THE RELATIONSHIP BETWEEN LEADERSHIP BEHAVIOUR, ENTREPRENEURIAL ORIENTATION AND ORGANISATIONAL PERFORMANCE IN MALAYSIAN SMALL AND MEDIUM ENTERPRISES

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A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy from the Royal Melbourne Institute of Technology University
STATEMENT OF AUTHORSHIP

I certify that except where due acknowledgement has been made, the research is that of the author alone; the research has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of research which has been carried out since the official commencement date of the approved research program; and any editorial work, paid or unpaid, carried out by a third party is acknowledged.

Ahmad Fadhly Arham

February 2014
DEDICATION

This dissertation is dedicated to
my dear wife, my precious son
and my beloved parents.
ACKNOWLEDGEMENTS

In the name of ALLAH s.w.t., the most gracious and the most merciful. All praise to Him for the strengths and blessings that He has given me to complete this thesis.

I would like to thank all of those who have contributed and played a role in supporting my journey to complete this thesis. My deepest appreciation and thanks go to my supervisors, Dr Nuttawuth Muenjohn and Associate Professor Carlene Boucher, for their invaluable and never-ending support, advice, guidance and encouragement through this dissertation process. Both of you have contributed immeasurably to my successful, challenging and enjoyable journey. Your superior knowledge and experience has challenged me to refine my direction and ideas and you will always be my inspiration. It has been a true pleasure to know you and have the opportunity to work with you over the past few years.

Most importantly, I would like to thank my wife, Norhayati Sulaiman, for all her love and support during this process. You were always there in every step of this journey. Your intelligence, patience, wisdom and support are invaluable and I could not have finished this thesis without your encouragement. I am so much in debt to you for all the time I selfishly devoted to my study. I will forever appreciate the sacrifices that you have made for me to complete this journey. Over the course of my study, we travelled thousands of miles and got our first son, Muhamad Fyras Nawfal. Having him and being married to you are the most wonderful things that have ever happened
in my life. Both of you are my emotional strengths in pursuing and completing this remarkable journey. I love you both so much.

To my parents, Haji Arham Haji Nordin and Hajah Aisah Md Nor, I am forever grateful for your continuous prayers and words of encouragement. You made me who I am today and I cannot thank you enough for your unconditional love and continuous support. There is not a day that passes when I do not think of both of you.

My brothers and their wives, my nieces and nephew also deserve sincere thanks for their support and the joy they bring into my life. Also, to my in-laws, thank you for your prayer and support.

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Thank you all.
ABSTRACT

Malaysia is heading towards having developed country status by 2020. To realise this national agenda, the country needs to further strengthen its economic development, growth and well-being. One of the important sources for economic growth is the development of small and medium enterprises (SMEs). SMEs are acknowledged as a source of employment, economic dynamism, competition and innovation. But their contributions to the country’s economy are still comparatively low compared with the contributions of SMEs in many developed and developing countries. This indicates an opportunity for further growth and development and a call for a robust study to further explore how the contributions of SMEs can be improved.

Research has shown that leadership and an entrepreneurial orientation are important for organisational success. But the literature has indicated that leadership research in small businesses, especially SMEs in Malaysia, is still lacking. Also, research in the area of entrepreneurial orientation in Malaysia is still in its infant stage.

Thus, this thesis concentrates on the organisational performance of SMEs in Malaysia from the perspective of the leadership behaviour of SME leaders and their entrepreneurial orientation. To accomplish this, this thesis begins by reviewing the literature in the areas of leadership, entrepreneurship and organisational performance. To represent leadership behaviour, transformational and transactional leadership have been chosen, as these types of leadership behaviour are considered the most recent paradigms of leadership. Innovativeness, proactiveness and risk taking have been
chosen to reflect entrepreneurial orientation. Growth and profitability are used as measures for organisational performance.

To test hypotheses, data were collected from 395 Malaysian-owned SMEs operating in the manufacturing and service industries. Exploratory factor analysis, confirmatory factor analysis and structural equation modelling (SEM) using path analysis were used to test three models and verify all hypotheses on the direct and indirect effects of leadership behaviour and entrepreneurial orientation on organisational performance. Nine interviews were also conducted to provide quantitative findings and to further elucidate the results of this study.

This study demonstrates that leadership behaviour has a direct impact on organisational performance, with transformational leadership having the stronger impact of the two types of leadership behaviour investigated. The attributes of inspirational motivation and contingent reward were found to be the most favourable aspects of transformational and transactional leadership respectively, as perceived by the respondents in this study. Also, entrepreneurial orientation was found to have a direct impact on organisational performance and was a good mediator between transformational leadership and organisational performance. These findings suggest that besides practising transformational leadership, leaders need to focus on developing their organisation’s entrepreneurial orientation. Transformational leadership qualities exert a strong effect on entrepreneurial orientation and enhance organisational performance. This study acknowledges leadership and entrepreneurial orientation as important resources and capabilities in an organisation because the
integration of these two elements can offer success for SMEs. Key implications of this study are:

i. Of the two types of leadership behaviour, transformational leadership proved to be a more efficient form of leadership behaviour than transactional leadership. Thus, leaders of SMEs in Malaysia need to display, practise and nurture the qualities of transformational leadership in order to achieve good organisational performance.

ii. Entrepreneurial orientation (EO) is an important strategic orientation for Malaysian SMEs. EO is also a mediator between leadership behaviour and the outcomes produced by organisations. The factors of EO are compatible with transformational and transactional leadership, being particularly effective for transformational leadership.

iii. SME Corp. Malaysia, which is the governing body that oversees entrepreneurial development in Malaysia, should provide more leadership training and development programs for entrepreneurs. The training should focus on developing and nurturing the transformational and transactional leadership qualities of entrepreneurs. Also, continuing support and assistance from the government and financial institutions would undoubtedly help these enterprises to fully develop EO in their business practices.
PUBLICATIONS, CONFERENCE PRESENTATIONS AND AWARDS OF THE CANDIDATE RELATED TO THIS THESIS

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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AMOS</td>
<td>Analysis of Moment Structure</td>
</tr>
<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td>CFA</td>
<td>Confirmatory factor analysis</td>
</tr>
<tr>
<td>CR</td>
<td>Contingent reward</td>
</tr>
<tr>
<td>EFA</td>
<td>Exploratory factor analysis</td>
</tr>
<tr>
<td>EO</td>
<td>Entrepreneurial orientation</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross domestic product</td>
</tr>
<tr>
<td>GDP-PPP</td>
<td>Gross domestic product – Purchasing power parity</td>
</tr>
<tr>
<td>GLCs</td>
<td>Malaysian Government Linked Companies</td>
</tr>
<tr>
<td>GLOBE</td>
<td>Global Leadership and Organisational Behavior Effectiveness</td>
</tr>
<tr>
<td>GR</td>
<td>Growth</td>
</tr>
<tr>
<td>INN</td>
<td>Innovativeness</td>
</tr>
<tr>
<td>II</td>
<td>Idealised influence</td>
</tr>
<tr>
<td>IC</td>
<td>Individualised consideration</td>
</tr>
<tr>
<td>IM</td>
<td>Inspirational motivation</td>
</tr>
<tr>
<td>IS</td>
<td>Intellectual stimulation</td>
</tr>
<tr>
<td>IT</td>
<td>Information technology</td>
</tr>
<tr>
<td>MBEA</td>
<td>Management by exception, active</td>
</tr>
<tr>
<td>MBEP</td>
<td>Management by exception, passive</td>
</tr>
<tr>
<td>MITI</td>
<td>Ministry of International Trade and Industry</td>
</tr>
<tr>
<td>MLQ</td>
<td>Multifactor Leadership Questionnaire</td>
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<tr>
<td>NSDC</td>
<td>National SME Development Council</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>--------------</td>
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<tr>
<td>PA</td>
<td>Proactiveness</td>
</tr>
<tr>
<td>PRO</td>
<td>Profitability</td>
</tr>
<tr>
<td>SMIDEC</td>
<td>Small and Medium Industries Development Corporation</td>
</tr>
<tr>
<td>SMEs</td>
<td>Small and medium enterprises</td>
</tr>
<tr>
<td>SME Corp. Malaysia</td>
<td>SME Corporation Malaysia</td>
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<tr>
<td>RBV</td>
<td>Resource-Based View</td>
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<tr>
<td>RT</td>
<td>Risk taking</td>
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<td>R&amp;D</td>
<td>Research and Development</td>
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<tr>
<td>SEM</td>
<td>Structural equation modelling</td>
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<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
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DEFINITIONS OF KEY TERMS

**Leadership** refers to how a person behaves and takes actions to motivate, stimulate and encourage a group of individuals to achieve organisational goals (developed by the researcher).

**Transformational leadership** is a process where leaders broaden and raise the interest of their employees to perform above and beyond expectations (Bass & Avolio 2004).

