A., Judge, T. A., & Shaw, J. C. (2006). Justice and personality: Using integrative theories to derive moderators of justice effects. *Organizational Behaviour and Human Decision Processes*, 100(1), 110.
- Conrod, P. J., Pihl, R. O., Stewart, S. H., & Dongier, M. (2000). Validation of the system classifying female substance abuse on the basis of personality and

motivational risks factors for substance use. *Psychology of Addictive Behaviors*, 14, 243-256.

- Cornish, S. L. (1997). Strategies for the acquisition of market intelligence and implications for the transferability of information input. *Association of American Geographers*, 87(3), 451.
- Cortina, J. M., Doherty, M. L., Schmitt, N., Kaufman, G., & Smith, R. G. (1992). The "Big Five" Personality Factors in the IPI and MMPI: Predictors of Police Performance. *Personnel Psychology*, 45(1), 119.
- Corwin, R. G., & Louis, K. S. (1982). Organizational Barriers to the Utilization of Research. *Administrative Science Quarterly*, 27(4), 623.
- Costa, P. T., & McCrae, R. R. (1987). Neuroticism, somatic complaints, and disease: Is the bark worse than the bite? *Journal of Personality*, 55, 299-316.
- Costa, P. T., & McCrae, R. R. (1992a). Normal personality assessment in clinical practice: The NEO personality inventory. *Psychological Assessment*, 4, 5-13.
- Costa, P. T., & McCrae, R. R. (1992b). *NEO PI-R professional manual*. Unpublished manuscript, Odessa, Florida.
- Costa, P. T., & McCrae, R. R. (1995). Primary traits of Eysenck's P-E-N system: Three- and five-factor solutions. *Journal of Personality and Social Psychology*, 69(2), 308.
- Cote, S., Lopes, P. N., & Salovey, P. (2003). *Emotional intelligence and vision formulation and articulation*. Unpublished manuscript.
- Cote, S., & Miners, C. T. H. (2006). Emotional intelligence, cognitive intelligence and job performance. *Administrative Science Quarterly*, 51, 1-28.
- Cowan, J. (1993). *The common table: Reflection and mediations on community and spirituality at the workplace*. New York: HarperColins.
- Cross, R., & Cummings, J. N. (2004). Tie and networks correlates of individual performance in knowledge-intensive work. *Academy of Management Journal*, 47(December), 928-937.
- Cross, R., & Sproull, L. (2004). More than an answer: Information relationships for actionable knowledge. *Organization Science*, 15(4), 446.
- Crossan, M., Cunha, M., Vera, D., & Cunha, J. (2005). Time and organizational improvisation. *Academy of Management Review*, 30(1), 129-145.
- Crossan, M., & Sorrenti, M. (1997). Making sense of improvisation. In j. P. Walsh & A. Huff (Eds.), *Advances in strategic management*. Greenwich, CT: JAI

Press.

- Crouch, H. (1996). *Government and society in Malaysia*. Sydney, Australia: Allen and Unwin.
- Cui, A., & Calantone, R. J. (2004). The effect of market intelligence and organizational factors of new product success: Exploring the complexity of relationships. *American Marketing Association, 15*, 65.
- Cunha, M., Cunha, J., & Kamoche, K. (1999). Organizational improvisation: What, when, how and why. *Internat. Journal of Mangement, 1*(3), 299-341.
- Curtin, P. D. (1984). *Cross cultural trade in world history*. Cambridge: Cambridge University Press.
- Daft, R., Lengel, R. & Trevino, L. (1987). Message equivocality, media selection and manager performance: Implication for information systems, *MIS Quarterly* (Sept), 355-366.
- Dahlstrom, R., & Ingram, R. (2003). Social networks and the adverse selection problem in agency relationships. *Journal of Business Research, 56*(9), 767.
- Darmon, R. Y. (2001). Salespeople management of customer information: impact on optimal territory and sales force size. *European Journal of Operational Research, 137*(1), 162-176.
- Davies, M., Stankov, L., & Roberts, R. (1998). Emotional intelligence: In search of an elusive construct. *Journal of Personality and Social Psychology, 75*(4), 989-1015.
- Davis, A. J. (1985). *The logic of causal order*. Beverly Hill, California: Sage.
- Davis, F. (1991). Marketing intelligence in small business. *Marketing Intelligence and Planning Journal, 9*(2), 47-62.
- Day, A. L., & Caroll, S. A. (2004). Using an ability-based measure of emotional intelligence to predict individual performance, group performance and group citizenship behaviour. *Personality and Individual Differences, 36*, 1443-1458.
- Day, G. S. (1994). The capabilities of market-driven organization. *Journal of Marketing, 58*(4), 37-52.
- De Jong, M., Steenkamp, J., & Veldkamp, B. (2009). A Model for the Construction of Country-Specific Yet Internationally Comparable Short-Form Marketing Scales. *Marketing Science, 28*(4), 674.
- De Jong, M. G., Steenkamp, J.-B. E. M., & Fox, J.-P. (2007). Relaxing Measurement Invariance in Cross-National Consumer Research Using a Hierarchical IRT

Model. *Journal of Consumer Research*, 34(2), 260.

- Dean, K. L., Fornaciari, C. J., & McGee, J. J. (2003). Research in spirituality, religion, and work: Walking the line between relevance and legitimacy. *Journal of Organizational Change Management*, 16(4), 378.
- Deeter-Schmelz, D. R., & Sojka, J. Z. (2007). Personality traits and sales performance: Exploring differential effects of need for cognition and self monitoring. *Journal of Marketing Theory and Practice*, 15(2), 145 - 157.
- Deleersnyder, B., Dekimpe, M., Steenkamp, J., & Leeflang, P. (2009). The Role of National Culture in Advertising's Sensitivity to Business Cycles: An Investigation Across Continents. *JMR, Journal of Marketing Research*, 46(5), 623.
- Delia, A. S., & Rose, S. (1999). The moderating effect of managerial sales orientations on salespersons' role stress-job satisfaction relationships. *Journal of Marketing Theory and Practice*, 7(1), 72.
- DelVecchio, S., Zemanek, J., McIntyre, R., & Claxton, R. (2004). Updating the adaptive selling behaviour: Tactics to keep and tactics to discard. *Journal Of Marketing Management*, 20(4), 859 - 875.
- Deshpande, R., & Zaltman, G. (1982). Factors affecting the use of market research information: A path analysis. *Journal of Marketing Research*, 19(2), 14-31.
- Deshpande, R., & Zaltman, G. (1984). A comparison of factors affecting researchers and managers perceptions of market research use. *Journal of Marketing Research*, 21, 32-38.
- Diamantopoulos, A., & Horncastle, S. (1997). Use of export marketing research by industrial firms: An application and extension of Deshpande and Zaltman's model. *International Business Review*, 6(3), 245-270.
- Diamantopoulos, A., & Inglis, K. (1988). Identifying differences between high- and low- involvement exporters. *International Marketing Review*, 5(6), 52-60.
- Diamantopoulos, A., Siguaw, J. A., & Cadogan, J. W. (2000). Export performance: The impact of cross-country export market orientation. *American Marketing Association. Conference Proceedings*, 11, 177-186.
- Diamantopoulos, A., & Souchon, A. L. (1988). Information utilisation by exporting firms: Conceptualisation, measurement, and impact on export performance. *Information and Management*, 9(6), 312-326.
- Diamantopoulos, A., & Souchon, A. L. (1996). Instrumental, conceptual and symbolic use of export information: An exploratory study of U.K. firms. *Advances in International Marketing*, 8, 117.



- Diamantopoulos, A., & Souchon, A. L. (1999). Measuring export information use: SCALE development and validation. *Journal of Business Research, 46*(1), 1.
- Diamond, E. (2002). The Kosher lifestyle: Religious consumerism and suburban orthodox Jews. *Journal of Urban History, 28*(4), 488-505.
- Digman, J. M. (1988). *Classical theories of trait organization and the big five factor model*. Paper presented at the Annual Meeting American Psychological Association, Atlanta.
- Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology, 41*, 417-440.
- Digman, J. M., & Digman, K. C. (1980). Stress and competence longitudinal perspective In S. Sell, R. Crandall, M. Roff, J. Strauss & W. Pollin (Eds.), *Human functioning in longitudinal perspective*. Baltimore: Williams & Wilkinson.
- Digman, J. M., & Takemoto-Chock, N. K. (1981). Factors in the natural language of personality: reanalysis, comparison and interpretation of six major studies. *Multi-Behavioural Research, 16*, 149-170.
- DiMaggio, P., & Louch, H. (1998). Socially embedded consumer transactions: For what kinds of purchases do people most often use networks? *American Sociological Review, 63*(5), 619-638.
- Dobbs, I. M., & Miller, A. D. (2009). Experimental evidence on financial incentives, information and decision-making. *The British Accounting Review, 41*(2), 71.
- Donnellan, B. M., Baird, B. M., Lucas, R. E., & Oswald, F. L. (2006). The Mini-IPIP Scales: Tiny-Yet-Effective Measures of the Big Five Factors of Personality. *Psychological Assessment, 18*(2), 192.
- Dozier, M., Harris, M., & Bergman, H. (1987). Social network density and rehospitalization among young adult patients. *American Psychiatry Association, 38*(1), 61-65.
- Dudley, N. M., Orvis, K. A., Lebiecki, J. E., & Cortina, J. M. (2006). A meta-analytic investigation of conscientiousness in the prediction of job performance: Examining the intercorrelations and the incremental validity of narrow traits. *Journal of Applied Psychology, 91*(1), 5.
- Dulewicz, C., Young, M., & Dulewicz, V. (2005). The relevance of emotional intelligence for leadership performance. *Journal of General Management, 30*(3), 71-86.
- Dulewicz, V., & Higgs, M. (1999). Can emotional intelligence be measured and

developed? . *Leadership and Organizational Development Journal*, 20(5), 242-252.

- Dulewicz, V., Higgs, M., & Slaski, M. (2003). Measuring emotional intelligence: Content, construct and criterion-validity. *Journal of Managerial Psychology*, 18(5), 405-420.
- Durvasula, S., Andrews, J. C., Lysonski, S., & Netemeyer, R. G. (1993). Assessing the cross-national applicability of consumer behavior models: A model of attitude toward advertising in general. *Journal of Consumer Research*, 19(4), 626.
- Durvasula, S., Andrews, J. C., & Netemeyer, R. G. (1997). A cross-cultural comparison of consumer ethnocentrism in the United States and Russia. *Journal of International Consumer Marketing*, 9(4), 73.
- Durvasula, S., Lobo, A. C., Lysonski, S., & Mehta, S. C. (2006). Finding the sweet spot: A two industry study using the zone of tolerance to identify determinant service quality attributes. *Journal of Financial Services Marketing*, 10(3), 244.
- Durvasula, S., Lysonski, S., & Andrews, J. C. (1993). Cross-cultural generalizability of a scale for profiling consumers' decision-making styles. *The Journal of Consumer Affairs*, 27(1), 55.
- Durvasula, S., Lysonski, S., & Watson, J. (2001). Does vanity describe other cultures? A cross-cultural examination of the vanity scale. *The Journal of Consumer Affairs*, 35(1), 180.
- Durvasula, S., Netemeyer, R. G., Andrews, S., & Lysonski, S. (2006). Examining the cross-national applicability of multi-item, multi-dimensional measures using generalizability theory. *Journal of International Business Studies*, 37(4), 469.
- Dwyer, F. R., Schurr, P. H., & Oh, S. (1987). Developing Buyer-Seller Relationships. *Journal of Marketing*, 51(2), 11.
- Dwyer, J. H., Schurr, P. H., & Oh, S. (1987). Developing buyer-seller relationships. *Journal of Marketing*, 51(April), 11-27.
- Economist, T. (2006). Finance and economics: Calling the faithful; Islamic finance. *The economist*,
- Economist, y. (2006). *The Economist yearbook*. London: Economist Books.
- Eisenhardt, K. M., & Tabrizi, B. M. (1995). Accelerating adaptive process: Product innovation in the global computer industry. *Administrative Science Quarterly*, 40(2), 84-110.

- Elçi, M. (2007). Effect of manifest needs, religiosity and selected demographics on hard working: An empirical investigation in Turkey. *Journal of International Business Research*, 6(2), 97 - 121.
- Emmons, R. A., Cheung, C., & Tehrani, K. (1998). Assessing spirituality through personal goals: Implications for research on religion and subjective well-being. *Social Indicators Research*, 45(1-3), 391.
- Endot, S. (1995). *The Islamisation proces in Malaysia*. Unpublished PhD Thesis, University of Bradford.
- Engel, J. F., & Blackwell, R. D. (1995). *Consumer behaviour*. Orlando, FL: The Dryden Press.
- Ettorre, B. (1996). Religion in the workplace: Implications for managers. *Management Review*, 85(12), 15.
- Eusebio, R., Abdreu, L. J., & Belbeze, M. P. L. (2006). Measures of marketing performance: A comparative study from Spain. *International Journal of Contemporary Hospitality Management*, 18(2), 145-155.
- Eysenck, H. J. (1970). *The structure of human personality*. London: Methuen.
- Eysenck, H. J. (1991). Dimensions of personality: 16,5 or 3? - Criteria for taxonomic paradigm. *Personality and Individual Differences*, 12(12), 773-790.
- Eysenck, H. J. (1992). Four ways five factors are not basic. *Personality and Individual Differences Journal*, 13, 667-673.
- Eysenck, H. J., & Eysenck, M. W. (1985). *Personality and individual differences: A natural science approach*. New York: Plenum Press.
- Eysenck, H. J., & Eysenck, S. B. G. (1964). *Manual of Eysenck personality questionnaire*. London: University of London Press.
- Eysenck, H. J., Eysenck, S. B. G., & Barret, G. V. (1985). A revised version of the psychoticism scale. *Personality and Individual Differences*, 6, 21-29.
- Eysenck, M. W. (1998). Personality and the psychology of religion. *Mental Health, Religion and Culture*, 1(1), 11-19.
- Fairholm, G. W. (2001). *Mastering inner leadership*. Westport, CT: Quorum Books.
- Fam, K. S., Waller, D. S., & Erdogan, B. Z. (2004). The influence of religion on attitudes towards the advertising of controversial products. *European Journal of Marketing*, 38(5/6), 537-555.
- Farh, J.-L., Dobbins, G. H., & Cheng, B.-S. (1991). Cultural relativity in action: A

- comparison of self-ratings made by Chinese and U.S. workers. *Personnel Psychology*, 44, 129-147.
- Farooqi, A. H. (2006). Islamic social capital and networking. *Humanomics*, 22(2), 113-125.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175-191.
- Fauziah, M. T., Ramayah, T., & Dzujastru, A. R. (2008). Factors influencing intention to use diminishing partnership home financing. *International Journal of Islamic and Middle Eastern Finance and Management*, 1(3), 235-248.
- Feldman, M. S., & March, J. G. (1981). Information in organizations as signal and symbols. *Administrative Science Quarterly*, 26(1), 171-186.
- Ferguson, T. D., & Ketchen, D. J. (1999). Organizational configurations and performance: The role of statistical power in extant research. *Strategic Management Journal*, 20(4), 385-395.
- Fernando, M., & Jackson, B. (2006). The influence of religion-based workplace spirituality on business leaders' decision-making: An inter-faith study. *Journal of Management and Organization*, 12(1), 23.
- Feyerherm, A. E., & Rice, C. L. (2002). Emotional intelligence and team performance: The good, the bad and the ugly. *International Journal of Organizational Analysis*, 10(4), 343-363.
- Fishman, A. E. (1999, Oct 10 2006). Measure sales performance with more than numbers. *Journal Record*, p. 1.
- Fohlke, M. (2006). Sales presentation skills and salesperson job performance. *Journal of Business and Industrial Marketing*, 21(5), 311-319.
- Ford, N. M., Walker, O. C., & Churchill, G. A. (1988). Selecting successful salespeople: A meta-analysis of biographical and psychological selection criteria. In H. M. J. (Ed.), *Review of marketing* (pp. 90-131). Chicago: American marketing Association.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Franke, G. R., & Park, J.-E. (2006). Salesperson Adaptive Selling Behavior and Customer Orientation: A Meta-Analysis. *Journal of Marketing Research*, 43(4), 34-45.