**Transactional leadership** is the type of leadership where a leader explains what is required from employees and what compensation they will get when they accomplish these requirements (Bass & Avolio 2004).

**Entrepreneurial orientation** is the inclination of a company’s top management to take calculated risks, to be innovative, and to display proactiveness in their approach to strategic decision making (Morris & Paul 1987).

**Growth** is the owner’s or top manager’s perception of how well their company is doing in regard to market shares and overall company performance relative to their competitors (developed by the researcher).

**Profitability** is the owner’s or top manager’s perception of how well their company is doing in regard to the return on investment and return on sales (developed by the researcher).
CHAPTER 1
INTRODUCTION

1.1 Introduction

The topic of the performance of small and medium enterprises (SMEs) is creating a vast amount of discussion among practitioners, researchers, educators and policy makers. The characteristics and determinants of the performance of SMEs have been and always will be a focus of debate and interest (McKelvie & Wiklund 2010). Due to the unique constraints and limitations faced by SMEs such as having a limited number of employees, insufficient financial resources, a lack of educational background and experience and a lack of managerial expertise, among other limiting factors (Samad 2007; Saleh & Ndubisi 2006; Abu Bakar et al. 2006; Mohd Aris 2006), efforts are continuously being made to understand how the performance of SMEs could be developed and further enhanced. These efforts are important since this sector of the economy is recognised as one of the important engines of growth for a country’s economy (Abu Kassim & Sulaiman 2010).

The focus of this research is to examine the impact on performance of SMEs in Malaysia from the perspectives of leadership behaviour and the entrepreneurial orientation (EO) in organisations. This is done through the collection and analysis of quantitative and qualitative data. Leadership and EO are acknowledged as essential elements for organisational success (Fiedler 1996; Wang 2008; Yang 2008; Hannay 2009; Gul et al. 2012). Effective leadership provides a sound strategic direction and encourages the motivation of employees (Hashim et al. 2012). Leadership is essential
for enhancing organisational performance since leaders are responsible for the attainment of strategic organisational goals. Thus, leaders are accountable to the stakeholders of their organisations for creating the best possible products and services through optimum utilisation of the resources available (Gul et al. 2012). Entrepreneurial ventures, on the other hand, need to focus on developing EO, which serves as a strategic orientation that can set them apart from their competitors. Both factors are needed to improve and sustain organisational performance and to allow entrepreneurs (the owners and top managers of SMEs in Malaysia) to better equip themselves to be more competitive in the future.

After this introduction, this chapter discusses the background of the study. Section 1.3 presents the problem statement and Section 1.4 details the scope of this study. Section 1.5 highlights the objectives and research questions. Section 1.6 presents the justifications for undertaking this research. Section 1.7 deliberates on the significance of the study, Section 1.8 provides a summary of the thesis structure and Section 1.9 concludes this chapter.

1.2 Background of Study

Situated in South East Asia, Malaysia is a multi-ethnic country. According to the Census 2010 (Department of Statistics, Malaysia, 2010), the total population in Malaysia was 28.3 million in 2010, compared to 23.3 million in 2000. Of these, 91.8% were Malaysians and 8.2% were non-citizens. The population is also divided into a 67.4% majority of Bumiputera (Malays and other indigenous groups), 24.6% Chinese, 7.3% Indians and 0.7% other races.
Since independence from the British in 1957, Malaysia has accelerated its economic performance to become one of Asia's best performers. In 2012, the Malaysia economy was ranked the third largest in South East Asia, after Indonesia and Thailand, and the 29th largest economy in the world. The country’s real gross domestic product (GDP) grew by an average of 6.5% per year from 1957 to 2005 (Economic Planning Unit 2010). A recent release by the World Bank acknowledged Malaysia as the country ranked 6th for ease of doing business. Regarding its political system, Malaysia practises a parliamentary democracy with a constitutional monarchy.

SMEs contribute significantly to the growth and development of the economy in Malaysia. According to the SME Annual Report (NSDC 11), SMEs represent about 99.2% of total business establishments and contribute 39.1% of the country’s GDP. SMEs provide 59.5% of the total employment and contribute 28.4% to the total exports of the country. Due to their total number, their size and the nature of their operations, it has been recognised that this segment of the economy is important in promoting sources of growth and strengthening the infrastructure for accelerated economic expansion and development in Malaysia (Mohd Aris 2007). The government has continuously allocated large amounts of funds through various sources and programs to assist SMEs to become more competitive in their various industries. However, the contributions of Malaysian SMEs are still lower in regard to the GDP and exports than those of some other developed and developing countries (NSDC 2010).
Despite various types of support from the government, SMEs in Malaysia still face challenges and difficulties in their business operations. Some of the problems are a lack of capabilities and resources, poor management, low technology, strong competition, international economic factors and the cost and shortage of workers (Hashim 2000; Saleh & Ndubisi 2006). These factors have affected their performance and their contribution to the country’s economy in general. Thus, to overcome these challenges, good leadership and entrepreneurial attitudes need to be developed. These two factors have been identified as those that could drive the success of SMEs in the future (Abdul Razak 2010).

Every organisation needs sound and effective leadership. Acknowledging the important links between leadership and organisational performance, many organisations are focusing on developing effective leaders in their organisations (Hashim et al. 2012). Most of the leadership research has focused on the impact of a leader’s behaviour on followers’ individual performance (Podsakoff et al. 1996), motivation (Papalexandris & Galanaki 2009) and satisfaction (Tsai 2008), rather than examining firm performance, even though the most important effects of leadership are on organisational performance (Elenkov 2002).

Notably, there is still a lack of understanding about leadership in small businesses (Wang & Poutziouris 2010). These authors claimed that studying leadership in the SME environment may result in a better understanding of the organisational performance of SMEs. In one study of 194 small businesses, effective leadership was found to result in better business performance (O'Regan et al. 2005). These researchers further argued that small businesses with strong leadership have better
performance than businesses with weak or uncertain leadership. In the context of leadership in Malaysia, the literature also suggests that very little effort has been made to examine leaders and leadership behaviour in SMEs (Mohd Sam et al. 2012; Hashim et al. 2012).

On the other hand, EO is becoming a popular subject in entrepreneurship literature (Wiklund 1999; Rauch et al. 2009). Studies in the field of entrepreneurship have indicated that the better the EO of an SME, the better the performance of the firm (Swierczek & Thanh Ha 2003b; Rauch et al. 2009). EO is regarded as a strategic orientation of the firm (Covin & Slevin 1989; Lumpkin & Dess 1996) and a source of competitive advantage (Lumpkin & Dess 1996). With relatively limited resources and capabilities, EO is a survival kit and a key for outperforming SME competitors in global markets (Knight 2000). Regarding SMEs in Malaysia, Abdul Razak (2011) wrote that EO is critical in directing strategic entrepreneurial activities and an important means to achieving better productivity. Thus, the ability of SMEs in Malaysia to possess and exercise EO is central for entrepreneurial success. However, due to mixed results in the research, of the role of entrepreneurship and the impacts of EO on SMEs in developing countries are not well understood (Fairoz et al. 2010).

Therefore, the purpose of this study is to test the proposed theoretical framework and hypotheses that represent the relationships between leadership, EO and organisational performance in SMEs in Malaysia. By providing empirical evidence, the research should provide a better understanding of the contributions of leadership and EO to the performance of SMEs in Malaysia and possibly also those in similar developing economies. The next section discusses the problem addressed by this study.
1.3 Problem Statement

Even though SMEs are recognised as an important agent of growth in many countries (Panitchpakdi 2006; Leutkenhorst 2004; Hilmi et al. 2010), their contribution to the Malaysian economy is still comparatively low compared with the contributions of SMEs in industrialised countries as well as other developing countries. SMEs’ contribution to GDP in Japan and Germany is about 53%, in the UK about 51% and in Korea approximately 49%. Singapore and Thailand also record higher SME contributions to GDP at 49% and 38% respectively. SMEs in Malaysia only contributed about 31% to GDP in 2009 (NSDC 2010). This indicates a significant opportunity to develop and refine SMEs’ performance to become a channel of growth for the country’s economy (NSDC 2010). Growth is important for job creation and productivity (Haltiwanger et al. 2013) as well as encouraging business expansion and internationalisation (Lu & Beamish 2001). Thus, finding the right balance between the leadership behaviour of entrepreneurs and EO could contribute to improving SMEs’ performance.

SMEs are always being pressured by fierce competition from within their industries and globally. To compete and continue productively in the global economy, SMEs will have to undergo radical changes such as becoming more entrepreneurial and having effective leadership (Hashim et al. 2012). If SMEs are to grow and to increase their contribution to the country’s economy as expected, their leaders will have to be able to identify the need for rejuvenation, to improve their sense of direction, to be prepared to create necessary changes within their organisation and, most importantly, to improve organisational performance. Hashim et al. (2012) added that for
organisations to sustain growth and profitability, effective leaders are needed to create the context that encourages employees to take on new challenges and achieve outstanding business results.