- Frankwick, G. L., Ward, J. C., Hutt, M. D., & Reingen, P. H. (1994). Evolving pattern in organizational beliefs in the formation of strategies. *Journal of Marketing*, 58(April), 96-110.
- French, B., & Finch, H. (2006). Confirmatory Factor Analytic Procedures for the Determination of Measurement Invariance. *Structural Equation Modeling*, 13(3), 378.
- French, B., & Finch, W. (2008). Multigroup Confirmatory Factor Analysis: Locating the Invariant Referent Sets. *Structural Equation Modeling*, 15(1), 96.
- Friedland, R. (2001). Religious nationalism and the problem of collective representation. *Annual Review of Sociology* 27, 125-152.
- Furnham, A., Forde, L., & Ferrari, K. (1999). Personality and work motivation. *Personality and Individual Differences Journal*, 26, 1035-1043.
- Gabbay, S. M., & Leenders, R. T. A. J. (2001). Social capital in organizations: From social structure to the management of corporate social capital. In S. M. Gabbay & R. T. A. J. Leenders (Eds.), *Research in the sociology of organizations* (Vol. 18, pp. 1-20). Oxford: JAI Press.
- Gabby, S. M., & Zuckerman, E. W. (1998). Social capital and opportunity in corporate R&D: The contingent effect of contact density on mobility expectations. *Social Science Research*, 27, 189-217.
- Gabel, R. S., Dolan, S. L., & Cerdin, J. L. (2005). Emotional intelligence as predictor of cultural adjustment for success in global assignment. *Career Development International*, 10(5), 375.
- Gabriel, Y., & Griffiths, D. S. (2002). Emotion, learning and organizing. *The Learning Organization*, 9(5), 214.
- Galunic, C., & Moran, P. (1999). *Social capital and productive exchange: Structural and relational embeddedness and managerial performance links*. Paper presented at the Academy of Management Meetings, Chicago.
- Garcia-Zamor, J.-C. (2003). Workplace, spirituality and organizational performance. *Public Administration Review*, 63(3), 355-364.
- Gelissen, J., & de Graaf, P. M. (2005). Personality, social background, and occupational career success. *Social Science Research*, 1-22.
- Gellatly, I. R. (1996). Conscientiousness and test performance: test of cognitive process model. *Journal of Applied Psychology*, 81(4), 474-482.
- Gellatly, I. R., & Irving, P. G. (2001). Personality, autonomy, and contextual performance of managers. *Journal of Human Performance*, 14(3), 231-245.

- Gengler, C. E., Howard, D. J., & Zolner, K. (1995). A personal construct analysis of adaptive selling and sales experience. *Psychology & Marketing, 12*(4), 287-305.
- George, J. (2000). Emotions and leadership: The role of emotional intelligence. *Human Relations, 53*, 1027-1055.
- Giacobbe, R. W., Jackson Jr., D. W. J., Crosby, L. A., & Bridges, C. M. (2006). A contingency approach to adaptive selling behaviour and sales performance: Selling situations and salesperson characteristics. *The Journal of Personal Selling & Sales Management, 26*(2), 115-142.
- Gibbs, N. (1995, October, 2). The EQ factor. *Time*, pp. 60-68,
- Glazer, R. (1991). Marketing is an information -intensive environment: Strategic implications of knowledge as asset. *Journal of Marketing, 55*(Oct), 1-19.
- Glazer, R., Steckel, J. H., & Winers, R. S. (1992). Locally rational decision making: The distracting effect of information on managerial performance. *Management Science, 38*, 212-226.
- Glew, D. J. (2009). Personal values amd performance in teams: An individual and team-level analysis. *Sage Publication, 40*(6), 670 - 693.
- Gohm, C. L. (2003). Mood regulation and emotional intelligence: Individual differences. *84*, 594.
- Gohm, C. L. (2004). Moving forward with emotional intelligence. *Psychological Inquiry, 15*(3), 222-227.
- Goldberg, L. R. (Ed.). (1981). *Language and individual differences: the search for universal in personality lexicons* (Vol. 2). Beverly Hills, CA: Sage Publication.
- Goldberg, L. R. (1990). An alternative “description of personality:” The big-five factor structure. *Journal of Personality and Social Psychology, 59*, 1216-1229.
- Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets several five-factor models. In L. Mervielde, I. Deary, F. De Fruyt & F. Ostendorf (Eds.), *Personality Psychology in Europe*. Tilburg, The Netherland: Tilburg University Press.
- Goldberg, L. R., & Saucier, G. (1995). So what do you propose we use instead? A reply to Block. . *Psychological Bulletin, 117*(2), 221-226.
- Goldenberg, I., Matheson, K., & Mantler, J. (2006). The assessment of emotional

intelligence: A comparison of performance-based and self-report methodologies. *Journal of Personality Assessment*, 86(1), 33.

- Goleman, D. (1995). *Emotional intelligence*. New York: Bantam.
- Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam.
- Goleman, D., Boyatzis, R., & McKee, A. (2002). *The new leaders*. New York: Little Brown.
- Gonroos, C. (2000). *Service management and marketing*. Chichester: Wiley.
- Gonzalez, G. R., Walker, B. A., Kapelianis, D., & Hunt, M. D. (2005). *The role of information acquisition and knowledge use in managing customer relationship*. Tempe, AZ: Arizona State University.
- Goodman, S. K. (1993). Information needs for management decision making. *Records Management Quarterly*, 27(4), 12-23.
- Goolsby, J., Legace, R., & Boroom, M. (1992). Psychological adaptiveness and sales performance. *Journal of Personal Selling and Sales Management*, 12(2), 51-66.
- Goyal, A., & Akhilesh, K. B. (2007). Interplay among innovativeness, cognitive intelligence, emotional intelligence and social capital of work teams. *Team Performance Management*, 13(7/8), 206-226.
- Graham, P. T., & Peter, A. N. (2006). Relationship between work performance and personality traits in Hong Kong organizational settings. *International Journal of Selection and Assessment*, 14(1), 37.
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78, 1360-1380.
- Granovetter, M. S. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91(3), 481-510.
- Gray, B. J., & Hooley, G. J. (2002). Market orientation and service firm performance - A research agenda. *European Journal of Marketing*, 36(9/10), 980.
- Gray, B. J., Matear, S., Boshoff, C., & Matheson, P. (1998). Developing a better measure of market orientation. *European Journal of Marketing*, 32(9/8), 884-903.
- Gray, J. R. (2004). Integration of emotion and cognitive control. *Psychological Science*, 13, 46-48.
- Greenley, G. E. (1995). Market orientation and company performance: Empirical

- evidence from UK companies. *British Journal of Management*, 6(1), 1-13.
- Gresham, G., Hafer, J., & Markowski, E. (2006). Interfunctional market orientation between marketing departments and technical departments in the management of new product development process. *Journal of Behavioural and Applied Management*, 8(1), 43.
- Gronroos (2000). *Service management and marketing*. Chichester: Wiley Publication.
- Grunert, K. G., Jeppesen, L. F., Jeppesen, K. R., & Sonne, A.-M. (2005). Market orientation of value chains: A conceptual framework based on four case studies from the food industry. *European Journal of Marketing*, 39(5/6), 428.
- Guenzi, P., Pardo, C., & Georges, L. (2007). Relational selling strategy and key account managers relational behaviors: An exploratory study. *Industrial Marketing Management*, 36(1), 121.
- Guilford, J. P. (1975). Factor and factors of personality. *Psychological Bulletin*, 82(4), 802-814.
- Guimerà, R., Uzzi, B., Spiro, J., & Nunes Amaral, L. A. (2005). Team assembly mechanisms determine collaboration network structure and team performance. *Science*, 308(5722), 697.
- Gulati, R., Nohria, N., & Zaheer, A. (2000). Strategic networks. *Strategic Management Journal*, 21(3), 203-215.
- Gumede, V. (2004). Export propensities and intensities of small and medium manufacturing enterprise in South Africa. *Small Business Economics*, 22(5), 379.
- Gummesson, E. (2003). Relationship marketing: It all happens here and now! *Marketing Theory*, 3(1), 167-179.
- Gummesson, E. (2004). Return on relationships (ROR): the value of relationship marketing and CRM in business-to-business contexts. *The Journal of Business & Industrial Marketing*, 19(2), 136-149.
- Gummesson, E. (2008). Customer centricity: reality or a wild goose chase? *European Business Review*, 20(4), 315-330.
- Hair, J. F., Black, B., Babin, B., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Eaglewood Cliff, New Jersey: Prentice Hall.
- Hamayotsu, K. (2002). Islam and nation building in Southeast Asia: Malaysia and Indonesia in comparative perspective. *Pacific Affairs*, 75(3), 353-375.



- Hansen, M. T. (1999). The search-transfer problem: The role of weak ties in sharing knowledge across organizational subunits. *Administrative Science Quarterly*, 44, 82-111.
- Hargadon, A., & Sutton, R. I. (1997). Technology brokering and innovation in a product development firm. *Administrative Science Quarterly*, 42(December), 716-749.
- Hariharan, A. (2005). Establishing knowledge management processes-part two. *Knowledge Management Review*, 8(5), 10-15.
- Harris, E. G., & Lee, J. M. (2004). Illustrating a hierarchical approach for selecting personality traits in personnel decisions: An application of the 3M Model. *Journal of Business and Psychology*, 19(1), 53.
- Harrison, D. A., Price, K. H., Gavin, J. H., & Florey, A. T. (2002). Time, team and task performance: changing effects of surface- and deep-level diversity on group functioning. *Academy of Management Journal*, 42(8), 1029-1045.
- Hart, S., Tzokas, N., & Saren, M. (1999). The effectiveness of market information in enhancing new product success rates. *European Journal of Innovation Management*, 2(1), 20.
- Hart, S., Webb, J. R., & Jones, M. V. (1994). Export marketing research and the effect of export experience in industrial SMEs. *International Marketing Review*, 11(6), 4-22.
- Heaven, P., C.L., & Ciarrochi, J. (2007). Personality and religious values among adolescents: A three-wave longitudinal analysis. *British Journal of Psychology*, 98, 681 - 694.
- Heneman, R. L. (1986). The relationship between supervisory ratings and results-oriented measures of performance: A meta-analysis *Personnel Psychology*, 39, 811-826.
- Hicks, D. A. (2002). Spiritual and religious diversity in the workplace: Implications for leadership. *Leadership Quarterly*, 13(4), 379.
- Hill, P., & Smith, G. S. (2003). Coming to terms with workplace spirituality and religion in the workplace. In R. Giacalone & C. L. Jurkiewicz (Eds.), *Handbook of Workplace Spirituality and Organizational Performance* (pp. 231-243). Armonk, NY: M.E. Sharpe.
- Hmieleski, K., & Corbett, A. (2008). The contrasting interaction effects of improvisational behavior with entrepreneurial self-efficacy on new venture performance and entrepreneur work satisfaction. *Journal of Business Venturing*, 23(4), 482-496.

- Hochwarter, W. A., Witt, L. A., Treadway, D. C., & Ferris, G. R. (2006). The interaction of social skill and organizational support on job performance. *Journal of Applied Psychology, 91*(2), 482.
- Hoffman, C. C., Nathan, B. R., & Holden, L. M. (1991). A comparison of validation criteria: Objectives versus subjective performance measures and self versus supervisor ratings. *Personnel Psychology, 44*, 601-619.
- Hogan, R. (1983). *Socioanalytic theory on personality*. Paper presented at the 1982 Nebraska symposium on motivation: Personality - Current theory and research, Lincoln, Nebraska.
- Holbert, L. R., & Stephenson, M. T. (2003). The importance of indirect effects in media effects research: Testing for mediation in structural equation modeling. *Journal of Broadcasting and Electronic Media, 47*(4), 556-572.
- Horn, J. L., & McArdle, J. J. (1992). A practical and theoretical guide to measurement invariance in aging research. *Experimental Aging Research, 18*(Fall - Winter), 117-144.
- Hostede, G. (1999). Problems remain, but theories will change: the universal and specific in 21st century global management. *Organizational Dynamics, 28*(1), 34-43.
- Hoyle, R. H. (2007). Applications of structural equation modeling in personality research. In R. W. Robins (Ed.), *Handbook of Research Methods in Personality Psychology* (pp. 444-460). New York: Guilford Publication.
- Hrehocik, M. (2007). Finding, keeping and grooming the best sales force *Sales and Marketing Management 159*(8), 22-27.
- Hu, L.-t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1-55.
- Hu, L.-t., Bentler, P. M., & Kano, Y. (1992). Can Test Statistics in Covariance Structure Analysis Be Trusted? *Psychological Bulletin, 112*(2), 351.
- Huber, G. P. (1991). Organizational learning: the contributing process and the literature. *Organizational Science, 2*(Feb), 88-115.
- Hughes, P., Morgan, R. E., Hughes, M., & Lee, N. (2006). Product-Market Strategy Comprehensiveness and Business Performance: An Analysis of Antecedents and Moderators. *American Marketing Association. Conference Proceedings, 17*(1), 57.
- Hurtz, G. M., & Donovan, J. J. (2000). Personality and job performance: The big five revisited. *Journal of Applied Psychology, 85*, 869-879.

- Hutson, S. (2000). *Why religion matters: The fate of human spirit in an age of disbelief*. New York: Harper & Row.
- Hutt, M. D., & Walker, B. A. (2006). A network perspective of account manager performance. *Journal of Business & Industrial Marketing*, 21(7), 466-473.
- Huy, Q. (1999). Emotional capability, emotional intelligence, and radical change. *Academy of Management Review*, 24(2), 325-245.
- Iacobucci, D. (2008). *Mediation analysis: Quantitative applications in the social sciences*. New York: Sage.
- Ibarra, H. (1995). Race, opportunity, and diversity of social circles in managerial networks. *Academy of Management Journal*, 38(3), 673-703.
- Ingram, P., & Roberts, P. W. (2000). Friendships among competitors in the Sydney hotel industry. *The American Journal of Sociology*, 106(2), 387-425.
- Isen, A. M., Daubman, K. A., & Nowicki, G. P. (1987). Positive effect facilitates creative problem solving. *Journal of Personality and Social Psychology*, 52, 1122-1131.
- Jabnoun, N. (1994). *Islam and management*. Kuala Lumpur: Institute Kajian Dasar.
- Jackman, R. W., & Miller, R. A. (1998). Social capital and politics. *Annual Review of Political Science*, 1, 47-73.
- Jackson, M., & Lash, R. (1999, Nov, 29, 1999). Enhancing your leaders' emotional intelligence. *Canadian HR Reporter*, Nov, 2.
- Jacob, J. (1965). *The death and life of great American cities*. London: Penguin Books.
- Jacobs, N. M. (1999). Personality and job performance: An examination of curvilinear predictor-criterion relationships.
- Jacoby, J., Morrin, M., Johar, G., Gurhan, Z., & Kuss, M. D. (2001). Training novice investors to become more expert: The role of information accessing strategy. *Journal of Psychology and Financial Market*, 2(2), 69-79.
- Jaffee, W. B., & D'Zurilla, T. J. (2009). Personality, problem solving, and adolescent substance use. *Behavior Therapy*, 40, 93-101.
- Jambekar, A. B., & Pelc, K. I. (2007). Improvisation model for team performance enhancement in a manufacturing environment. *Team Performance Management*, 13(7/8), 259 - 274.
- James, L. R., Mulaik, S. A., & Brett, J. M. (1982). *Causal analysis: Assumption*,

*models and data*. Beverly Hills: Sage.

- Jamshidian, M., & Bentler, P. M. (1999). ML missing of mean and covariance structures with missing data using complete data routines. *Journal of Educational and Behavioral Statistics*, 24(1), 21-41.
- Janovics, J., & Christiansen, N. D. (2001). *Emotional intelligence at the workplace*. Paper presented at the Annual Meeting of the Society of Industrial and Organizational Psychology, San Diego, California.
- Jansen, E. (2008). New public management: Perspectives on performance and the use of performance information. *Financial Accountability & Management*, 24(2), 169.
- Jausovec, N., Jausovec, K., & Gerlic, I. (2001). Differences in event related and induced electroencephalography patterns in the theta and alpha frequency bands related to human emotional intelligence. *Neuroscience Letters*, 31(1), 93-96.
- Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: Antecedents and consequences. *Journal of Marketing*, 57(7), 53-70.
- Jaworski, B. J., Kohli, A. K., & Sahay, A. (2000). Market driven versus driving markets. *Journal of Academy of Marketing Science*, 28(1), 45-55.
- Jaworski, B. J., & Wee, L. C. (1993). Competitive intelligence and bottom line performance. *Competitive Intelligence Review*, 3(4), 23-27.
- Jeung-Eun, P., & Holloway, B. B. (2003). Adaptive selling behavior revisited: An empirical examination of learning orientation, sales performance, and job satisfaction. *Journal of Personal Selling and Sales Management*, 23(3), 239-251.
- Johanson, J., & Vahlne, J. E. (1977). Internationalization process of the firm- a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8, 23-32.
- Johlke, M. C. (2006). Sales presentation skills and salesperson job performance. *Journal of Business and Industrial Marketing*, 21(5), 311-319.
- John, G., & Martin, J. (1984). Effect of organisational structure of marketing planning on credibility and utilisation of plan output. *Journal of Marketing Research*, 21, 170-183.
- John, O. P. (1989). Towards a taxonomy of personality descriptors. In D. Buss & N. Cantor (Eds.), *Personality psychology: Recent trends and emerging directions*. New York: Springer-Verlag.
- John, O. P., & Srivastava, S. (1999). The big five trait taxonomy: History,

measurement and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of Personality: Theory and Research* (2nd ed.). New York: Guilford Publication.

- Johnson, B. R., Jang, S. J., Larson, D. B., & Li, S. D. (2001). Does adolescent religious commitment matter? A re-examination of the effects of religiosity on delinquency. *Journal of Research in Crime and Delinquency*, 38(1), 22-43.
- Johnson, E., Meade, A., & DuVernet, A. (2009). The role of referent indicators in tests of measurement invariance. *Structural Equation Modeling*, 16(4), 642.
- Jolson, M. (1997). Broadening the scope of relationship selling. *Journal of Personal Selling and Sales Management*, 17, 75-88.
- Jones, T. (2002). Social networks and relationship marketing: Explaining service provider-consumer relationship. *American Marketing Association. Conference Proceedings*, 13(Winter), 86-93.
- Jordan, P., Ashkanasy, N., & Hartel, C. (2002). Emotional intelligence as a moderator of emotional and behavioural reactions to job security. *Academy of Management Review*, 27(3), 362-372.
- Judge, T. A., Bone, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology*, 87, 765-780.
- Judge, T. A., & Cable, D. N. (1997). Applicant personality, Organisational culture, and organisation attraction. *Personnel Psychology*, 50, 359-394.
- Judge, T. A., Higgins, C. A., Thoresen, C. J., & Barrick, M. R. (1999). The big five personality traits, general mental ability, and career success across the life span. *Personnel Psychology*, 52, 621-652.
- Judge, T. A., & Ilies, R. (2002). Relationship of personality to performance motivation: A meta-analytic review. *Journal of Applied Psychology*, 87, 797-807.
- Kaipia, R., & Hartiala, H. (2006). Information-sharing in supply chains: Five proposals on how to proceed. *International Journal of Logistics Management*, 17(3), 377.
- Kalantari, B. (2005). Middle Eastern public management: A cultural approach to developmental administration. *Public Organization Review*, 5(2), 125-137.
- Kalmijn, M. (1998). Inter-marriage and homogamy: Causes, patterns and trends. *Annual Review of Sociology*, 21(4), 395-421.
- Karren, R. J., & Barringer, M. W. (2002). A review and analysis of the policy-

capturing methodology in organizational research: Guidelines for research and practice. *Organizational Research Methods*, 5(4), 337.

- Kavanaugh, A. L., Reese, D. D., Carrol, J. M., & Rosson, M. B. (2004). Weak ties in network communities. *The Information Society*, 21, 119-131.
- Kilduff, M., Tsai, F.-S., & Hanke, R. (2006). A paradigm too far? A dynamic stability reconsideration of the social network research program. *Academy of Management Review*, 31(4), 1031-1048.
- Kim, J. O., & Curry, J. (1977). The treatment of missing data in multivariate analysis. *Social Method and Research*, 6(1), 215-241.
- King, S. M. (2000). Towards a new administrative ethics: An understanding and application of the judeo-Christian tradition to administrative issues. *Public Integrity*, 2(1), 17-28.
- King, S. M. (2007). Religion, spirituality and the workplace: Challenges for public administration. *Public Administration Review*, 67(1), 103.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2 edition ed.). New York: Guilford.
- Knoke, D. (1999). Organizational networks and corporate social capital. In A. J. Leenders & S. M. Gabbay (Eds.), *Corporate Social Capital and Liability* (pp. 17-42). Boston: Kluwer.
- Knoke, D., & Kuklinski, J. H. (1982). *Network analysis*. Beverly Hills, CA: Sage.
- Knorr, K. D. (1977). Policy makers' use of science social knowledge: symbolic or instrumental? In C. H. Weiss (Ed.), *Using Social Science Research in Public Policy*. Lexington, MA: Lexington Books.
- Kogut, B., & Zander, U. (1992). Knowledge of the firms, combinative capabilities and the replication of technology. *Organization Science*, 3, 383-397.
- Koh, S. C., Gunasekaran, A., Thomas, A., & Arunachalam, S. (2005). The application of knowledge management in call centres. *Journal of Knowledge Management*, 9(4), 56.
- Kohli, A. K., & Jaworski, B. (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, 54(4), 1-18.
- Kokkinaki, F., & Ambler, T. (1999). *Marketing performance assessment: An exploratory investigation into current practice and the role of firm orientation*. Cambridge, MA: Marketing Science Institute.
- Koman, E. S., & Wolff, S. B. (2008). Emotional intelligence competencies in the

- team and team leader. *The Journal of Management Development*, 27(1), 55-67.
- Kotler, P., & Armstrong (2005). *Principles of marketing* (Vol. 11th). USA: Prentice Hall.
- Krackhardt, D. (1992). The strength of strong ties: The important of philos in organizations. In N. Nohria & R. G. Eccles (Eds.), *network and organizations* (pp. 216-239). Boston: harvard University Press.
- Krackhardt, D. (1999). The ties that torture: Simmelian tie analysis in organizations. *Research in the Sociology of Organizations*, 16(1), 183-210.
- Krackhardt, D., & Hanson, J. R. (1993). Informal networks: The company behind the chart. *Harvard Business Review*, 71(4), 104-111.
- Krishnan, B. C., Netemeyer, R. G., & Boles, J. S. (2002). Self-efficacy, competitiveness, and effort as antecedents of salesperson performance. *Journal of Personal Selling and Sales Management*, 22(4), 285-295.
- Kuran, T. (2003). The Islamic commercial crisis: Institutional roots of the economic underdevelopment in Middle East. *Journal of Economic History*, 63(2), 414-446.
- Kyriakopoulos, K., & de Ruyter, K. (2004). Knowledge of stocks and information flow in new product development. *Journal of Management Studies*, 41(8), 1470.
- Kyriakopoulos, K., & Moorman, C. (1998). Exploitative vs exploratory market learning and new product outcomes. *American Marketing Association. Conference Proceedings*, 9, 28.
- Kyriakopoulos, K., & Moorman, C. (2004). Tradeoffs in marketing exploitation strategies: The overlooked role of market orientation. *International Journal of Research in Marketing*, 21(3), 219.
- Lam, L., & Kirby, S. (2002). Is emotional intelligence an advantage? An exploration of the impact of emotional and general intelligence on individual performance. . *The Journal of Social Psychology*, 142(1), 133-143.
- Landy, F. J., & Farr, J. L. (1980). Performance rating. *Psychological Bulletin*, 87, 72-107.
- Laporta, R., Lopez-deSilanes, E., Shleifer, A., & Vishny, R. W. (1997). Trust in large organizations. *American Economic Review*, 87(2), 333 - 338.
- Larsen, J. (1982). *Information utilisation and non-utilisation*. Washinton DC: American Institute for Research in the Behavioural Science.

- Latour, M., Bradley, C., & Hosmer, U. (2002). Emotional intelligence: Implications for all United States Air Force Leaders. *Air & Space Power Journal* (Nov).
- Lau, V. P., & Shaffer, M. A. (1999). Career Success: The effect of personality. *Career Development International*, 4(4), 225-230.
- Law, K. S., Wong, C. S., & Song, L. J. (2004). The construct and criterion validity of emotional intelligence and its potential utility for management studies. *Journal of Applied Psychology*, 89, 483-496.
- Law, K. S., Wong, C.-S., Huang, G.-H., & Li, X. (2008). The effects of emotional intelligence on job performance and life satisfaction for the research and development scientist in China. *Asia Pacific Journal Management*, 25, 51-69.
- Leban, W., & Zulauf, C. (2004). Linking emotional intelligence abilities and transformational leadership styles. *Leadership and Organization Development Journal*, 25(7), 554-564.
- Lechner, C., Dowling, M., & Welpe, I. (2006). Firm network and firm development: The role of relational mix. *Journal of Business Venturing*, 21, 514-540.
- Lee, K. C., Lee, S., & Kang, I. W. (2005). KMPI: Measuring knowledge management performance. *Information and Management*, 42, 469-482.
- Leech, N. L., Barret, K. C., & Morgan, G. A. (2008). *SPSS for intermediate statistics: Use and interpretation* (3 ed.). New York: Lawrence Erlbaum Associates.
- Leigh, T., Pullins, E. B., & Comer, L. B. (2001). The top sales articles o the 20th century. *Journal of Personal Selling and Sales Management*, 21(3), 217-222.
- Lenski, G. (1963). *The religion factor: A sociological study on religion's impact on politics, economics nad family life*. Garden City, NY: Double Day.
- Leong, S. M., Busch, P., S., & John, D. R. (1989). Knowledge bases and salesperson effectiveness: A script theoretic analysis *Journal of Marketing Research*, 26(2), 164-178.
- Levin, I. P., Huneke, M. E., & Jasper, J. D. (2000). Information processing at successive stages of decision making: Need for cognition and inclusion-exclusion effects. *Organizational Behavior and Human Decision Processes*, 82, 17-93.
- Lewis, B. (2002). *What went wrong? The clash between Islam and modernity in the Middle East*. New York: Oxford University Press.
- Lewis, M. K. (2007). Comparing Islamic and Christian attitudes to usury. In K. M.



Hassan & M. K. Lewis (Eds.), *Handbook of Islamic Banking*. Northampton, MA USA: Edward Elgar.