Although the literature has presented evidence of great interest among researchers and practitioners in the topics of leadership and EO, the arguments have tended to concentrate on whether there is a relationship between leadership and EO on the one hand and organisational performance on the other hand. Despite the links identified between leadership and performance (As-Sadeq & Khoury 2006; Ling et al. 2008; Lo et al. 2010) and between EO and performance (Moreno & Casillas 2008; Rauch et al. 2009; Wiklund 1999), very few studies have been conducted to examine the relationship between the three variables simultaneously (Yang 2008; Todorovic & Schlosser 2007). Thus, the examination of EO as a mediator in the leadership-performance relationship could add new understanding of the direct and indirect relationships between leadership and organisational performance in the context of SMEs in Malaysia.

Finally, there is still a limited understanding of leadership in the context of SMEs in Malaysia (Mohd Sam et al. 2012; Hashim et al. 2012). Thus, this investigation of the forms of leadership behaviour in SMEs in Malaysia hopes to close this gap in the literature on SMEs.

1.4 Scope of Study

This research focuses on the relationship between leadership behaviour and entrepreneurial orientation in SMEs in Malaysia and their effects on SMEs’
performance. The leader of an SME is represented by either the owner or the top manager, who tends to be the most knowledgeable person about the strategic direction of the firm (Keh et al. 2007; Yang 2008) and is the person who engages in entrepreneurial activities. The scope of SMEs is limited to enterprises operating in the manufacturing and service industries only. These two were chosen for their largest representation of SME establishments and significant contributions to the country’s economy. The definition of SMEs is based on the definition provided by the National SME Development Council (NSDC), as shown in Table 1.1.

### Table 1.1: Definition of SMEs in Malaysia

<table>
<thead>
<tr>
<th>Industry</th>
<th>Micro-enterprise</th>
<th>Small enterprise</th>
<th>Medium enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing, * * Manufacturing-Related Services and Agro-based Industries</td>
<td>Sales turnover of less than RM50,000 OR full-time employees fewer than 5</td>
<td>Sales turnover between RM250,000 and less than RM10 million OR full-time employees between 5 and 50</td>
<td>Sales turnover between RM10 million and RM25 million OR full-time employees between 51 and 150</td>
</tr>
<tr>
<td>Services, Primary Agriculture and Information &amp; Communications Technology (ICT)</td>
<td>Sales turnover of less than RM200,000 OR full-time employees fewer than 5</td>
<td>Sales turnover between RM200,000 and less than RM1 million OR full-time employees between 5 and 19</td>
<td>Sales turnover between RM1 million and RM5 million OR full-time employees between 20 and 50</td>
</tr>
</tbody>
</table>

Source: National SME Development Council, 2010

Transactional and transformational types of leadership, the most widely researched forms of leadership (Lo et al. 2009; Judge & Piccolo 2004), are analysed in this study. The three factors of entrepreneurial orientation used in this study are the factors established by Miller (1983): innovativeness, proactiveness and risk taking. Organisational performance is measured through growth and profitability.
1.5 Research Objectives and Research Questions

The following objectives drove the direction of the research:

i. To investigate the relationship between transformational and transactional leadership behaviour and organisational performance of SMEs in Malaysia.

ii. To examine the relationship between entrepreneurial orientation and organisational performance of SMEs in Malaysia.

iii. To investigate the mediating effect of entrepreneurial orientation on the relationship between leadership behaviour and organisational performance of SMEs in Malaysia.

The following research questions needed to be answered:

i. To what extent do transformational and transactional leadership behaviours have an impact on organisational performance?

ii. Does transformational leadership have a stronger effect on organisational performance than transactional leadership does?

iii. To what extent does entrepreneurial orientation influence organisational performance?

iv. To what extent does entrepreneurial orientation mediate the relationship between leadership behaviour and organisational performance?

1.6 Justification of Study

This study is important for several reasons. First, the outcomes of this study are empirical findings on whether certain forms of leadership behaviour and EO are resources and capabilities needed by organisation to ensure sustainable performance.
Ahmad and Ghani (2010) highlighted that it is important for the top management of SMEs to ensure that all the factors of EO (innovativeness, proactiveness and risk taking) exist in their organisation. Addressing only one of the factors would inhibit entrepreneurs from competing and strengthening their business effectively (Wiklund & Shepherd 2005). To focus on all the factors of EO requires good and effective leadership. Good leadership can nurture the development of the entrepreneurial skills of a firm and ensure the success of business enterprises (Yang 2008; Lussier 2006).

Second, most leadership and EO studies have been conducted in Western or other developed countries, primarily in the US and Western Europe (Lieberson & O’Connor 1972; Bass 1997; Ardichvili 2001; Den Hartog & Koopman 2001; Swierczek & Thanh Ha 2003a). Bass (1996) claimed that ‘leadership is a universal phenomenon’ (p. 732). He further argued that the concept and model of leadership developed in Western culture is as universal as the concept of leadership itself (Bass 1996). Therefore, it would be interesting to study whether Western leadership concepts are applicable to a developing country like Malaysia. Even though Bass (1996) posited that the leadership concept is culturally universal, the transferability of the theories of leadership to different business and cultural environments needs to be validated.

Thomas and Mueller (2000) questioned the transferability of EO to different cultural and business environments outside the US context. Therefore, the theoretical framework of this study might help to reveal how well the Western-developed concepts of leadership – specifically, the transformational and transactional leadership theories and EO – fit the context of entrepreneurial firms in a developing
country like Malaysia. According to Wang and Poutziouris (2010), a systematic approach to studying leadership in the SME environment may result in a better understanding of the organisational performance of SMEs. Therefore, these findings add to the literature on leadership and entrepreneurship by examining the applicability of these two concepts to Malaysian SMEs.

Third, SMEs’ development is increasingly important for the economic performance of the country. Despite this increased importance, there has been limited research on the effects of transformational and transactional leadership and EO on the organisational performance of SMEs in the manufacturing and service industries. This study therefore aims at generating empirical evidence for the relationships between leadership behaviour and leaders’ perceptions of their firms’ EO, and the influence of these factors on organisational performance. It is expected that the findings will significantly assist leaders of SMEs to be more effective in improving the EO in their firms and consequently improve organisational performance. Thus, the findings of this study could help organisations to develop more effective leaders. The outcomes could help them to make a good choice regarding:

i. Which leadership behaviour is effective in creating EO?

ii. What are the effects of leadership behaviour and EO on organisational performance?

Fourth, there is also a lack of studies on the relationship between EO and organisational performance relationship at the individual level of analysis (Todorovic & Schlosser 2007). Most of the previous studies on EO and performance have been done at the firm-level (Miller & Friesen 1982; Wiklund 1999). However,
significant number of researchers have asserted that the application of EO at the individual level could offer important insights into both managerial functions and the operation of organisations (Gartner 1985; Carland et al. 1988). It is only recently that the application of EO as an individual-level variable has started to receive some attention (Davis et al. 2010). Therefore, the analysis of EO from the individual perspective in this study is expected to provide a contribution to the entrepreneurship literature by providing a better understanding of how a leader’s entrepreneurial orientation is affected by their leadership behaviour and also what its impact might be on organisational performance.

Finally, this study investigates and identifies the form of leadership behaviour that would be practicable for leaders of SMEs in Malaysia. The identification of this factor through empirical and qualitative findings could be of great assistance to the development of training programs for new leaders of SMEs in Malaysia.

1.7 Significance of Study

The outcome of this study will contribute to the body of knowledge on leadership and entrepreneurship. Many of the previous studies in this area of research have focused on Western or other developed countries (Swierczek & Thanh Ha 2003a), so this study will provide empirical evidences of the applicability of these concepts to a developing country like Malaysia.

Due to the lack of research attention to the leadership behaviour of entrepreneurs in the context of small businesses, this study could potentially offer a better understanding of the forms of leadership behaviour that would be appropriate and
effective for Malaysian entrepreneurs. This is important since the culture, operating environment and values in Malaysia are different from those of Western and other developed countries. Some variables or factors might be important in Western countries but are not within the scope of SMEs in Malaysia, and vice versa. Adjustments to some of the Western-developed concepts of leadership and entrepreneurship may make them better suited to Malaysian entrepreneurs.

The area of study on entrepreneurship in developing countries is now growing. The outcomes of this research will provide further evidence on the level of entrepreneurial attitudes in SMEs in a developing country. This evidence will help the understanding of how the performance of SMEs in entrepreneurial activities could be improved.

Most studies on leadership and entrepreneurship are inclined to use either a qualitative or a quantitative method. In the present study, it was considered that the use of mixed methods might generate more convincing results for understanding the relationships between leadership and EO and organisational performance in SMEs in Malaysia. The use of quantitative data provides empirical evidence to test research hypotheses. The use of qualitative data supplements, clarifies, confirms and contests some of the quantitative findings, thus inciting interesting discussion on the findings of the study.