- Leybourne, S., & Sadler-Smith, E. A. (2006). The role of intuition and improvisation in project management. *International Journal of Project Management*, 24(6), 483-501.
- Leybourne, S. A. (2006). Managing change by abandoning planning and embracing improvisation. *Journal of General Management*, 31(3), 11-29.
- Li, T., & Calantone, R. J. (1998). The impact of market knowledge competent on new product advantage: Conceptualization and empirical examination. *Journal of Marketing*, 62(October), 13-29.
- Lim, K. K., Ahmed, P. K., & Zairi, M. (1999). Managing for quality through knowledge management. *Total Quality Management*, 10, 615-621.
- Lin, N. (1999). Social network and status attainment. *Annual Review of Sociology*, 25, 467-487.
- Lin, N., Fu, Y., & Hsung, R. (2001). The position generator: Measurement techniques for investigations of social capital. In N. Lin, K. Cook & R. Burt (Eds.), *Social capital theory and research* (pp. 57-81). New York: Aldine de Gruyter.
- Lindwall, M., & Palmeira, A. (2009). Factorial Validity and Invariance Testing of the Exercise Dependence Scale-Revised in Swedish and Portuguese Exercisers. *Measurement in Physical Education and Exercise Science*, 13(3), 166.
- Linz, S. J., & Semykina, A. (2009). Personality traits as performance enhancers? A comparative analysis of workers in Russia, Armenia and Kazakhstan. *Journal of Economic Psychology*, 30(1), 71-91.
- Lipsey, M. W., & Wilson, D. B. (1993). The efficacy of psychological, educational, and behavioral treatment. *American Psychologist*, 48, 1181-1201.
- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling*, 9(2), 15-73.
- Liu, S., & Corner, L. B. (2006). Salespeople as information gatherers: Associated success factors. *Industrial Marketing Management*.
- Livingstone, H., Najjiwon-Foster, M., & Smithers, S. (2002). *Emotional Intelligence & Military Leadership*. Unpublished manuscript, Toronto.
- Locke, E. A. (2005). Why emotional intelligence is an invalid concept. *Journal of Organizational Behaviour*, 26(425-443).

- Longhorn, S. (2004). How emotional intelligence can improve management performance. *International Journal of Contemporary Hospitality Management*, 16(4), 220-230.
- Lopez, T. B., Carr, J., Gregory, B. T., & Dwyer, S. (2005). The influence of psychological climate on the salesperson customer orientation – salesperson performance relationship. *Journal of Marketing Theory and Practice* 13(2), 59-71.
- Loury, G. (1987). Why should we care about group inequality? *Social Philosophy & Policy*, 5, 249-271.
- Loury, G. (1992). The economics of discrimination: Getting to the core of the problem. *Harvard Journal for African American Public Policy*, 1(2), 91-110.
- Lubke, G. H., & Muthén, B. O. (2004). Applying Multigroup Confirmatory Factor Models for Continuous Outcomes to Likert Scale Data Complicates Meaningful Group Comparisons. *Structural Equation Modeling*, 11(4), 514.
- Lucas, R. E., & Diener, E. (2001). Understanding extraverts' enjoyment of social situations: The importance of pleasantness. *Journal of Personality and Social Psychology*, 81(2), 343-256.
- Lucas, R. E., Diener, E., Grob, A., Suh, E. M., & Shao, L. (2000). Cross-cultural evidence for the fundamental features of extraversion. *Journal of Personality and Social Psychology*, 79(3), 452 - 468.
- Lysonski, S., & Durvasula, S. (1990). Effects of moderating variables on product managers' behavior: A reexamination. *Psychological Reports*, 67(2), 687.
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods*, 4(1), 84-99.
- Mackinnon, D. P. (2000). Contrasts in multiple mediator models. In J. Rose, L. Chassin, C. C. Presson & S. J. Sherman (Eds.), *Multivariate applications in substance use research* (pp. 141-160). Mahwah, New Jersey: Erlbaum.
- Mackinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison methods to test mediation and other intervening variables effects. *Psychological Methods*, 7(1), 83-104.
- Mackinnon, D. P., Warsi, G., & Dwyer, J. H. (1995). A simulation study of mediated effects measures. *Multivariate Behavioural Research*, 30, 41-62.
- MacKnight, J. (2005). West meets East. *Banking Technology*, 1, 12-15.
- Major, D. A., Turner, J. E., & Fletcher, T., D. (2006). Linking proactive personality and the big five to motivation to learn and development activity. *Journal of*

*Applied Psychology*, 91(4), 027-935.

Major, D. A., Turner, J. E., & Fletcher, T. D. (2006). Linking proactive personality and the big five to motivation to learn and development activity. *Journal of Applied Psychology*, 91(4), 927-935.

Malaysia Remisier Association (1977). About Remisiers Retrieved 18 May 2007 2007, from <http://mymall.netbuilder.com.my/index.php?doit=showclass&cid=41&domain=remisiers>

Malouff, J., Schutte, N., Bauer, M., & Mantelli, D. (1990). Development and evaluation of a measure of the tendency to be goal-oriented. *Personality and Individual Differences Journal*, 11, 1191-1200.

Maltz, E., & Kohli, A. K. (1996). Market intelligence dissemination across functional boundaries. *Journal of Marketing Research*, 33(2), 47-61.

Maltz, E., & Kohli, A. K. (2000). Reducing marketing's conflict with other functions: The different effect of integrating mechanisms. *Academy of Marketing Science Journal*, 28(4), 479.

Maltz, E., Menon, A., & Wilcox, J. B. (2006). The effects of flexible firm orientations on market information use: intended and unintended consequences. *Journal of Strategic Marketing*, 14, 147-164.

Maltz, E., Sounder, W. E., & Kumar, A. (2001). Influencing R&D/marketing integration and the use of market information by R&D managers: Intended and unintended effects of managerial actions. *Journal of Business Research*, 52(1), 69.

Manshor, T. A., Jusoh, M., & Simun, M. (2003). Diversity factors and preferential treatment in selecting employees. *Journal of Management Development*, 22(7), 643 - 656.

Mark, R., Vorhies, D. W., & Badovick, G. J. (1996). A psychometric evaluation of ADAPTS scale: A critique and recommendations. *Journal of Personal Selling and Sales Management*, 16(4), 53-65.

Markoczy, L., & Goldberg, J. (1995). A method for eliciting and comparing causal map. *Journal of Management* 21(2), 305-333.

Marks, R., Vorhies, D. W., & Badovick, G. J. (1996). A psychometric evaluation of the ADAPTS scale: A critique and recommendations. *The Journal of Personal Selling & Sales Management*, 16(4), 53.

Marsden, P. V. (1990). Network data and measurement. In W. R. Scott & J. Blake (Eds.), *Annual Review of Sociology* (Vol. 16, pp. 435-463). Palo Alto, CA:

Annual Reviews.

- Marsden, P. V., & Campbell, K. E. (1984). Measuring tie strength. *Social Forces*, 63(2), 482-501.
- Marsh, H., & Grayson, D. (1994). Longitudinal stability of latent means and individual differences: A unified approach. *Structural Equation Modeling*, 1(3), 317 - 359.
- Marsh, H., Muthén, B., Asparouhov, T., Lüdtke, O., Robitzsch, A., Morin, A., et al. (2009). Exploratory Structural Equation Modeling, Integrating CFA and EFA: Application to Students' Evaluations of University Teaching. *Structural Equation Modeling*, 16(3), 439.
- Marshall, G., Goebel, D., & Moncrief, W. (2003). Hiring for success at the buyer-seller interface. *Journal of Business Research*, 55(2), 247-255.
- Marshall, G. W., Goebel, D. J., & Moncrief, W. C. (2003). Hiring for success at the buyer-seller interface. *Journal of Business Research*, 56(4), 247-261.
- Martens, M. P. (2005). The use of structural equation modeling in counseling psychology research. *The Counseling Psychologist*, 33(1), 269-298.
- Mastor, K. A., Jin, P., & Cooper, M. (2000). The Malay culture and personality. *The American Behavioral Scientist*, 44(4), 95-111.
- Matthews, G., Roberts, R. D., & Zeidner, M. (2004). Seven myths about emotional intelligence. *Psychological Inquiry*, 15(3), 179-196.
- Matthews, G., Zeidner, M., & Roberts, R. D. (2002). *Emotional intelligence: Science and myth*. Cambridge, MA: MIT Press.
- Matzler, K., Renzl, B., Müller, J., Herting, S., & Mooradian, T. A. (2008). Personality traits and knowledge sharing. *Journal of Economic Psychology*, 29(3), 301-313.
- Mayer, J. D., & Caruso, D. (2002b). The effective leader: Understanding and applying emotional intelligence. *Ivy Business Journal Online*, 1-5
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyte (Eds.), *MEmotional Development and Emotional Intelligence: Educational Implications* (pp. 3-31). New York: Basic Books.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2002). *Mayer-Salovey-Caruso emotional intelligence test (MSCEIT) user's manual*. Toronto, ON: MHS.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2003). *Mayer-Salovey-Caruso emotional intelligence test (MSCEIT)-youth research version*. Toronto, ON: MHS.

- Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Emotional intelligence: Theory, findings, and implications. *Psychology Inquiry*, 15(3), 197-215.
- Mazen, A. M. M., Hemmasi, M., & Lewis, M. F. (1987). Assessment of statistical power in contemporary strategy research. *Strategic Management Journal*, 8(4), 403-410.
- McCormick, D. W. (1994). Spirituality and management. *Journal of Managerial Psychology*, 9(6), 5.
- McCrae, R. R., & Costa, P. T., Jr. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52(1), 81.
- McCrae, R. R., & Costa, P. T., Jr. (1989). Reinterpreting the Myers-Briggs type indicator from the perspective of the five-factor model of personality. *Journal of Personality*, 57(1), 17.
- McCrae, R. R., & Costa, P. T., Jr. (1992). Discriminant validity of Neo-PI facet scales. *Educational and Psychological Measurement*, 52(1), 229.
- McCrae, R. R., Costa, P. T., del Pilar, G. H., Rolland, J.-P., & Parker, W. D. (1998). Cross-cultural assessment of the five-factor model. *Journal of Cross - Cultural Psychology*, 29(1), 171.
- McCrae, R. R., Costa, P. T., Jr., & Dolliver, R. H. (1991). The NEO personality inventory: Using the five-factor model in counseling-comment/reply. *Journal of Counseling and Development : JCD*, 69(4), 367.
- McCrae, R. R., & Costa, P. T. J. (1988). Recalled parent-child relationships and adult personality. *Journal of Personality* 56(2), 417-434.
- McCrae, R. R., Costa, P. T. J., Hrebickova, M., Urbanek, T., & et al. (2004). Age differences in personality traits across cultures: Self-report and observer perspectives. *European Journal of Personality*, 18(2), 143.
- McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its application. *Journal of Personality*, 60, 175-215.
- McCrae, R. R., Paul T. Costa, P. T. J., & Martin, T. A. (2005). The NEO-PI-3: A more readable revised NEO personality inventory. *Journal of Personality Assessment*, 84(3), 261.
- McDaniel, R., Jr. (2007). Management Strategies for Complex Adaptive Systems: Sensemaking, Learning, and Improvisation. *Performance Improvement Quarterly*, 20(2), 21 - 41.

- McDonald, R. P., & Ho, M.-H. R. (2002). Principle and practice in reporting structural equation analyses. *Psychological Methods*, 7(1), 62-82.
- McEvily, B., & Marcus, A. (2005). Embedded ties and the acquisition of competitive capabilities. *Strategic Management Journal*, 20(12).
- McEvily, B., Perrone, V., & Zaheer, A. (2003). Trust as an organizing principle. *Organization Science*, 14(1), 91-106.
- McEvily, B., & Zaheer, A. (1999). Bridging ties: A source of firm heterogeneity in competitive capabilities. *Strategic Management Journal*, 20(12), 1133.
- McFarland, R. G., & Kidwell, B. (2006). An examination of instrumental and expressive traits on performance: The mediating role of learning, prove and avoid goal orientations *The Journal of Personal Selling & Sales Management*, 26(2), 143.
- McMurrian, R. c., Srivastava, R., & Holmes, t. (2002). The impact of self-efficacy on expectancy, effort, and adaptive selling in a personal selling context. *American Marketing Association. Conference Proceedings*, 13, 399-406.
- McPherson, J. M., Popielarz, P. A., & Drobnic, S. (1992). Social networks and organizational dynamics. *American Sociological Review*, 57, 153-170.
- McPherson, M., Smith-Lovin, L., & Cook, M. (2001). Birds of feathers, homophily in social networks. *Annual Review of Sociology*, 27(1), 415 - 444.
- Meade, A., & Bauer, D. (2007). Power and Precision in Confirmatory Factor Analytic Tests of Measurement Invariance. *Structural Equation Modeling*, 14(4), 611.
- Menon, A., Bharadwaj, S. G., & Howell, R. (1996). The quality and effectiveness of marketing strategy: Effects of functional and dysfunctional conflict in intraorganizational relationships. *Academy of Marketing Science. Journal*, 24(4), 299.
- Menon, A., Homburg, C., & Beutin, N. (2005). Understanding customer value in business-to-business relationships. *Journal of Business to Business Marketing*, 12(2), 1.
- Menon, A., Homburg, C., & Giering, A. (1999). Managing customer loyalty in buyer-seller relationships: The influence of relationship and market characteristics. *American Marketing Association. Conference Proceedings*, 10, 28.
- Menon, A., Jaworski, B. J., & Kohli, A. K. (1997). Product quality: Impact of interdepartmental interactions. *Academy of Marketing Science. Journal*, 25(3), 187.
- Menon, A., & Varadarajan, P. R. (1992). A model of marketing knowledge use

- within firms. *Journal of Marketing*, 56(4), 53.
- Menon, A., & Wilcox, J. (2001). USER: A scale to measure use of market research. In R. Deshpande (Ed.), *Using market knowledge* (pp. 243-272). Thousand Oaks: Sage.
- Menon, T., & Pfeffer, J. (2003). Valuing internal vs external knowledge: Explaining the preference for outsiders. *Management Science*, 49(4), 497-513.
- Meunier-FitzHugh, K. L., & Piercy, N. (2006). Integrating marketing intelligence sources: Reconsidering the role of the salesforce. *International Journal of Market Research*, 48(6), 699-716.
- Meyer, A. (1998). Organizing for improvisation: The backstage story of the Vancouver Jazz Concert and Symposium. *Organization Science*, 9(5), 569-577.
- Miller, J. P. (2000). Small business intelligence - People make it happen. *Competitive Intelligence Magazine*, 3(2), 22.
- Miner, A. S., Bassoff, P., & Moorman, C. (2001). Organizational improvisation and learning: A field study. *Administrative Science Quarterly*, 46(2), 304-337.
- Moaddel, M. (2002). The study of Islamic culture and politics: An overview and assessment. *Annual Review of Sociology*, 28, 359-387.
- Mokhlis, S. (2006). The effect of religiosity on shopping orientation: An exploratory study in Malaysia. *The Journal of American Academy of Business, Cambridge*, 9(1), 64-74.
- Molleman, E. (2005). The multilevel nature of team-based work research. *Team Performance Management*, 11(3/4), 113-125.
- Moorman, C. (1995). Organizational market information processes: Cultural antecedents and new product outcomes. *JMR, Journal of Marketing Research*, 32(3), 318.
- Moorman, C. (1998). Market-level effects of information: Competitive responses and consumer dynamics. *JMR, Journal of Marketing Research*, 35(1), 82.
- Moorman, C., Deshpande, R., & Zaltman, G. (1993). Factors affecting trust in market research relationships. *Journal of Marketing*, 57(1), 81.
- Moorman, C., & Miner, A. (1998). The convergence of planning and execution: Improvisation in new product development. *Journal of Marketing* 62(July), 1-20.
- Moorman, C., Rex, D. R., & Mela, C. F. (2005). The effect of standardized

- information on firm survival and marketing strategies. *Marketing Science*, 24(2), 263 - 279.
- Moorman, C., & Rust, R. T. (1999). The role of marketing. *Journal of Marketing*, 63(Special Issue), 180-197.
- Moorman, C., & Slotegraaf, R. J. (1999). The contingency value of complementary capabilities in product development. *Journal of Marketing Research*, 36(2), 239.
- Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between providers and users of market research: The dynamics of trust within and between organizations. *Journal of Marketing Research*, 29(3), 314.
- Moran, P. (2005). Structural vs. relational embeddedness: social capital and managerial performance. *Strategic Management Journal*, 26(12), 1129.
- Morrison, K. (2002). *School leadership and complexity theory*. New York: Routledge.
- Motowidlo, S. J., Borman, W. C., & Schmitt, M. J. (1997). A theory of individual differences in task and contextual performance. *Human Performance*, 10(2), 71-83.
- Mott, S. C. (1984). The use of the new testament. *Transformation*, 1(2), 21-26.
- Mott, S. C. (1993). *A Christian perspective on political thought*. New York: Oxford University Press.
- Mount, M., & Barrick, M. (1995). The big five personality dimensions: Implications for research and practice in human resources management. In K. M. Rowland & G. Ferrari (Eds.), *Research in Personnel and Human Resource Management* (pp. 153-200). Greenwich, CT: Jai Press.
- Mount, M., Barrick, M., & Stewart, G. (1998). Five factor model personality and performance in jobs involving interpersonal interactions. *Human Performance*, 11, 145-165.
- Mount, M., Ilies, R., & Johnson, E. (2006). Relationship of personality traits and counterproductive work behaviours: The mediating effects of job satisfaction. *Personnel Psychology*, 59(3), 591.
- Mount, M. K., & Barrick, M. R. (1995). The big five personality dimensions: Implications for research and practice in human resource management. *Personnel and Human Resource Management*, 13, 153-200.
- Mudie, P. (2003). Internal customer: By design or default. *European Journal of Marketing*, 37(9), 1261-1276.



- Mulaik, S. A., & Millsap, R. E. (2000). Doing the four step right. *Structural Equation Modeling*, 7(1), 36-73.
- Mullen, M. R. (1995). Diagnosing measurement equivalence in cross-national research. *Journal of International Business Studies*, 26(3), 573.
- Mumby, D. K., & Putnam, L. L. (1992). The Politics of Emotion: A Feminist Reading of Bounded Rationality. *The Academy of Management Review*, 17(3), 465-486.
- Muniz, A. M., & Schau, H. J. (2005). Religiosity in the brand community. *Journal of Consumer Research*, 31(March), 737-747.
- Murphy, K. R., & Cleveland, J. N. (1991). *Performance appraisal*. Needam Height, MA: Allyn & Bacon.
- Murray, G., Judd, F., Jackson, H., Fraser, C., Komiti, A., Pattison, P., et al. (2007). Ceremonies of the whole : Does social participation moderate the mood consequences of neuroticism? *Social Psychiatry and Psychiatric Epidemiology*, 42(3), 173.
- Murray, K. B. (1991). A test of services marketing theory: Consumer information acquisition activities. *Journal of Marketing*, 55(1), 10.
- Myors, B. (2006). Statistical power. In F. T. L. Leong & J. T. Austin (Eds.), *The psychology research handbook* (pp. 161-172). California: Sage Publication.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy Management Review*, 23(2), 242-266.
- Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, 54(4), 20.
- Narver, J. C., Stanley, F. S., & MacLachlan, D. L. (2004). Responsive and proactive market orientation and new product success. *The Journal of Product and Innovation Management*, 21(5), 334.
- Nathan, K. R., & Alexandra, R. A. (1988). A comparison criteria for test validation: A meta analytic investigation. *Personnel Psychology*, 41, 517-535.
- Netemeyer, R. G., Durvasula, S., & Lichtenstein, D. R. (1991). A Cross-National Assessment of the Reliability and Validity. *JMR, Journal of Marketing Research*, 28(3), 320.
- Newsome, S., Day, A. L., & Catano, V. M. (2000). Assessing the predictive validity of emotional intelligence. *Personality and Individual Differences*, 29(2), 1005-1016.

- Ng, I., & Chow, I. H.-S. (2005). Does networking with colleagues matter in enhancing job performance. *Asia Pacific Journal of Management*, 22(4), 405.
- Noland, M. (2005). Religion and economic performance. *World Development*, 33(8), 1215 - 1232.
- Norman, W. T. (1963). Towards an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal Sociological Psychology*, 66(3), 574-583.
- Ntalianis, F., & Darr, W. (2005). The influence of religiosity and work status on psychological contracts. *International Journal of Organizational Analysis*, 13(1), 89.
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.
- O'Connor, B. P. (2002). A quantitative review of comprehensive of five-factor model in relation to popular personalities inventories. *Assessment*, 9, 188-203.
- Oh, H., Chung, M.-H., & Labianca, G. (2004). Group social capital and group effectiveness: The role of informal socialising ties. *Academy of Management Journal*, 47, 860-875.
- Oh, H., Kilduff, M., & Brass, D. J. (1999). *Communal social capital, linking social capital, and economic outcomes*. Paper presented at the Annual Meeting of the Academy of Management, Chicago.
- Oh, H., Labianca, G., & Chung, M.-H. (2006). A multilevel of group social capital. *Academy Management Review*, 31, 569-582.
- Oh, I.-S., & Berry, C. M. (2009). The five-factor model of personality and managerial performance: Validity gains through the use of 360 degree performance ratings. *Journal of Applied Psychology*, 94(6), 1498 - 1513.
- Oh, I.-S., Chung, M.-H., & Labianca, G. (2004). Group social capital and group cohesiveness: The role of informal socializing ties. *The Academy of Management Journal*, 47(6), 860-875.
- Olinsky, A., Chen, S., & Harlow, L. (2003). The comparative efficacy of imputation methods for missing data in structural equation modeling. *European Journal of Operational Research*, 151, 53-79.
- Olver, J. M., & Mooradian, T. A. (2003). Personality traits and personal values: A conceptual and empirical investigation. *Personality and Individual*

*Differences*, 35, 109-125.

- O'Reilly, C. (1982). Variations in decision makers' use of information sources: The impact of quality and accessibility of information. *Academy of Management Journal*, 25, 756-771.
- O'Reilly, C., Caldwell, D., & Barnett, W. (1989). Work group and demography, social integration, and turnover. *Administrative Science Quarterly*, 34, 21-37.
- Organ, D. W., & Paine, J. B. (1999). A new kind of performance for industrial and organizational psychology: Recent contributions to the study of organizational citizenship behaviour. In C. L. Cooper & I. T. Robertson (Eds.), *International Review of Industrial and Organizational Psychology*. Chichester, England: Wiley.
- Osborne, J. W. (2000). Advantages of hierarchical linear modelling. *Practical Assessment Research and Evaluation*. doi:<http://www.PARAonline.net>
- Osuagwu, L. (2006). Market orientation in Nigerian companies. *Marketing Intelligence and Planning*, 24(6), 608.
- Paparoidamis, N. G., & Guenzi, P. (2009). An empirical investigation into the impact of relationship selling and LMX on salespeople's behaviour and sales effectiveness. *European Journal of Marketing*, 43(7/8), 1053-1075.
- Park, J.-E., & Holloway, B. B. (2003). Adaptive selling behaviour revisited: An empirical examination of learning situation, sales performance, and job satisfaction. *The Journal of Personal Selling & Sales Management*, 23(3), 239 - 253.
- Pearce, J. L., & Randel, A. E. (2004). Expectation or organisational mobility, workplace social inclusion, and employee job performance. *Journal of Organizational Behaviour*, 25, 81-98.
- Pellitteri, J. (2002). The relationship between emotional intelligence and ego defence mechanisms. *The Journal of Psychology*, 136(2), 182-194.
- Pelz, D., & Horsley, J. A. (1981). Measuring utilization of nursing research in utilising evaluation: Concept and measurement techniques. In J. Ciarlo (Ed.). Beverly Hill: Sage.
- Piedmont, R. L. (1999). Strategies for using the five-factor model of personality in religious research. *Journal of Psychology and Theology*, 27(4), 338- 350.
- Piedmont, R. L., McCrae, R. R., & Costa, P. T., Jr. (1991). Adjective check list scales and the five-factor model. *Journal of Personality and Social Psychology*, 60(4), 630.

- Piedmont, R. L., McCrae, R. R., Rieman, R., & Angleitner, A. (2000). On the invalidity and validity scales: Evidence from self-reports and observer ratings in volunteer samples. *Journal of Personality & Social Psychology* 78(3), 582-593.
- Podolny, J. M., & Baron, J. N. (1997). Resources and relationships: Social networks and mobility in the workplace. *American Sociological Review*, 62(5), 673-693.
- Poolton, J., & Ismail, H. (2000). New development in innovation. *Journal of Managerial Psychology*, 13(3), 795 - 811.
- Portes, A. (1998). Social capital: Its origin and applications in modern sociology. *Annual Review of Sociology*, 24, 1-24.
- Poulson, R. L., Eppler, M. A., Satterwhite, T. N., Wuensch, K. L., & Bass, L. A. (1998). Alcohol consumption, strength of religious belief and risky sexual behaviour in college students. *Journal of American College Health*, 46(5), 227-232.
- Pransky, G., Finkelstein, S., Berndt, E., Kyle, M., Mackell, J., & Tortorice, D. (2006). Objective and self-report work performance measures: A comparative analysis. *International Journal of Productivity and Performance Management*, 55(5), 390.
- Putnam, R. D. (1993). The prosperous community: Social capital and public life. *American Prospect*, 13, 35-42.
- Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, 6(1), 65-78.
- Putti, J. M., Aryee, S., & Liang, T. K. (1989). Work Values and Organizational Commitment: A Study in the Asian Context. *Human Relations*, 42(3), 275-289.
- Qian Geng, G., Townley, C., Kun, H., & Jing, Z. (2005). Comparative knowledge management: A pilot study of Chinese and American universities. *Journal of American Society for Information Science & Technology*, 56(10), 1031-1044.
- Quester, P.G., McGuiggan, R.L., McCarthy, E.J. & Perreault, W.D. (2003). *Basic marketing: A managerial perspectives*, 3<sup>rd</sup> ed. New York: McGraw Hill
- Quigley, K. (2003). *The relationship between personality factors and team member competencies*. Unpublished D.M., University of Phoenix, United States -- Arizona.
- Quintana, S., M., & Maxwell, S. E. (1999). Implications of recent developments in structural equation modeling for counseling psychology. *The counseling*

*Psychologist*, 27(4), 485-527.

- Quinten, A., & Raaijmakers, W. (1999). Effectiveness of different missing data treatments in surveys with likert-type data: Introducing the relative mean substitution approach. *Educational and Psychological Measurement*, 59(5), 725-748.
- Rabinowitz, S., & Hall, D. T. (1977). Organisational research on job involvement. *Psychological Bulletin*, 84, 265-288.
- Rafiq, M. (1992). Ethnicity and enterprise comparison of Muslim and non-Muslim owned Asin businesses in Britain. *New Community*, 19(1), 43 - 60.
- Rahim, M. A., Psenicka, C., Zhao, J.-H., Yu, C.-S., Chan, K. A., Kwok Wai, Y. S., et al. (2002). A model of emotional intelligence and conflict management strategies: A study in seven countries. *International Journal of Organizational Analysis*, 10(4), 201.
- Reagans, R., & McEvily, B. (2003). Network structure and knowledge transfer: The effects of cohesion and range. *Administrative Science Quarterly*, 48, 240-267.
- Reagans, R., Zuckerman, E., & McEvily, B. (2004). How to Make the Team: Social Networks vs. Demography as Criteria for Designing Effective Teams. *Administrative Science Quarterly*, 49(1), 101-133.
- Reynolds, K. E., & Arnold, M. J. (2000). Customer loyalty to the salesperson and the store: Examining relationship customers in an upscale retail context. *The Journal of Personal Selling & Sales Management*, 20(2), 89-99.
- Rice, G. (1999). Islamic ethics and the implications for business. *Journal of Business Ethics*, 18(4), 345 - 358.
- Rich, R. F. (1997). Uses of social science information by Federal Bureaucrats: Knowledge for Action Versus Knowledge for Understanding. In C. H. Weiss (Ed.), *Using Social Research in Public Policy Making*. Lexington, MA: Lexington Books.
- Rindfleisch, A., & Moorman, C. (2001). The acquisition and utilization of information in new product alliances: A strength-of-ties perspective. *Journal of Marketing*, 65(2), 1.
- Robert, C. M., Rajesh, S., & Terry, H. (2002). The impact of self-efficacy on expectancy, effort, and adaptive selling in a personal selling context. *American Marketing Association. Conference Proceedings*, 13, 399.
- Robert, D. S. (1982). *Islam: The misunderstood religion*. Lahore, Pakistan: Islamic Publications.