Practically, the outcomes of this study will benefit government-related agencies such as SME Corporation Malaysia (SME Corp. Malaysia) and the development of entrepreneurs in Malaysia. For example, a more robust and specific training program
may be initiated by SME Corp. Malaysia to foster and develop appropriate leadership skills and entrepreneurial posture among entrepreneurs in Malaysia.

1.8 Structure of Thesis

Chapter 2 reviews the literature on each of variables in this study: leadership behaviour, EO and organisational performance. A discussion of the variables leads to the selection of the measures for forms of leadership behaviour, factors of EO and organisational performance.

Chapter 3 reviews the literature on SMEs in Malaysia. A detailed review of the research variables in the context of research and practices in Malaysia is also presented.

Chapter 4 discusses the development of the theoretical framework of this thesis. Reviews of the relevant theories that include leadership and EO as resources and capabilities that enhance organisational performance drive the development of theoretical hypotheses in this study.

Chapter 5 explains the research methodology that directs the conduct of this study. Detailed descriptions of the research design, sample population, recruitment strategy, research instruments, data analysis, validity and reliability, and ethical considerations are presented.

Chapter 6 presents the outcomes of this study. There are two parts to this chapter. The first part discusses the outcomes from quantitative analysis and the second part discusses the outcomes from qualitative analysis. For the quantitative data, an
analysis of structural models using Structural Equation Modelling (SEM) to provide answers to research questions and hypotheses is presented. For the qualitative data, thematic analysis is used to analyse the interview data.

Chapter 7 discusses the outcomes derived from the analyses of both types of data. Each of the hypotheses and research questions is addressed.

Chapter 8 draws conclusions from the analyses and from comparisons of the quantitative and qualitative findings. Recommendations, implications for theory and practice, the limitations of the study and possible future research directions are also provided.

1.9 Summary

The topic of leadership has created much interest in management literature (Hannay 2009) and it has been established that effective leadership is important for organisations of all sizes and industries (Bolden 2007; Yang 2008; Gul et al. 2012). Effective leadership ensures organisational success and good business performance, especially in the competitive environment in which most firms are operating (Ireland & Hitt 2005). For SMEs, good leadership is needed not only to guide organisational success (Van 2005) but also for survival (Abdul Aziz et al. 2013).

Thus, this study examines the effects of the relationship between leadership behaviour and EO on the organisational performance of SMEs in Malaysia. Leadership is a complex phenomenon. Even though many studies have identified that
leadership affects performance, its effects in the context of SMEs in developing countries still need to be validated. This is the issue that has become the focus of this study.

This chapter presents a clear picture of the need for this study. A brief background on studies and identified problems indicate the gap that needs to be filled. The research objectives and research questions provide guidance for the direction of this research. Justifications for this study deliberated on why this study was needed and the significance of the contributions that this study might make. An outline of the thesis structure provides guidance to readers on the direction of this thesis. In the next chapter, this study explores the literature on leadership, EO and organisational performance.
CHAPTER 2
LITERATURE REVIEW

2.1 Introduction

The objective of this chapter is to present a review of the literature relating to the main variables in this study. Section 2.2 presents a definition of leadership followed by a historical review of various theories on leadership. There is an extensive and specific review of the theory of transformational and transactional leadership. This section also discusses the current literature and practice for this theory and its application to the context of SMEs. A brief review of the Multifactor Leadership Questionnaire (MLQ), a tool used to measure transformational and transactional leadership, is also presented. Section 2.3 presents the literature on EO, its key factors and its application in research and practice. Section 2.4 discusses the literature on organisational performance, the dependent variable of this study.

Section 2.5 reviews literature that has integrated the variables used in this study. Although previous studies examining links between leadership, EO and organisational performance are not extensive, especially in the context of SMEs, the findings from those studies in various industries and business environments provide fruitful insights for developing a strong foundation of this study. Section 2.6 summarises this chapter.
2.2 Leadership

2.2.1 Definition of Leadership

A review of the literature on leadership indicates that there is not only a wide range of leadership theories but also no single agreed definition of leadership (Bass 1990a; Rost 1993). After 40 years of researchers trying to unravel the meaning of leadership, Bass (1990a) identified more than 3,500 definitions and concluded, ‘There are almost as many definitions of leadership as those who have attempted to define the concept’ (Bass 1990a, p.11).

Some definitions of leadership tend to be rather narrow and some are quite comprehensive. For example, in a popular textbook on leadership, Yukl (2010) defined it as the process of getting others to understand and follow what should be accomplished and how, and the process of facilitating individual and collective efforts to accomplish shared objectives. Narrower definitions see leadership as the ability to release and engage human potential in the pursuit of common goals (Moore & Diamond 2000) or the process whereby a person influences a group of individuals to achieve a shared purpose (Northouse 2007).

Bass (1990a), on the other hand, defined leadership as a relationship between two or more individuals of a group that often involves a structuring or restructuring of the situation and the perceptions and expectations of the members. Leaders are seen as agents of change – people whose behaviour affects other individuals more than the other individuals’ behaviour affects them. Leadership is established when one member of a group modifies the motivation or competencies of others in the group.
The broad definitions of leadership are perhaps a consequence of the many attempts of researchers and scholars to study the concept of leadership. Perhaps these definitions are developed to accord with the different aspects of leadership that interest them, to match their own perspectives of the leadership process or perhaps to deal with a certain leadership context that they want to focus on. Therefore, the selection of an appropriate definition of leadership is important for interpreting the findings of a study so as to avoid confusion. Hence, in this study, the following definition of leadership developed by the researcher is used:

*Leadership refers to how a person behaves and takes actions to motivate, stimulate and encourage a group of individuals to achieve organisational goals.*

This definition has been developed to suit the needs of this study. Self-perception measures are used in this study to measure leadership, and this definition allows leaders to evaluate their own leadership through their understanding of how they behave, what actions they take to lead and how they engage with their employees. This definition of leadership seems appropriate for this study as:

i. It reflects on how a leader behaves in dealing with employees.

ii. It stresses the actions carried out by a leader to influence employees’ engagement.

This definition indicates that any form of leadership must be accompanied by practical actions to ensure that employees are united, motivated and inspired to focus on achieving the goals of the organisation. Yukl’s (2010) definition of leadership also stresses the behaviour of a leader, including the activities that are important to fulfil a
leader’s responsibilities. These activities include persuading others to work towards common goals and shared objectives (Yukl 2010; Northouse 2007).

The next section presents a review of past and current research and leadership theories. The review considers the Great Man theory and the trait approach, the behavioural approach, the situational approach, and the transactional and transformational leadership theory. An understanding of these past and present leadership theories serves as a foundation of this study.

2.2.2 Leadership Approaches

Leadership can be traced back to the emergence of various religious beliefs. Transformational leadership theory has been chosen as the leadership theory for this study due to the academic attention that it has gained over the past 20 years as a useful paradigm for understanding leadership (Spreitzer et al. 2005; Judge & Piccolo 2004). This study acknowledges that this approach to leadership is based on the Western views and interpretation of leadership. In the eastern countries, approaches to leadership often relate to religious beliefs such as Islam, Buddhism and Confucianism.

2.2.2.1 Great Man Theory and Traits Approach

The earliest theory of leadership was the Great Man theory. This theory was popular in the 19th and early 20th centuries and assumed that great leaders are born and not made (Kirkpatrick & Locke 1991). This theory depicted great leaders as heroic, mythic and ordained to rise to leadership when required to. Then, around the late 1940s, studies on leadership started to focus on the trait theory of leadership. This
approach was derived from the Great Man theory and therefore had some similarities. The trait theory assumed that people inherit certain traits and qualities that distinguish them as great leaders. The trait theory tried to identify the characteristics that differentiate leaders from followers. The theory of this leadership approach is that leadership is inborn, meaning that some people are born with certain traits that make them good leaders. Traits such as energy, intelligence, honesty, self-confidence, appearance, knowledge, optimism, tolerance of stress, persistence when encountering obstacles and result-orientation integrity were considered the characteristics of effective leaders (Northouse 2007; Yukl 1989, 2010).

Stogdill (1948) reviewed 124 studies on the trait theory of leadership and concluded that the studies were indecisive, inconclusive and unconvincing. However, he did identify several traits of a leader that were greater than those of the members of his group: intelligence, scholarship, dependability, activity, social participation and economic status. His findings also highlighted the importance of situational conditions that might influence the effectiveness of a leader and stated that leadership could not be sufficiently described by the trait theory. He concluded that ‘a person does not become a leader by the virtue of some combination of traits, but the pattern of personal characteristics of the leader must bear some relevant relationship to the characteristic, activities and goals of the followers’ (Stogdill 1948, p. 64). Intelligence, for example, may contribute to the success of a leader when group members possess an almost similar level of intelligence or a slightly lower lower than the leader. But this trait may be irrelevant to a leader in other situations. Therefore, having certain inborn personal traits is not a guarantee for success and Robbins
(2003) concluded that having all these traits may increase the likelihood of success as a leader but they do not promise success.