- Roberts, R. D., Zeidner, M., & Matthews, G. (2001). Does emotional intelligence meet traditional standards for an intelligence? Some new data and conclusion. *Emotion, 1*, 196-231.
- Robie, C., Brown, D. J., & Shepherd, W. J. (2005). Interdependence as a moderator of the relationship between competitiveness and objective sales performance. *International Journal of Selection and Assessment, 13*(4), 274.
- Robinson, L., Marshall, G. W., Moncrief, W., & Lasek, F. G. (2002). Towards a shortened measure of adaptive selling. *Journal of Personal Selling and Sales Management, 22*(2), 111 - 119.
- Roccas, S., Sagiv, L., Schwartz, S. H., & Knafo, A. (2002). The big five personality factors and personal values. *Personality and Social Psychology Bulletin, 28*(6), 789-801.
- Roche, M. (2004). Towards EI at a medium sized plastic manufacturing company. *New Zealand Journal of Applied Business Research, 3*(November), 41-50.
- Rodan, & Galunic, C. (2004). More than network structure: How knowledge heterogeneity influences managerial performance and innovativeness. *Strategic Management Journal, 25*(6), 541.
- Rodinson, M. (1974). *Islam and capitalism*. Suffolk, UK: Chaucer Press.
- Rodriguez, C. M. (1993). *Relevancy, measurement and modeling of religiosity in consumer behaviour: the case of Peru*. Paper presented at the Fourth Symposium on Cross cultural Consumer and Business Studies, Hakuka, Hawaii.
- Rogers, E. (1983). *The diffusion of innovations*. New York: The Free Press.
- Rogers, E., & Kincaid, D. (1981). *Communication networks*. New York: Free Press.
- Rokeach, M. (1973). *The nature of human values*. New York: Free Press.
- Rosete, D., & Ciarrochi, J. (2005). Emotional intelligence and its relationship to workplace performance outcomes of leadership effectiveness. *Leadership and Organization Development Journal, 26*(5/6), 388.
- Ruiz-Mercader, J., Merono-Cerdan, A. L., & Sebatier-Sanchez, R. (2006). Information technology and learning. Their relationship and impact on organisational performance in small businesses. *International Journal of Information Management, 26*(1), 16.
- Rulke, D. L., Zaheer, S., & Anderson, M. H. (2000). Sources of managers' knowledge of organisational capabilities. *Organizational Behaviour and Human Decision Processes, 82*(May), 134-149.

- Sackett, P. R., Zedeck, S., & Fogli, L. (1988). Relation between measures of typical and maximum job performance. *Journal of Applied Psychology, 73*(1), 482-486.
- Sadowski, C. J. (1993). An examination of the short Need for Cognition Scale. *The Journal of Psychology, 127*(4), 451.
- Sadowski, C. J., & Cogburn, H. E. (1997). Need for cognition in the big-five factor structure. *The Journal of Psychology, 131*(3), 307.
- Sadowski, C. J., & Gulgoz, S. (1996). Elaborative processing mediates the relationship between need for cognition and academic performance. *The Journal of Psychology, 130*(3), 303.
- Sager, J. K. (1994). A structural model depicting salespeople's job stress. *Academy of Marketing Science. Journal, 22*(1), 74.
- Sagiv, L., & Schwartz, S. H. (1995). Values priorities and readiness for out-group social contact. *Journal of Personality and Social Psychology, 69*(3), 437-448.
- Sala, F. (2002). *Emotional competent inventory (ECI) technical manual*. Boston: MacClelland Centre for Research and Innovation, Hay Group.
- Sala-i-Martin, X., Doppelhofer, G., & Miller, R. I. (2004). Determinants of long-run growth: A Bayesian averaging classical estimates approach. *American Economic Review, 94*(4), 813 - 835.
- Salgado, J. F. (1997). The five factor model personality and job performance in the European community. *Journal of Applied Psychology, 82*, 30-43.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality, 9*, 185-211.
- Sambasivan, M., Abdul, M., & Yusop, Y. (2009). Impact of personal qualities and management skills of entrepreneurs on venture performance in Malaysia: Opportunity recognition skills as a mediating factor. *Technovation, 29*, 798 - 805.
- Samie, S., & Walters, P. G. P. (1999). Determinants of structured export knowledge acquisition. *International Business Review, 8*, 373-397.
- Saroglou, V. (2002). Religion and the five factors of personality: A meta-analytic review. *Journal of Personality and Individual Differences, 32*(1), 15-25.
- Saucier, G., & Goldberg, L. R. (1998). What is beyond the big five? *Journal of Personality, 66*(4), 495.

- Saucier, G., & Goldberg, L. R. (2002). Assessing the big five: Application of 10 psychometric criteria to the development of market scales. In B. De Raad & D. Perugini (Eds.), *Big Five Assessment* (Vol. 66, pp. 495-524). Cambridge: Hogrefe and Huber.
- Sawyer, O. O., Srinivas, S., & Wang, S. (2009). Call center employee personality factors and service performance. *The Journal of Service Marketing*, 23, 301.
- Scherbaum, C. A. (2006). A basic guide to statistical research and discovery. In F. T. L. Leong & J. T. Austin (Eds.), *The psychology research handbook* (pp. 275-305). California: Sage Publication.
- Schmidt, F. L., Shaffer, J., & Oh, I.-S. (2008). Increased accuracy for range restriction correction: Implication for the role of personality and general mental ability in job training and performance. *Personnel Psychology*, 61(4), 827-868.
- Schutte, N., Malouff, J., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., et al. (1998). Development and validation of measures of emotional intelligence. *Personality and Individual Differences*, 25, 167-177.
- Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values? *Journal of Social Issues*, 50(1), 19 - 45.
- Securities Commission Malaysia (2007). Licensing Retrieved 12 May 2007, 2007, from <http://www.sc.com.my/>
- Seibert, S. E., Kraimer, M. L., & Crant, J. M. (2001). What do proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology*, 54, 845-874.
- Seibert, S. E., Kraimer, M. L., & Liden, R. C. (2001). A social capital theory of career success. *Academy of Management Journal*, 44, 219-237.
- Semadar, A., Robins, G., & Ferris, G. R. (2006). Comparing the validity of multiple social effectiveness constructs in the prediction of managerial performance. *Journal of Organizational Behaviour*, 27, 443-461.
- Shaffer, R. D., & Shaffer, M. A. (2005). Emotional intelligence abilities, personality and workplace performance. *Academy of Management Best Conference Paper*, M1-M6.
- Shaker, S. M., & Gembicki, M. P. (1999). Competitive intelligence: A futurist's perspective. *Competitive intelligence Magazine*, 2(1), 24.
- Shambu, G., & Meyer, G. (2007). *Applying lessons from Jazz improvisation in the management classroom*. Paper presented at the Allied Academies International Conference.



- Sharma, A., Levy, M., & Evanschitzky, H. (2007). The variance in sales performance explained by the knowledge structures of salespeople. *Journal of Personal Selling and Sales Management*, 27(2), 169-181.
- Shepherd, C. D., & Rentz, O. (1990). A method for investigating the cognitive processes and knowledge structures of expert salespeople. *Journal of Personal Selling and Sales Management*, 10(1), 55-70.
- Sher, K. J., Batholow, B. D., & Wood, M. D. (2002). Personality and disinhibitory psychopathology: Alcoholism and anti-social personality disorder. *Journal of Abnormal Psychology*, 103, 92-102.
- Sheth, J. N., & Pravatiyar, A. (1995). Relationship marketing in consumer markets: Antecedents and consequences. *Journal of the Academy of Marketing Science*, 23(4), 255-271.
- Shim, S. S. (2003). Clinical handbook of pastoral counselling. In r. J. Wicks, R. D. Parsons & D. Capps (Eds.), (Vol. 3, pp. 77-100). New York: Paulist Press.
- Siguaw, J. (1993). *An examination of adaptive selling antecedents and outcomes* Paper presented at the Annual Conference of the Academy Marketing Science, Miami.
- Silvestri, S. (2009). Islam and religion in the EU political system. *West European Politics*, 32(6), 1212-1239.
- Simba, R. (2008). The changing role of Islam in international relations. *Journal of International and Area Studies*, 15(2), 55-68.
- Sinkula, J. M. (1990). Perceived characteristics, organizational factors, and the utilization of external market research suppliers. *Journal of Business Research*, 21(1), 1-19.
- Sinkula, J. M. (1994). Market information processing and organizational learning. *Journal of Marketing*, 58(1), 35.
- Sinkula, J. M. (2002). Market-based success, organizational routines, and unlearning. *The Journal of Business & Industrial Marketing*, 17(4), 253.
- Sinkula, J. M., Baker, W., & Noordewier, T. (1997). A framework for market-based organizational learning: Linking values, knowledge, and behavior. *Academy of Marketing Science Journal*, 25(4), 305.
- Slaski, M., & Cartwright, S. (2003). Emotional intelligence training and its implications for stress, health and performance. *Stress and Health*, 19(4), 233-239.

- Slater, S. F., & Narver, J. C. (1995). Market orientation and the learning organisation. *Journal of Marketing*, 59(July), 63-74.
- Slater, S. F., & Narver, J. C. (2000). Intelligence generation and superior customer value. *Academy of Marketing Science*, 28(1), 120-127.
- Smallbone, D., Fadahunsi, A., Supri, S., & Paddison, A. (1999, 25 - 26 November). *The diversity of ethnic minority enterprise*. Paper presented at the RENT XIII, London.
- Smith, B. (1999). A survey of Egypt: Islamists in retreat. *The Economist*, 350(8111), S15.
- Smith, B. C. (2006). Religious Foundations of Western Civilization: Judaism, Christianity, and Islam. *Library Journal*, 131(4), 93.
- Smith, K. (2002, June). *What is knowledge economy?* . Paper presented at the Knowledge-Intensity and Distributed Knowledge Bases, The United Nations University.
- Smith, M. C., & Frankenberger, K. D. (1991). *The effect of religiosity on selected aspects of consumer behaviour*. Paper presented at the Administrative Science Association of Canada, Canada.
- Smith, P. A. (1992). Where Capitalism Is Shaped by Islam. *Global Finance*, 6(10), 70.
- Sojka, J. Z., & Giese, J. L. (2001). The influence of personality traits on the processing of visual and verbal information. *Marketing Letters*, 12(1), 91-106.
- Sood, J., & Adams, P. (1984). Model of management learning styles as a predictor of export behaviour and performance. *Journal of Business Research*, 12(2), 169.
- Sood, J., & Nasu, Y. (1995). Religiosity and nationality: An exploratory study of their effect on consumer behaviour in Japan and United States. *Journal of Business Research*, 34(1), 1-9.
- Souchon, A. L., Cadogan, J. W., Procter, D., & Dewsnap, B. (2004). Marketing information use and organisational performance: the mediating role of responsiveness. *Journal of Strategic Marketing*, 12(4), 231.
- Souchon, A. L., & Diamantopoulos, A. (1996). A conceptual framework of export marketing information use: Key issues and research propositions. *Journal of International Marketing*, 4(3), 49.
- Souchon, A. L., & Diamantopoulos, A. (1999). Export information acquisition modes: measure development and validation. *International Marketing Review*, 16(2), 143.

- Souchon, A. L., Diamantopoulos, A., Holzmüller, H. H., Axinn, C. N., Sinkula, J. M., Simmet, H., et al. (2003). Export information use: A five-country investigation of key determinants. *Journal of International Marketing*, 11(3), 106.
- Souchon, A. L., & Durden, G. R. (2002). Making the most out of export information: An exploratory study of UK and New Zealand exporters. *Journal of Euro - Marketing*, 11(4), 65.
- Sparrowe, R. T., & Popielarz, P. A. (1995). *Weak ties and structural holes: The effects of network structure on careers*. Paper presented at the Annual Meeting of Academy of Management, Vancouver.
- Spiro, R. L., & Perreault Jr., W. D. (1979). Influences used by industrial salesmen: Influence-strategy mixes and situational determinants. *Journal of Business* 52(3), 435-455.
- Spiro, R. L., & Weitz, B. A. (1990). Adaptive selling: Conceptualisation, measurement and nomological validity. *Journal of Marketing Research*, 27(1), 61-69.
- Stanton, N., & Matthews, G. (1995). Twenty-one traits of personality: An alternative solution for the occupational personality questionnaire. *Journal of Management Development*, 14(7), 66-75.
- Steenkamp, J.-B. E. M., & Baumgartner, H. (1998). Assessing Measurement Invariance in Cross-National Consumer Research. *The Journal of Consumer Research*, 25(1), 78-90.
- Stephen, M. K. (2007). Religion, Spirituality, and the Workplace: Challenges for Public Administration. *Public Administration Review*, 67(1), 103.
- Strauss, J. P., Barrick, M. R., & Connerley, M. L. (2001). An investigation of personality similarity effects (relational and perceived) on peer and supervisor ratings and the role of familiarity and liking. *Journal of Occupational and Organizational Psychology*, 74, 637-651.
- Strieter, J. C., Celuch, K. G., & Kasouf, C. J. (1999). Market-oriented behaviors within organizations: An individual-level perspective. *Journal of Marketing Theory and Practice*, 7(2), 16.
- Sue-Chan, C., & Gary, P. L. (2004). The Situational Interview as a Predictor of Academic and Team Performance: A Study of the Mediating Effects of Cognitive Ability and Emotional Intelligence. *International Journal of Selection and Assessment*, 12(4), 312 -328.
- Sujan, H., Sujan, M., & Bettman, J. R. (1988). Knowledge structures differences

- between more effective and less effective salespeople. *Journal of Marketing Research*, 25(Feb), 81-86.
- Sujan, H., Weitz, B., & Kumar, N. (1994). Learning orientation, working smart, and effective selling. *Journal of Marketing* 58(3), 39-52.
- Sweeney, J. C., & Brandon, C. (2006). Brand personality: Exploring the potential to move from factor analytical to circumplex models. *Psychology and Marketing*, 23(8), 639-663.
- Sy, T., Tram, S., & O'Hara, L. A. (2006). Relation of employee and manager emotional intelligence to job satisfaction and performance. *Journal of Vocational Behavior*, 68(3), 461.
- Szymanski, D. M. (1988). Determinants of selling effectiveness. The importance of DEC. *Journal of Marketing*, 52(1), 64-78.
- Szymanski, D. M., & Churchill, G. A. (1990). Client evaluations cues: A comparison of successful and unsuccessful sales people. *Journal of Marketing Research*, 27(3), 163-174.
- Tangpong, C., Islam, M., & Lertpittayapoom, N. (2009). The Emergence of Business-to-Consumer E-Commerce: New Niche Formation, Creative Destruction, and Contingency Perspectives. *Journal of Leadership & Organizational Studies*, 16(2), 131.
- Tanner, J. F., Jr. (1994). Adaptive selling at trade shows. *The Journal of Personal Selling & Sales Management*, 14(2), 15-24.
- Tayeb, M. (1997). Islamic revival in Asia and human resource management. *Employee Relations*, 19(4), 352-364.
- Taylor, L. A. (1987). Decision quality and commitment within a probabilistic environment. *Organization Behavior and Human Decision Processes*, 39(2), 203-227.
- Tett, R. P., Jackson, D. N., & Rothstein, M. (1991). Personality measures as predictor of job performance: A meta-analytic review. *Personnel Psychology*, 44, 703-742.
- Tett, R. P., Steele, J. R., & Beauregard, R. S. (2003). Broad and narrow measures on both side of personality-job performance relationship. *Journal of Organizational Behaviour*, 24, 335-336.
- Thompson, J. A. (2005). Proactive personality and job performance: A social capital perspective. *Journal of Applied Psychology*, 90(5), 1011.
- Thoresen, C. J., Bliese, P. D., Bradley, J. C., & Thoresen, J. D. (2004). The Big Five

Personality Traits and Individual Job Performance Growth Trajectories in Maintenance and Transitional Job Stages. *Journal of Applied Psychology*, 89(5), 835 - 853.