In another study, Kirkpatrick and Locke (1991) recognised that traits are only a precondition for successful business leadership. Leaders endowed with the requisites traits must also take certain actions in order to be successful. It is acknowledged that the trait theories have been effective in identifying the range of traits for successful leaders (Bass 1990a) but depending only on the traits is not always an effective means of distinguishing good leaders (Bass 1990a; Barker 1997), as other criteria are also important.

2.2.2.2 Behavioural Approach

The inability to prove that individual characteristics are the main determinant for effective leadership caused a shift towards a behavioural approach to leadership, with an emphasis on leadership style or behaviour. The idea that unique characteristics made people effective leaders was no longer considered applicable in every situation. Behavioural theories which were proposed from the late 1940s to the mid-1960s argued that leadership can be learned and leaders can be developed rather than just having inborn personal characteristics (Ayman & Korabik 2010). A behavioural definition of leadership focuses on the view that leaders are responsible for providing and shaping an environment which enables followers to achieve specific tasks (Mosley 1998). Mosley added that for a subordinate to fulfil organisational goals, the leader can manage his or her behaviour through organising antecedents and consequences of behaviour.
Instead of concentrating on what leaders are, this behavioural approach concentrated on what leaders do to make them great leaders and ‘the relationship of behaviour to managerial effectiveness’ (Yukl 1989, p. 257). In the behavioural approach, the effectiveness of a leader is related either to the nature of managerial work (task orientation), or to the functions, practices and behaviour of the leader (people orientation) (Robbins & Coulter 2005). These two broadly defined behavioural sets also appear in categories such as and production-centred behaviour (task orientation) and employee-centred behaviour (people orientation) (Bowers & Seashore 1966; Burns 1978; Bass 1990a; Judge et al. 2004).

Task-oriented leadership behaviour emphasises giving employees specific tasks, clarifying their roles and duties, and maximising their job performance capacity. People-oriented leadership behaviour concentrates on showing mutual trust and respect, making people feel part of the team, building and sustaining effective interpersonal relationships, and showing concern for employees’ needs and welfare (McShane & Travaglione 2003; Zimmermann et al. 2008). Research has shown that organisations with task-oriented leaders have high job performance, but it is usually related to low job satisfaction accompanied by high absenteeism and a high turnover rate. Organisations with a people-oriented leader have high job satisfaction, low absenteeism and a low turnover rate. But the job performance in people-oriented organisations tends to be lower than in task-oriented organisations (McShane & Travaglione 2003).

There are several popular behavioural theories on leadership such as the Ohio State Studies, the University Michigan Studies and the Managerial Grid (Northouse 2007).
In all of these studies, the effectiveness of the leaders depends on their style or behaviour. In some circumstances, it has been proved that task orientation is more effective than people orientation, especially when the leader is dealing with new employees. But recently Cummings et al. (2010) found that people-oriented leadership behaviour is superior to task-oriented leadership behaviour in regard to productivity and effectiveness, team work and collaboration, job satisfaction, employee retention, working environment and employee health. Regardless of the styles used by leaders, those styles can be secluded, defined and taught, which is contrary to the underlying assumption of the traits theory.

2.2.2.3 Situational Approach

During the 1960s and 1970s, a new perspective of leadership began to emerge (Ayman & Korabik 2010). In this view, style of leadership alone was seen as inconclusive in explaining the factors influencing organisational effectiveness. The disadvantage of the behavioural approach was considered to be a lack of consideration of the situational influences that might affect leadership effectiveness. Therefore some researchers begun to assume that a situation creates conditions suitable for leaders’ efficiency. This is known as the contingency approach (Aronson 2001). According to Yukl (1989, 2010), the situational approach stresses the importance of contextual factors such as the leader’s authority and discretion, the nature of the work performed by the leader’s unit, the attributes of followers and the nature of the external environment. This means that the efficiency of a leader depends on how well he or she matches their leadership behaviour to different situational factors.
Yukl (1989) identified that research into the situational approach to leadership can be classified into two categories: researchers who try to discover situational factors that influence behaviour and researchers who try to discover the moderating effects of situations on leaders’ behaviour and their effectiveness. The issue is whether the dependant variable is determined by the situation or by the behaviour of the leader. Some models have received greater attention than others due to their ability to distinguish the situational variables that influence leadership effectiveness. These models include the Fiedler Model, Hersey and Blanchard’s Situational Leadership Theory, the Leader Participation Model, the Path Goal Model and Leadership Substitutes (Yukl 1989). Among these models, Hersey and Blanchard’s (1969, 1993) Situational Leadership Theory (SLT) has been the most widely used by practitioners (Butler & Reese 1991; Blank et al. 1990). Avery and Ryan (2002) revealed that many leaders prefer situational leadership to other leadership models as it is more applicable to the organisational context.

According to Hersey and Blanchard (1993), the foundation of SLT is the interaction between the extent of leader task behaviour, leader relationship behaviour and follower readiness/maturity in performing a certain task. In this theory, the followers are the most important factor in the leadership circumstances. As the maturity level of the followers varies, so does the style of supervision by the leader. Employee readiness/maturity is defined as the extent to which a follower has the ability and willingness to accomplish a task.

Four types of leadership styles relate to four levels of employee maturity. For employees whose maturity level ranges from low to moderate, the appropriate
leadership style is ‘high relationship and moderate task’. As employees became more mature, the leader’s style shifts to ‘low relationship and low task’. In this theory, the effectiveness of leaders is based on the interaction between leader task behaviour, leader relationship behaviour and employee readiness/maturity.

The situational contingency approach has had a huge impact on the study of leadership. However, the approach has raised some concerns about the complexity of the models and their validity (Yukl 1999; Graeff 1983). The approach has also been criticised for treating leadership as a one-way process, with too much emphasis and responsibility on the leader. This would create a situation, particularly with the path-goal theory (Chemers 1997; Northouse 2012), where employees become overly dependent on their leader in order to complete their task.

2.2.2.4 Transformational Leadership

Disagreements about the situational factors that really influence leadership effectiveness arising from the multiplicity of theories and perspectives have induced researchers to shift towards a new theory of leadership. The concept of the transformational leader was first developed by Burns (1978) to deal with political leadership. Since then, the concept of transformational leadership has been the focus of much interest, discussion and debate for three decades in leadership and management literature (Zhu et al. 2012; Kimura 2012; Hannay 2009). Burns (1978) viewed transformational leaders and transactional leaders as separate from one another. According to him, transactional leaders are those who intend to influence their followers’ self-interests. In this model, leaders emphasise task assignments, work standards and compliance by followers. They also provide rewards and
punishment to influence the performance of subordinates. In contrast, transformational leaders inspire followers to work towards common goals and to achieve a high level of self-actualisation through instilling a clear mission and vision and building up trust and confidence (Burns 1978).

Bass (1985) refined Burns’ (1978) view on transactional and transformational leadership with a proposed theory of transformational leadership. He proposed that an effective leader with transformational attributes and abilities has the ability to transform his or her organisation to greater heights and to achieve greater performance (Bass 1985, 1990a, 1990b).

There were two distinct modifications made by Bass to Burns’ initial concept of transformational leadership. First, Bass disagree with Burns’ proposition that transformational and transactional leadership are two separate concepts, representing the opposite ends of a continuum. Bass (1985) claimed that these two types of leadership behaviour were not two separate concepts but rather two dimensions of a single concept. This means that effective leaders can possess both transformational and transactional leadership attributes (Bryman 2000; Bass & Riggio 2012). Next, Bass expanded the types of behaviour that represented transformational and transactional leadership (Judge & Piccolo 2004). Based on the constructs of transformational and transactional leadership behaviour developed by Burns (1978), Bass (1985) added the laissez-faire leadership construct to refer to the type of leader who ‘shows unconcern, procrastinates and avoids decisions’ (Bass 2000, p. 23) and avoids supervisory responsibility (Den Hartog et al. 1997). Bass (1996) used the label
‘full range leadership theory’ to include transformational, transactional and laissez-faire leadership.

According to Bass (1985), a transactional leader ‘pursues a cost-benefit economic exchange to meet subordinates’ current material and psychic needs in return for “contracted” services rendered by the subordinate’ (Bass 1985, p. 14). A transactional leader provides followers something that they want in return for something that the leader wants (Kuhnert & Lewis 1987). Transactional leaders address the self-interest of their employees by using positive and aversive reinforcement. When employees meet objectives, rewards and praise are granted. Negative reinforcement such as negative feedback or disciplinary action is used when they fail to meet commitments (Bass 2000; Bass et al. 2003; Bass & Riggio 2012). It is an agreed exchange process between the leader and the followers in order to achieve the necessary standard of performance.

Most transactional leaders are risk averse and perform well in stable and predictable conditions (Bass 1990a). In essence, transactional leaders favour maintaining stability in the organisation through economic and social exchanges that achieve specific goals for both the leaders and the followers (Lussier & Achua 2001). The relationship between a leader and a follower is simply based on the level of the transaction. For instance, followers with high and efficient work performance receive praise and rewards from the leader in exchange. On the other hand, followers with poor and inefficient performance receive punishment or threats. The relationship between a leader and a high achieving follower grows stronger as more transactions occur and more benefits are obtained by both parties.
In contrast to transactional leadership, ‘transformational leadership is the process whereby a person engages with others and creates a connection that raises the level of motivation and morality in both the leader and follower. This type of leader is attentive to the needs and motives of followers and tries to help followers reach their full potential’ (Northouse 2007, p. 76). Bass (1985) asserted that leaders who portray themselves as transformational leaders can motivate followers to achieve performance beyond expectations. Leaders affect and transform their organisation by increasing employees’ awareness of the importance of the task and its value, by elevating interest in the organisational goals instead of their personal interests, and by focusing on their higher-order needs. Transformational leaders raise employees’ understanding about what is important, and increase the need for achievement and self-actualisation (Bass 2000). They motivate employees to strive beyond their self-interest for the benefit of the group (Bass & Riggio 2012; Bass 2000).

Transformational leaders are able to influence followers to put in extra effort due to their commitment to the leader, their intrinsic work motivation, the level of their development, or having a clear sense of purpose or mission that drives them to excel beyond a standard performance (Bass et al. 2003; Howell & Avolio 1993), and they also develop followers to take on leadership roles (Bass & Avolio 1993). Lussier and Achua (2001) described transformational leaders as not afraid to change the status quo by informing followers about the problems in the current system and providing a compelling vision of what a better organisation could be. Sarros and Santora (2001) extended the effects of transformational leaders to appealing to followers’ ideals and values such as liberty, justice, peace and equality.
The third type of leadership identified by Bass (1996) as laissez-faire leadership is a lack of active leadership (Bass & Avolio 1995). It is characterised by a reluctance to become actively involved and a view that leadership is expressed by withdrawing from the action. This type of leadership is sometimes labelled ‘passive-avoidant leadership’, which is related to the types of ‘no leadership’ (Avolio & Bass 2004) and ‘do nothing leadership’ (Gartner & Stough 2002). Among these three types of leadership behaviour, laissez-faire is the least effective form of leadership (Jones & Rudd 2007; Bass & Avolio 1995).

Since laissez-faire leadership is the absence of leadership or ‘no leadership’, this type of leadership has not been included in this study, similar to previous studies conducted by Lowe et al. (1996) and Michel et al. (2011). Leaders with this leadership behaviour show passive indifference to tasks and to followers. They represent the opposite of change-oriented behaviour, behave in ways that do not inspire ideas, innovation, creativity, willingness to promote change or a tendency to take risks, and they encourage a conservative, anti-entrepreneurial organisational strategy or restrict organisational entrepreneurship (Eyal & Kark 2004).

Many previous studies have also concluded that laissez-faire leadership is not positively related to significant outcomes in organisations (Judge & Piccolo 2004; Bass 1985; Bass & Avolio 1989; Yammarino & Bass 1990; Singer 1985) and therefore it is not included in this study. The research questions stated in Chapter 1 specifically identify whether transformational and transactional styles of leadership affect organisational performance. Thus, to include leadership behaviour that has been considered as ‘the most inactive’ and ‘ineffective’ behaviour for leaders in
almost all research (Bass & Riggio 2012, p. 8) would be irrelevant, especially in the scope of SMEs, where most leaders are also the owners of the firm. The next two sections discuss the key factors of transformational and transactional leadership.

**Key Factors of Transformational Leadership**

Transformational leadership is defined as a process where leaders broaden and raise the interest of their employees. It occurs when leaders generate awareness and acceptance of the purpose and mission of the group and when they inspire their employees to look beyond their self-interest for the benefit of the group (Bass 1985, 1990b, 2000). There are four factors of transformational leadership: idealised influence, inspirational motivation, intellectual stimulation and individualised consideration (Bass & Avolio 1997, 2004; Bass et al. 2003; Bass & Riggio 2012).

As idealised influence, a leader provides vision and a sense of mission, instils pride, and receives respect and trust in employees (Bass 1990a; Bass & Riggio 2012). Transformational leadership inspires and excites employees with the idea that they are able to accomplish great things by putting in extra effort (Bass & Avolio 2004). Leaders of this type create trust and confidence from employees. They demonstrate conviction, take stands and also appeal to employees on an emotional level (Judge & Piccolo 2004). Idealised influence, also known as the charismatic attribute, is central to the transformational leadership process and is the key component of transformational leadership (Bass 1985; Yukl 1989).

Inspirational motivation refers to the degree to which leaders articulate a vision that is appealing and inspiring to employees. Inspirational leaders challenge employees to
reach high standards, communicate optimism about the attainment of goals and provide meaning for the tasks at hand (Judge & Piccolo 2004; Bass et al. 2003). Inspirational leaders communicate high expectations, and use symbols to focus effort and convey important purposes to employees in simple ways (Bass 1990a, 1996; Muenjohn & Armstrong 2008). In other words, they articulate shared goals and mutual understanding of what is right and important in simple ways to their employees (Bass & Avolio 2004; Bass & Riggio 2012).

Intellectual stimulation from leaders encourages intelligence, rationality and careful problem solving (Bass 1990a; Bass & Riggio 2012). This attribute also refers to the degree to which the leader challenges assumptions, takes chances, and solicits employees’ views and opinions. Leaders with this attribute incite and encourage creativity in their employees (Judge & Piccolo 2004). In their behaviour, transformational leaders provide an example to their employees of using new perspectives to look at old problems. Leaders of this type encourage innovative thinking and allow employees to develop their capacity to solve problems unforeseen by them (Bass & Avolio 2004). Kirkbride (2006) identified one of the main qualities of a transformational leader as the ability to encourage independent problem solving and decision making.

Finally, the individualised consideration aspect of transformational leadership means leaders provide personal attention to employees and treat each of them individually (Bass 1990a; Bass & Riggio 2012). It also refers to the degree to which leaders attend to each employee’s needs, act as a mentor or a coach to employees and listen to their concerns and needs (Judge & Piccolo 2004). These leaders spend time coaching and
giving advice productively by paying close attention to the differences among employees (Muenjohn & Armstrong 2008). This is an effort by the leaders not only to identify and satisfy employees’ existing needs, but also to enhance and increase those needs in order to maximise and develop employees’ full potential.

**Key Factors of Transactional Leadership**

Transactional leadership is where leaders explain what is required from employees and what compensation they will receive when they accomplish these requirements. It is a transaction between leaders and followers (Bass 1990, 2000; Bass et al. 2003). Transactional management can be described as the process of creating clear expectations on the part of followers with agreement on what they will get in return for meeting these expectations (Blanchard & Johnson 1985). The three factors of transactional leadership that are used in this study are: contingent reward, active management-by-exception and passive management-by-exception.

Contingent reward is the exchange of rewards for efforts. It promises rewards for excellent performance, acknowledges accomplishments and punishes poor performance (Bass 1996; Muenjohn & Armstrong 2008). The leaders explain expectations and establish rewards for meeting these expectations (Judge & Piccolo 2004). This is an agreed reciprocal process between leaders and followers. Each party understands the system of rewards and the requirements for certain achievements or behaviour of the followers (Bass 1990, 2000; Bass & Riggio 2012).

Both of the management-by-exception factors originated from contingent reinforcement theories (Bass 1990), in which followers are punished or rewarded for
an assigned action. In active management-by-exception, leaders act as monitors to watch for deviations from rules and standards and take corrective actions (Bass 1990a, 1996; Muenjohn & Armstrong 2008; Sosik & Jung 2010). In passive management-by-exception, leaders intervene only when procedures and standards are not met (Bass 1990a, 1996). Leaders of that kind only expect the status quo to be met by followers and they do not encourage exceptional performance by followers (Hater & Bass 1988). Both types of management-by-exception focus on identifying mistakes in business operations (Bass & Avolio 2004; Bass & Riggio 2012).

The difference between active and passive management-by-exception in identifying mistakes is the point of intervention by the leader. Leaders do not get involved until failures or deviations occur in the designated tasks (Bass 1985, 1990). A leader with the characteristics of active management-by-exception continuously monitors performance outcomes and takes corrective actions before deviations become a major issue. In passive management-by-exception leadership, a leader intervenes only after a problem has occurred. This type of leader waits for the completion of an assignment before determining that a problem exists and then intervening with corrective measures or punishment (Howell & Avolio 1993). Barbuto (2005) suggested that intervention by the leader is necessary only when a failure takes place and punishment or corrective action is needed. Nevertheless, both types of behaviour focus on establishing standards and monitoring failures or deviations from the standards required (Zhu et al. 2012).
2.2.3 Transformational Leadership in Practice and Research

Leadership studies have been conducted in various organisational settings and environments. The literature review has identified that attempts have been made to evaluate the effect of leadership on followers’ development and engagement (Luthans & Avolio 2003), on organisational culture and a firm’s innovativeness (Duygulu & Ozeren 2009), on increasing employees’ satisfaction (Casimir & Ng 2010; Papalexandris & Galanaki 2009), on improving employees’ motivation (Papalexandris & Galanaki 2009), and on examining the distribution of leadership in a group or examining team performance (Pearce & Sims 2000). Other studies have examined the contextual environment of leadership (Somech 2003; Waldman & Yammarino 1999).