- Tidwell, P. S., Sadowski, C. J., & Pate, L. M. (2000). Relationships between need for cognition, knowledge, and verbal ability. *The Journal of Psychology*, 134(6), 634.
- Toften, K. (2005). The influence of export information use on export knowledge and performance: Some empirical evidence. *Marketing Intelligence and Planning*, 23(2/3), 200 - 219.
- Toften, K., & Olsen, S. O. (2003). Export market information use, organizational knowledge, and firm performance: A conceptual framework. *International Marketing Review*, 20(1), 95.
- Tsai, F.-S. (2005). Composite diversity, social capital, and group knowledge sharing: A case narration. *Knowledge Management Research and Practice*, 3(4), 218.
- Tsalikis, J., & Lassar, W. (2009). Measuring consumer perceptions of business ethical behavior in two Muslim countries. *Journal of Business Ethics*, 89(1), 91 - 98.
- Tsikriktsis, N. (2005). A review of techniques for treating missing data in OM survey research. *Journal of Operations Management*, 24(1), 53 - 62.
- Tupes, E. C., & Christal, R. E. (1961). Recurrent personality factors based on trait ratings. (pp. 61-97): USAF ASD Tech. Rep.
- Uzzi, B. (1996). The sources and consequences of embeddedness for the economic performance of organizations: The network effect. *American Sociological Review*, 61(4), 674.
- Uzzi, B. (1997). Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly*, 42(1), 35.
- Uzzi, B. (1999). Embeddedness in the making of financial capital: How social relations and networks benefit firms seeking financing. *American Sociological Review*, 64(4), 481.
- Uzzi, B., & Dunlap, S. (2005). How to build your network. *Harvard Business Review*, 83(12), 53.
- Uzzi, B., & Lancaster, R. (2003). Relational embeddedness and learning: The case of bank loan managers and their clients. *Management Science*, 49(4), 383.
- Van de Ven, A. H., & Ferry, D. L. (1980). *Measuring and assessing organizations*.

New York: John Wiley and Sons.

- Van deVijver, R., & Hambleton, R. K. (1996). Translating test: Some practical guidelines. *European Psychologist, 1*, 89-99.
- Van Vianen, A. C. M., & De Dreu, C. K. W. (2001). Personality in teams: its relationship to social cohesion, task cohesion and team performance. *European Journal of Work and Organizational Psychology, 10*(1), 97-120.
- Varey, R., & Lewis, B. R. (1999). A broadened conception of internal marketing. *European Journal of Marketing, 33*(9), 926-944.
- Varey, R., & Lewis, B. R. (2000). *Internal marketing: directions for management*. London: Routledge.
- Vera, D., & Crossan, M. (2005). Improvisation and innovative team performance. *Organization Science, 16*(3), 203 - 244.
- Verhees, F. J. H. M., & Meulenbergh, M. T. G. (2004). Market orientation, product innovation, and performance in small firms. *Journal of Small Business Management, 42*(2).
- Vinchur, A. J., Schippmann, J. S., Switzer, F. S., & Roth, P., L. (1998). A meta-analytic review of predictors of job performance for salespeople. *Journal of Applied Psychology, 83*(4), 586 - 597.
- Viswesvaran, C., Schmidt, F. L., & Ones, D. S. (1996). Comparative analysis of the reliability of job performance ratings. *Journal of Applied Psychology, 81*(5), 557.
- Vlachopoulos, S. (2008). The Basic Psychological Needs in Exercise Scale: Measurement Invariance Over Gender. *Structural Equation Modeling, 15*(1), 114.
- Vyas, R., & Souchon, A. (2003). Symbolic use of export information: A multidisciplinary approach to conceptual development and key consequences. *International Marketing Review, 29*(1), 67-94.
- Waldman, D. A., Atwater, L. E., & Davidson, R. A. (2004). The role of individualism and the five-factor model in the prediction of performance in a leaderless group discussion. *Journal of Personality, 72*(1), 1-28.
- Walker, O. C., & Ruekert, R. W. (1987). Marketing's roles in the implementation of business strategies: A critical review and conceptual framework. *Journal of Marketing, 51*(July), 15-33.
- Wall, T. D., Michie, J., Wood, S., Patterson, J., Sheehan, M., Clegg, C. W., et al. (2004). On the validity of subjective measures of company performance.

*Personnel Psychology*, 57, 95-118.

- Walters, P. G. P. (1996). International market information infusion: Data acquisition behaviour in Norwegian exporters. *International Journal of Information Management*, 16(6), 437.
- Wang, X., & Yang, Z. (2008). A meta-analysis of effect sizes in international marketing experiments. *International Marketing Review*, 25(3), 276.
- Warr, P., Barram, D., & Brown, A. (2005). Big five validity: Aggregation method matters. *Journal of Occupational and Organizational Psychology*, 78, 377.
- Warr, P., & Pearce, A. (2004). Preferences for careers and organizational cultures as a function of logically related personality traits. *Applied Psychology*, 53(3), 423.
- Weber, M. (1958). *The protestant ethics and the spirit of capitalism*. NY: Charles Scribner's Son.
- Weick, K. E. (1996). Drop your tools: an allegory for organizational studies. *Administrative Science Quarterly*, 41(3), 301-313.
- Weiss, A. M., & Heide, J. B. (1993). The nature of organizational search in high technology markets. *Journal of Marketing Research*, 30(May), 220-233.
- Weiss, C. H. (1981). Measuring the use of evaluation. In J. Ciarlo (Ed.), *Utilizing evaluation: Concepts and techniques*. Beverly Hills, CA: Sage Publication.
- Weiss, C. H., & Buuvalas, M. J. (1977). The challenge of social research to decision making. In C. H. Weiss (Ed.), *Using social research in public policy making*. Lexington, MA: Lexington Books.
- Weitz, B. A. (1978). The relationship between sales person performance and understanding of customer decision making. *Journal of Marketing Research*, 15, 501 - 516.
- Weitz, B. A., & Bradford, K. D. (1999). Personal selling and sales management: A relationship marketing perspectives. *Journal of Academy of Marketing Science*, 27(Spring), 241-254.
- Weitz, B. A., Sujan, H., & Sujan, M. (1986). Knowledge, motivation, and adaptive behavior: A framework for improving selling effectiveness. *Journal of Marketing* 50, 174-191.
- Wellman, B. (1992). Which ties provide what kinds of support? . *Advances in Group Processes*, 9, 207-235.
- Wernerfelt, B. (1995). The resource based view: Ten years after. *Strategic*

- Management Journal*, 16(3), 171-174.
- Westermeyer, J., & Neider, J. (1988). Social networks and psychopathology among substance abusers. *American Journal of Psychiatry*, 145, 1265-1269.
- Weston, R., & Gore Jr, P. A. (2006). A brief guide to structural equation modeling. *The Counseling Psychologist*, 34(5), 719-751.
- Wiggins, J. S. (1980). Circumplex models of interpersonal behaviour. In L. Wheeler (Ed.), (Vol. 1, pp. 256-294). Beverly Hills, CA: Sage Publication.
- Wilde, A., & Joseph, S. (1997). Religiosity and personality in a Moslem context. *Journal of Personality and Individual Differences*, 23(5), 899 - 900.
- Wilkowski, B. M., Robinson, M. D., & Meier, B. P. (2006). Agreeableness and the prolonged spatial processing of antisocial and prosocial information. *Journal of Research in Personality*. doi:www.sciencedirect.com
- Williams, A., & Sharma, A. (2005). Building an Islamic brand. *Brand Strategy*, 197, 52-53.
- Williams, J. E. M., & Chaston, I. (2004). Links between the Linguistic Ability and International Experience of Export Managers and their Export Marketing Intelligence Behaviour. *International Small Business Journal*, 22(5), 463.
- Wilton, P., & Myers, J. (1986). Task, expectancy, and information assessment effects in information utilization processes. *Journal of Consumer Research*, 12(March), 469-486.
- Wisker, L. (2006, June 6-8). *The effect of personalities in optimizing the use of market intelligence: A case of New Zealand middle managers*. Paper presented at the Knowledge Management International Conference, Kuala Lumpur, Malaysia.
- Wisker, L. (2009). Emotional intelligence in the military curriculum: Friend or foe? *New Zealand Defence Journal*, 4(2), 19-24.
- Witkowski, T. H. (1999). Religiosity and social meaning of wearing Islamic dress. In S. M. Smith (Ed.), *Proceedings of the Seventh Cross-Cultural Consumer and Business Studies Research Conference*. Cancun, Mexico.
- Witt, L. A. (2002). The interactive effects of extraversion and conscientiousness on performance. *Journal of Management*, 28(6), 835-851.
- Wolff, S., Pescosolido, A., & Druska, V. (2002). Emotional intelligence as the basis of leadership emergence in-self managing teams. *Leadership Quarterly*, 13, 505-522.



- Wong, C. S., & Law, K. S. (2002). The effects of leader and follower emotional intelligence of performance and attitude: An exploratory study. *The Leadership Quarterly*, 13, 243-274.
- Worthington, E. L., Wade, N. G., Hight, T. L., McCullough, M. E., Berry, J. T., Ripley, J. S., et al. (2003). The religious commitment inventory-10: Development, refinement and validation of a brief scale for research and counselling. *Journal of Counselling Psychology*, 50(1), 84-96.
- Wotruba, T. R. (1991). The evolution of personal selling. *Journal of Personal Selling and Sales Management*, 11(Summer), 1-12.
- Wu, W., & Tsai, H. (2005). Impact of social capital and business operation mode on intellectual capital and knowledge management. *International Journal of Technology Management*, 30(1/2), 147.
- Yaghi, A. (2008). Leadership Values Influencing Decision-Making: An Examination of Nine Islamic, Hindu, and Christian Nonprofit Institutions in the US. *South Asian Journal of Management*, 15(1), 24.
- Yap, K. B., & Pecotich, A. (2006). *Islamic banking: Its nature and role in economic development*. Paper presented at the Macromarketing the Future of Marketing, Queenstown, New Zealand.
- Yiannis, G., & Dorothy, S. G. (2002). Emotion, learning and organizing. *The Learning Organization*, 9(5), 214.
- Yoo, B., Schuler, D., & Sneide, G. (2003). Do information technology-savvy salespeople sell more? An exploratory study of the use of information technologies on salesperson performance. *Marketing Management Journal*, 13(1), 14-22.
- Yulk, G. (2002). *Leadership in organizations* (5 ed.). New Jersey: Prentice Hall.
- Zablah, A. R. (2005). Market intelligence: How and why organizations use market research; consumer insight; how to use data and market research to get closer to your customer. *Journal of Marketing Research*, 42(4), 525.
- Zaheer, A., & Bell, G. G. (2005). Benefiting from network position: Firm capabilities, structural holes and performance. *Strategic Management Journal*, 26, 809-825.
- Zaltman, G., Duncan, R., & Holbek, J. (1973). *Innovations and organizations*. New York: John Wiley and Sons Inc.
- Zander, U., & Kogut, B. (1995). Knowledge and the speed of the transfer and imitation of organizational capabilities: an empirical test. *Organization Science*, 6, 76-92.

Zeidner, M., Matthews, G., & Roberts, R. D. (2004). Emotional intelligence in the workplace: A critical review. *An International Journal of Applied Psychology*, 53, 371-399.

Zikmund, W. G. (2003). *Business research methods* (7th ed.). South-Western: Thomson.

Zimbardo, P. G., & Ruch, F. (1979). *Psychology and Life* (10th ed.). Glenview, IL: Scott, Foreman and Company.

# APPENDICES

## Appendix A: Letter to Potential Participant

30 December 2007



THE UNIVERSITY OF  
**WAIKATO**  
*Te Whare Wānanga o Waikato*

To Potential Participants

Dear Sir/Madam

I am writing to invite you to participate in a research project I am conducting for my Ph.D. dissertation at the University of Waikato in New Zealand. My research aims to examine the impact of account managers' personality and social networks on their decision making in using market information. I believe that you are an ideal candidate to represent account managers, and sincerely hope you will choose to help me by participating.

Your participation will help me:

- identify useful perspectives and approaches in gathering market information,
- provide insights into the way account managers use market information, and
- identify factors that may affect the performance of account managers

Naturally, participation in this research is entirely voluntary. If you take part in the study, you have the right to:

- Refuse to answer any particular question, and to withdraw from the study at any time.
- Ask any further questions about the study that occurs to you during your participation.
- Request a summary of the findings from the study when it is completed.

Please remember that all your answers are not only anonymous, they will also be treated in the strictest confidence.

If you could please complete the enclosed questionnaire and return it at your earliest convenience, I would greatly appreciate it. If you have any concerns or wish to seek clarification of any aspect of this research, please do not hesitate to contact me. I look forward to your response.