Many attempts have been made to analyse the effects of transformational leadership theory on various measures of organisational performance in different industry settings. These attempts have included analysing the effects on the performance of large corporations (Agle et al. 2006; Ensley et al. 2006), financial institutions and banks (Xenikou & Simosi 2006; Geyer & Steyer 1998; Howell & Avolio 1993), the education sector (Paracha et al. 2012; Arnold et al. 2001), non-profit organisations (Chung & Lo 2007; Langley & Kahnweiler 2003), the hotel industry (Chiang & Wang 2012; Patiar & Mia 2009) and also on the performance of SMEs in developed countries (Hood 2003) and developing countries (Lo et al. 2009). All of these studies have highlighted the importance and applicability of transformational leadership theory in various contexts and organisational settings all around the world.
Xenikou and Simosi (2006) analysed the effect of transformational leadership behaviour on organisational effectiveness and revealed that transformational leadership and organisational performance has a positive effect on subordinates’ level of motivation. Arnold et al. (2001) found that transformational leadership increases trust, commitment and team efficacy. Hood (2003) and Banerji and Krishnan (2000) evaluated the effects of transformational leadership on ethical practices. Findings from Hood (2003) revealed that transformational leaders exhibit significantly higher levels of ethical practices than either transactional or laissez-faire leaders. Howell and Avolio (1993) measured senior managers’ leadership behaviour and suggested that leaders who display more attributes of transformational leadership than transactional leadership contribute positively to the achievement of business unit goals. But an earlier study by Dubinsky et al. (1995), which examined the links between transformational leadership behaviour and personality traits, presented different results. Based on a sample of 174 sales staff and their manager, they found that transactional leadership might be more effective in enhancing salespeople’s affective and behavioural responses.

The interest in examining the effects of transformational leadership theory has also extended to their effects on non-profit organisations (NPOs). Based on 77 samples of people involved in social welfare charity foundations (SWCFs) in Taiwan, Chung and Lo (2007) found that both transformational and transactional leadership behaviours were important for top managers in SWCFs. Thirty-five respondents evaluated the leadership practices in their charity foundations as high transactional and high transformational. Even though several characteristics of NPOs differ from those of profit-based organisations (such as employing volunteers and generating
funding from donations, government subsidies and revenue from their services), they still need to pay attention to effective management practices and top managers with the right kind of leadership behaviour to ensure effective services to their customers. Chung and Lo’s (2007) results confirmed the results of the study by Langley and Kahnweiler (2003) of the leadership behaviour of 102 African-American pastors involved in social-political issues in the US. These authors concluded that pastors with transformational leadership qualities are involved more frequently in social-political activities.

Most of these studies have suggested that transformational leadership results in better organisational outcomes. Leaders who display transformational leadership qualities are able to engage employees, gauge their interest and motivation and improve their team commitment; all of these translate into better performance. However, there is a situation where transactional leadership might be more relevant and effective. When work requires constant monitoring, transactional leadership becomes more important. As suggested by Dubinsky et al. (1995), salespeople are guided better by transactional leaders, perhaps due to the nature of this work, which is mostly based on commission from sales, providing a promising reward for high achievement. Constantly monitoring the sales progress and exercising punishment for poor performance might effectively influence the performance of the salespeople.

An important issue that needs to be discussed in regard to the transformational–transactional leadership theory is the universality of the theory for different organisational contexts and different cultures. Bass (1997) concluded that there is universality in the transformational–transactional leadership paradigm and presented
cross-continental supportive evidence collected from organisations in business, education, the military, the government and the independent sector. There were similar correlations between the different types of leadership behaviour and particular outcomes in many different countries. Bass (1997) asserted that the operation of the theory and its relationships can be observed in many types of organisations and cultures, but there might be some exceptions as a consequence of unusual attributes and different beliefs. The concepts may have certain thought processes, beliefs, implicit understanding or behaviour that might be perceived differently in different cultures (Bass 1997).

Inkson and Moss (1993) questioned the universality of the transformational leadership theory when the findings from their study revealed that the correlations were all insignificant, suggesting that leaders vary their leadership behaviour according to the situation. Swierczek (1991) acknowledged in his paper that leadership theories based on Western cultural values might not be appropriate worldwide. But the outcomes from his study of two different groups consisting of 40 managers from 24 different countries in Asia (except Japan) showed otherwise. Similarities were identified in these groups in regard to what constitutes good and bad leaders. Many of these characteristics reflected transformational and transactional leadership attributes such as efficient decision making, good communication, concern for individuals, support for employees, giving motivation and efficiency in problem solving. These outcomes from very diverse Asian managers suggest that there is a possibility of a culturally universal theory of leadership (Swierczek 1991).
The same conclusion was also drawn in a study by Den Hartog et al. (1999) across 62 cultures. They found that even though cross-cultural research stressed that different cultural groups are likely to have different conceptions of what constitutes good leadership, certain attributes associated with transformational leadership are universally endorsed as contributing to outstanding leadership. However, they also acknowledged that some other attributes of transformational leadership are seen as barriers in certain cultures.

Bass (1997) reinforced the notion that leadership is a universal phenomenon. He maintained that transformational leaders are more effective than leaders who practise transactional or laissez-faire leadership, regardless of culture, organisation and country. His argument was supported when outcomes from different studies in different countries presented similar results. For example, in Russia, Elenkov (2002) found that transformational leadership directly and positively impacts on the organisational performance of Russian companies far more than transactional leadership. In Chile, Pedraja-Rejas et al. (2006) concluded that the effect of transformational leadership on organisational performance is stronger than the effects of transactional and laissez-faire types of leadership. Finally, a more recent study by Chiang and Wang (2012) of 395 employees from 41 hotels in Taiwan also concluded that transformational leadership is positively related to cognitive and affective trust whereas transactional leadership is negatively related to cognitive trust.

Perhaps due to cultural differences, transformational leadership might not be relevant in developing countries like Malaysia. But given the outcomes generated from every part of the world in regard to the effect of transformational leadership on
organisational performance, similar results might be produced. Although Swierczek (1991) initially suggested that a Western leadership theory might not be appropriate worldwide, his results stated otherwise. This means that there might be a possibility of a universal theory of leadership and that the transformational leadership theory might have similar effects across cultures.

The fact remains that transformational and transactional leadership theory is the most recent and commonly used leadership theory by researchers in the current literature (Pawar 2003; Lo et al. 2009; Law 2011; Judge & Piccolo 2004) and has been proved to have impacts on the performance of organisations (Law 2011; Matzler et al. 2008). Judge and Bono (2000) found that from 1990 to 2003, the transformational theory of leadership was more often cited in articles published in PsycINFO than all the other leadership theories combined.

2.2.3.1 Criticisms of Transformational Leadership Theory

Despite its popularity, transformational leadership theory has been criticised for certain weaknesses and limitations. For example, Northouse (2007, 2012) asserted that the weaknesses of transformational leadership are that it has many components that seem too broad, it treats leadership more as a set of personality traits than as learned behaviour, and it has the potential for abusing power. Earlier, Yukl (1999) claimed that one of the weaknesses of transformational leadership is to the ambiguity underlying its influences and processes. He claimed that the theory is incapable of explaining the interacting variables between transformational leadership and positive work outcomes. The ability of this theory to clearly identify essential influences and
to explain how each type of behaviour affects mediating variables and the outcome would strengthen its utility.

Another weakness of transformational leadership theory as claimed by Yukl (1999) is related to the ambiguity in explaining the theoretical rationale when differentiating between different types of embedded behaviour. Research has indicated a partial overlap of different types of behaviour and a high correlation between different aspects of transformational behaviour, thus raising doubts about their construct validity (Geyer & Steyer 1998). For example, ‘intellectual stimulation’ is understood as a leader motivating a subordinate to question traditional beliefs, to identify innovative solutions for problems and to view problems in different ways. This definition has been found to be too broad and ambiguous because it does not clearly describe what the leader says or does to engage the cognitive processes and behaviour of followers (Odumeru & Ifeanyi 2013).

Currie and Locket (2007) questioned the effectiveness of this theory in the context of public service organisations. They argued that a leadership approach should vary according to organisational circumstances and the type of problems the leader encounters. Their study in English secondary schools showed that policy makers’ transformational leadership style is ineffective in organisations of this type. They claimed that ‘leadership of public sector organisations in England appears less about transforming circumstances… and more about embedding change that others, policy-makers, have initiated’ (p. 365). Due to the constraints of legal, regulatory and policy rules, leaders in a public sector organisation may refuse to delegate leadership as they
are held accountable for the performance of their organisations; this contradicts the
theory of transformational leadership.