Yours Sincerely

---

**LILY WISKER**

Email [lily.wisker@xtra.co.nz](mailto:lily.wisker@xtra.co.nz) or [zw83@waikato.ac.nz](mailto:zw83@waikato.ac.nz)

Phn:006-44-5271017

Facsimile:006-44-5271009

## Appendix B: Market Information Strategy Research Project Information Sheet



### Introduction

For most businesses and organisations, information and knowledge about the market environment are vitally important. Business success today increasingly requires the best possible market information to compete in the marketplace where faster moving competitors are a constant threat. Market information becomes vital to the decision-making process when it is well prepared, used pragmatically, analysed and interpreted with market-led implications. It improves the decision making process by reducing uncertainty as well as reducing the number of assumptions that a team of managers might make.

### Research Objectives

The main aim of this research project is to investigate managers' characteristics and their relationships with market information activities. The objectives of the research are:

- To examine whether managers' personality affect the acquisition and use of market information strategy
- To investigate the impact of market intelligence acquisition and use (strategy) on performance

### Research Process

The research project consists of the completion of a questionnaire. This should take no longer than 35 minutes in most cases (and considerably less in some). The participants can complete this part at their convenience and return the questionnaire in a self envelope provided within a period of one month.

### Your Rights as a Participant

Participation in this research is entirely voluntary. If you take part in the study, you have the right to:

- Refuse to answer any particular question, and to withdraw from the study at any time.
- Ask any further questions about the study that occurs to you during your participation.

- Be given access to a summary of the findings from the study when it is concluded. I would be happy to share the findings with you once the thesis is completed.

### **What will happen to the information collected?**

The survey will be used to write a descriptive and causal analysis of the issue that the study has chosen. The analysis of data will be undertaken and reported in such a way that information cannot be linked to any person or organization. Only my supervisors and I will be privy to the questionnaires. Afterwards, questionnaires and additional notes (if any) will be destroyed. Responses will be coded and aggregated in a manner that protects the names and identities of all study participants. No participants will be named in research reports unless permission has been given, and every effort will be made to disguise their identity.

### **Research Approval**

This project has been reviewed and approved by the University of Waikato, Human Ethics Committee, Hamilton, New Zealand.

If you have any concerns or questions about the research project, please do not hesitate to contact me at the contact details below. Alternatively you can contact my supervisors.

Supervisors:

Professor Richard Varey  
The Waikato Management School  
University of Waikato  
Private Bag 3105  
Hamilton, New Zealand  
Telephone 64-7-838 4466 ext. 4617  
Facsimile 64-7- 838 4352  
Email [rvarey@mngt.waikato.ac.nz](mailto:rvarey@mngt.waikato.ac.nz)

Research Student  
Lily Wisker  
14 Ruapehu Drive  
Palmerston North, New Zealand  
Telephone 64-6-9527000 ext. 70388  
Facsimile 64-6-9527038  
Email [l.wisker@ucol.ac.nz](mailto:l.wisker@ucol.ac.nz)

Dr Marc Anderson  
The Waikato Management School  
University of Waikato  
Private Bag 3105  
Hamilton, New Zealand  
Telephone 64-7-838 4466 ext. 4330  
Facsimile 64-7- 838 4352  
Email [mha@mngt.waikato.ac.nz](mailto:mha@mngt.waikato.ac.nz)

Thank you for your time.

## Appendix C: Scale Items for Personality Traits

**1. Instructions:** Please use the rating scale below to describe how accurately each statement describes **you**. Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself in relation to other people you know of same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence. Please read each statement carefully, and then circle the appropriate number

	Very Accurate	Moderately Accurate	Neither Inaccurate nor Accurate	Moderately Inaccurate	Very Inaccurate
Am the life of the party					
Feel little concern for others					
Am always prepared					
Get stressed out easily					
Have a rich vocabulary					
Don't talk a lot					
Am interested in people					
Leave my belongings around					
Am relaxed most of the time					
Have difficulty understanding abstract ideas					
Feel comfortable around people					
Insult people					
Pay attention to details					
Worry about things					
Have a vivid imagination					
Keep in the background					
Sympathize with others' feelings					
Make a mess of things					
Seldom feel blue					
Am not interested in abstract ideas					
Start conversations					
Am not interested in other people's problems					
Get chores done right away					
Am easily disturbed					
Have excellent ideas					
Have little to say					
Have a soft heart					
Often forget to put things back in their proper place					
Get upset easily					
Do not have a good imagination					
Talk to a lot of different people at parties					
Am not really interested in others					
Like order					
Change my mood a lot					
Am quick to understand things					

Don't like to draw attention to myself					
Take time out for others					
Neglect my duties					
Have frequent mood swings					
Use difficult words					
Don't mind being the center of attention					
Feel others' emotions					
Follow a schedule					
Get irritated easily					
Spend time reflecting on things					
Am quiet around strangers					
Make people feel at ease					
Am exacting in my work					
Often feel blue					
Am full of ideas					

## Appendix D: Scale Items for Emotional Intelligence

**2. Instructions:** Please circle the number to indicate how strongly you agree or disagree with each statement.

	<div style="text-align: right;"><i>Strongly Agree</i></div> <div style="text-align: right;"><i>Agree</i></div> <div style="text-align: center;"><i>Neither Agree nor Disagree</i></div> <div style="text-align: left;"><i>Disagree</i></div> <div style="text-align: left;"><i>Strongly Disagree</i></div>				
I have a good sense of why I have certain feelings most of the time					
I have good understanding of my own emotions					
I really understand what I feel					
I always know whether or not I am happy					
I always know my friends' emotions from their behaviour					
I am a good observer of others' emotion					
I am sensitive to the feelings and emotions of others					
I have good understanding of the emotions of people around me					
I always set goals for myself and then try my best to achieve them					
I always tell myself I am a competent person					
I am a self-motivating person					
I would always encourage myself to try my best					
I am able to control my temper so that I can handle difficulties rationally					
I am quite capable of controlling my own emotions					
I can always calm down quickly when I am very angry					
I have a good control of my own emotions					



**Appendix E: Scale Items for Market Intelligence Use**

**3. Instructions:** The following statements centre on your overall use of market information.

*Generally speaking, market information can be gathered in four main ways.*

**Marketing research** is a formal and structured information gathering mechanism carried out within the firm (e.g. in a marketing research department) or commissioned to an outside specialist (e.g. a market research agency).

**Market assistance** refers to information services provided by governmental bodies, chambers of commerce, etc.

**Market intelligence** refers to information gathered largely informally in the course of day-to-day activities through contacts with other sales people, work colleagues, customers, suppliers, trade press, internet, etc.

**Internal database** refers to company's internal records information

a. Please answer the following questions regarding the use of market research, market assistance bodies and market intelligence **BY YOU**. How often do you use the following **TO OBTAIN** market information? PLEASE **CIRCLE** THE NUMBER OF YOUR CHOICE IN THE BOXES PROVIDED.

	Very Often				
	Often				
	Occasionally				
	Rarely				
	Never				
Market Research					
Company's Own Staff					
Company's Internal Newsletters					
Conferences and Trade Shows					
Central Bank					
Personal Contacts					
Trade Magazine					
Contacts with Customers					
Trade Association Letters					
Kuala Lumpur Stock Exchange Newsletter					
Chamber of Commerce					
Internal Databases					
Other (please specify): Competitors websites					

b. Please indicate the extent to which you agree or disagree with the following statements. ANSWER SEPARATELY AND ONLY FOR EACH INFORMATION COLLECTION METHOD **YOU USE**, BY PUTTING THE NUMBER OF YOUR CHOICE IN THE BOXES PROVIDED (e.g. if you only use market intelligence, only fill the boxes in third column).

**1**  
*Strongly Disagree*
**2**  
*Disagree*
**3**  
*Neither Agree*
**4**  
*Agree*
**5**  
*Strongly Agree*

*Internal Databases*

*Market Intelligence*

*Market Assistance*

*Marketing Research*

I use information collected in this way to justify decisions already made on the basis of instinct				
My confidence in making decisions is increased as a result of information collected in this way				
I combine my instinct/intuition with information collected in this way when making decisions				
I would make very different decisions without information collected in this way				
I do not use the majority of the information gathered in this way				
I do not often consider information gathered in this way in the making of decisions for which it was initially requested				
I sometimes take into account information acquired in this way to justify the cost of having acquired it				
I use information collected in this way to solve a specific decision at hand				
Information that is gathered in this way often has little decision relevance				
If information is difficult to obtain in this way, I make guesses				
I make more accurate decisions based on information collected in this way than wholly intuitive ones				
I frequently use information collected in this way to support decisions made on other grounds				
I use information collected in this way to back up hunches, prior to the implementation of a sales decision				
I manipulate information collected in this way to justify decisions already made on the basis of instinct				
My uncertainty associated with sales activity is greatly reduced by information acquired in this way				

I would not make a decision without information collected in this way				
I store information collected in this way for use by other individuals				
I use the same piece of information collected in this way for more than one decision				
I translate information collected in this way into significant practical actions				

## Appendix F: Scale Items for Adaptive Selling Behaviour, Improvisation and Subjective Sales Performance

**8. Instructions:** The following statements centre on the way in which you serve customers. Please use the rating scale below to indicate how strongly you agree or disagree with each statement.

	<i>Strongly Agree</i>				
	<i>Agree</i>				
	<i>Neither Agree nor Disagree</i>				
	<i>Disagree</i>				
	<i>Strongly Disagree</i>				
I am flexible in the selling approach I use	1	2	3	4	5
I can easily set a wide variety of selling approaches	1	2	3	4	5
I vary my sales style from situation to situation	1	2	3	4	5
I do not use a set sales approach	1	2	3	4	5
I treat all customers pretty much the same	1	2	3	4	5
I like to experiment with different sales approaches	1	2	3	4	5
I change my approach from one customer to another	1	2	3	4	5
I figure out my sales presentation as I go along	1	2	3	4	5
I follow a rigid, well defined sales presentation plan	1	2	3	4	5
I improvise when making my sales presentation	1	2	3	4	5
I strictly follow my sales presentation plan	1	2	3	4	5
My sales presentation is an ad-libbed action	1	2	3	4	5
I produce a high market share for this company in a specific territory	1	2	3	4	5
I make sales with the highest profit margin	1	2	3	4	5
I generate a high level of dollar sales	1	2	3	4	5
I maintain a high level of current customer retention	1	2	3	4	5
I find and develop new customer relationships	1	2	3	4	5

**Appendix G: Demographic Scale and Scale for Sales Performance**

**9. Instructions:** Finally please tell a few details about yourself.

1. What year were you born?

2. Gender (please circle)

Male                      Female

3. Religion (please circle)

Islam                      Buddha

Hindu                      Christian

Others (please indicate) \_\_\_\_\_

Education (please circle the highest level completed)

School Certificate              Diploma

Bachelor Degree              Post Graduate

Master Degree              PhD

Others: (Please indicate) \_\_\_\_\_

4. What was your actual sales compared to target sales during each of the last three years expressed as a percentage? For example 10% above write as 110%; 20% below write as 80%.

Year	% of Number of Account to Annual Target
2007 (Please estimate if not yet available)	
2006	
2005	

5. How many years experience do you have in managing accounts?

6. How would you describe your earnings?


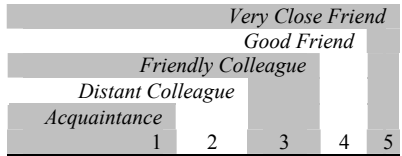
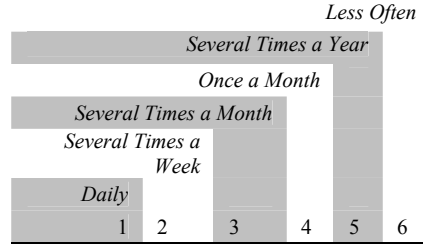
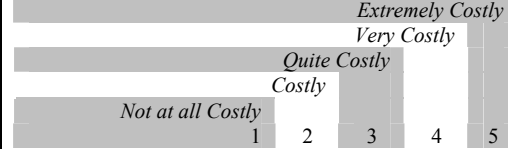
Commission only              Paid Salary

Commission and based salary

Others (Please indicate) \_\_\_\_\_

**Appendix H: Scale for Social Network Size, Cost and Tie Strength**

**STEP 2: QUESTIONS ONE TO FIVE**

		<b>STEP 2: QUESTIONS ONE TO FIVE</b>																	
		<b>Q1: How close are you with each person?</b>					<b>Q2: How many years have you known this person</b>	<b>Q3: How frequently do you communicate with each person on average?</b>						<b>Q4: Does this person work inside your organization (a fellow employee)?</b>	<b>Q5: Seeking information or advice from other people can be costly. For example, with some people you may not feel comfortable revealing your own lack of knowledge on a given topic. Alternatively people that you ask for information may make you feel excessively indebted to them. In light of such interpersonal risk and obligations, please indicate the extent to which you feel that seeking information or advice from this person is costly.</b>				
<b>STEP 1:</b>  <i>First Name or Initials</i>		<i>Scale:</i>						<i>Scale:</i>											
																			
		1	2	3	4	5	1	2	3	4	5	6	1	2	3	4	5		
Person 1		1	2	3	4	5		1	2	3	4	5	6		1	2	3	4	5
Person 2		1	2	3	4	5		1	2	3	4	5	6		1	2	3	4	5
Person 3		1	2	3	4	5		1	2	3	4	5	6		1	2	3	4	5
Person 4		1	2	3	4	5		1	2	3	4	5	6		1	2	3	4	5
Person 5		1	2	3	4	5		1	2	3	4	5	6		1	2	3	4	5
Person 6		1	2	3	4	5		1	2	3	4	5	6		1	2	3	4	5
Person 7		1	2	3	4	5		1	2	3	4	5	6		1	2	3	4	5
Person 8		1	2	3	4	5		1	2	3	4	5	6		1	2	3	4	5
Person 9		1	2	3	4	5		1	2	3	4	5	6		1	2	3	4	5
Person 10		1	2	3	4	5		1	2	3	4	5	6		1	2	3	4	5
Person 11		1	2	3	4	5		1	2	3	4	5	6		1	2	3	4	5
Person 12		1	2	3	4	5		1	2	3	4	5	6		1	2	3	4	5
Person 13		1	2	3	4	5		1	2	3	4	5	6		1	2	3	4	5
Person 14		1	2	3	4	5		1	2	3	4	5	6		1	2	3	4	5
Person 15		1	2	3	4	5		1	2	3	4	5	6		1	2	3	4	5