In addition, this theory adopts the ‘heroic leadership stereotype’ (Odumuru & Ifeanyi
2013, p. 357), similar to the majority of leadership theories. The idea of an
organisation, group or employee performing above expectations is too dependent on
leadership by an individual with appropriate skills for identifying effective methods
and motivating others to carry them out.

There have also been other criticisms about the measurements used to measure
transformational leadership (Yukl 1994; Tepper & Percy 1994; Tracey & Hinkin
1998; Davis & Luthans 1979; House & Podsakoff 1994; Mosley 1998). This is
elaborated in Section 2.2.5 in a discussion of the Multifactor Leadership
Questionnaire (MLQ).

2.2.4 Transformational Leadership and SMEs

Ardichvili (2001) claimed that there is universal acceptance of the importance of
leadership in large organisations, but research on leadership behaviour in small
businesses and new ventures is scarce. To date, there have been many initiatives by
scholars and researchers to assess the importance of transformational and
transactional leadership in SMEs (Hood 2003, Yang 2008, Matzler et al. 2008; Visser
et al. 2005; Pedraja-Rejas et al. 2006; Damirch et al. 2011) and many have found that
transformational leadership is relevant to the context of the SME business
environment (Hayat & Riaz 2011; Matzler et al. 2008; Ling et al. 2008). For
example, Hayat and Riaz (2011) claimed that transformational and transactional
leadership types are highly relevant to SMEs as they are closely related to the business approach of SMEs and the environment in which entrepreneurs operate.

Matzler et al. (2008) maintained that transformational leadership is strongly related to entrepreneurship and SMEs. They reasoned that because SMEs are small, the entrepreneur is the one who guides the vision and direction, which is equivalent to the idealised influence of transformational leadership. Being able to communicate expectations to each employee is relevant to the inspirational and individualised aspects of transformational leadership characteristics. Secondly, they argued that, due to limited resources, SMEs explicitly address the intrinsic motivation of employees because SMEs are unable to use extensive extrinsic rewards in transactions with employees since they do not have enough financial leeway. Finally, they argued that SMEs operate in a dynamic environment and global economy which are distinguished by unpredictable opportunities and threats; therefore, transformational leadership is perhaps suitable for SMEs to adapt to this kind of environment.

In line with the view of Matzler et al., Ling et al. (2008) also reasoned that the less complex and more fluid nature of SMEs than large organisations provides an advantageous setting for transformational CEOs to play a significant role in enhancing organisational performance. CEOs in SMEs have a great level of managerial discretion and freedom in which they are more fully empowered than CEOs in large organisations to empower others. In 2003, Hood examined the data from 382 CEOs of small to medium size high-technology firms in the US. The results of her study demonstrated that the impact of transformational leadership on ethical practices is greater and more significant than the impact of transactional or laissez-
faire leadership. She concluded that transactional leaders may follow ethical practices that are legal mandates, whereas transformational leaders go beyond the legal requirements and voluntarily undertake more socially responsible and ethical practices.

Finally, Visser et al. (2005) conducted a study of transformational leadership in South Africa involving 535 owners and managers of SMEs. The results revealed that there is a medium degree of positive relationship between transformational leadership and entrepreneurship. They showed that owners and managers of SMEs in South Africa possess characteristics of both entrepreneurs and transformational leaders.

These studies have concurred that the transformational and transactional leadership theory is applicable to the SME business environment. Regardless of the size of an organisation, leaders who effectively deploy transformational and transactional leadership produce positive results for their organisations.

2.2.5 Multifactor Leadership Questionnaire (MLQ)

The Multifactor Leadership Questionnaire (MLQ) is the measure of a wide range of leadership behaviour, including non-leadership behaviour, leaders who use contingent rewards to followers, and leaders who transform their followers by being attentive to their higher order needs. The MLQ has been used in many previous studies on transformational leadership to measure various aspects of transformational/transactional leadership behaviour (Muenjohn & Armstrong 2008; Tejeda et al. 2001).
Many research programs, empirical research investigations, doctoral dissertations and master’s theses all around the world have used the MLQ. The MLQ has proved to be a highly credible and trustworthy tool for measuring leadership behaviour and leadership effectiveness.

Even though Ozaralli (2003) contended that the MLQ is perhaps the best validated tool for measuring transformational and transactional leadership, the psychometric properties of the MLQ have been criticised (Yukl 1994; Tepper & Percy 1994; Tracey & Hinkin 1998). One of the criticisms has been that it has a heavily reliance on questionnaires to evaluate the behaviour of leaders and followers (Davis & Luthans 1979; House & Podsakoff 1994). This criticism has led to construct validity issues regarding whether researchers are accurately measuring leaders’ behaviour and the reasons followers give for performance outcomes (Mosley 1998).

Tepper and Percy (1994) examined the factor structure of a reduced 24-item version of Bass and Avolio’s (1990) 72-item MLQ. Confirmatory factor analysis (CFA) was performed to examine the factor structure by using a sample of 290 undergraduates and 95 managers. They found that none of the hypothesised models was supported, and the idealised influence and inspirational motivation scales converged to a single latent construct. They also reported that the management-by-exception scales may need improvement or reinterpretation because none of the hypothesised models produced an acceptable fit when these scales were included in the analysis.

Geyer and Steyrer (1998) reported that there were high correlations among the transformational leadership scales. There was also a high positive correlation
between the transformational leadership scale and contingent reward. Only after the original MLQ was modified to consist of only 35 items were the correlations reduced. The modified scales still produced two basic factors of both transformational and transactional leadership. A recent study by Kelloway et al. (2012) based on a sample of 269 in the US also found high correlations among the transformational leadership scales.

Yukl (1999) highlighted other weaknesses of the transformational leadership theory: oversimplifying a complex phenomenon, omission of relevant behaviour, too much emphasis on dyadic processes and other problems. He added that several aspects of leadership behaviour that are relevant for understanding leadership effectiveness are not included in the measurement scales. Some task behaviour such as planning and clarifying, some relationship behaviour such as team building and networking and some change-oriented behaviour such as scanning and analysing the external environment are not included in the measurement of leadership effectiveness.

A study by Muenjohn and Armstrong (2008) demonstrated that the nine-correlated factor model (Full Leadership Model) could be the most appropriate for capturing the constructs of transformational and transactional leadership. Based on 138 samples, this study contended that even though some of the leadership scales were strongly correlated to each other, these scales still clearly measured their own leadership constructs. Despite arguments relating to the MLQ, Kirkbride (2006) and Zagoršek et al. (2009) stated that the MLQ remains the most widely used and tested measure for transformational leadership theory.
One of the advantages of using the MLQ is that it is a multi-rater assessment measure. There is a variety of MLQ tools to choose from in order to assess leadership behaviour from the perception of the leaders themselves, followers’ assessments of their leaders’ effectiveness and team perception of the leader’s behaviour. There is also a resource tool for use in leadership training. Due to its wide acceptance as a measure of leadership, the original MLQ has been translated into many languages and is now available in French, Arabic, Spanish, Italian, Chinese, Korean, Thai and Greek. The following are some of the researchers who have used the MLQ and also brief descriptions of their studies.

Khan et al. (2009) studied 296 top- and middle-level managers from the main telecommunications firms in Pakistan by using the transformational leadership subscale of the MLQ. Their results substantiated that transformational leadership has a significant and positive impact on organisational innovation.

Chen (2002) used the MLQ with 308 employees from three steel companies in Taiwan to study the relationship between leadership behaviour and organisational commitment. He concluded that, at the factor level, idealised influence, inspirational motivation and individualised consideration are more strongly correlated with organisational commitment than the other factors of transformational and transactional leadership are. At the construct level, transformational leadership was found to have a stronger correlation than transactional leadership with organisational commitment.
Finally, based on the ratings of 2200 employees of the leadership styles of top- and middle-level managers in a large telecommunications organisation, Berson and Avolio (2004) demonstrated that leaders rated as transformational displayed a ‘prospector’ strategy in their perception and development of strategic goals. Their qualitative and quantitative results also showed that in disseminating organisational goals, leaders with transformational leadership attributes are seen as more effective communicators by their direct employees.

Even though other measures have been established to assess transformational and transactional leadership (Rafferty & Griffin 2004; Podsakof et al. 1990), the MLQ is considered the best validated tool (Ozaralli 2003) and remains the most widely used and tested measure to describe transformational leadership (Kirkbride 2006; Zagoršek et al. 2009). Therefore, it is adopted in this study as a measure of leadership behaviour.

2.2.6 Recent Leadership Theories

This study acknowledges that other leadership theories have started to receive some attention in leadership literature, such as spiritual leadership, distributed leadership, servant leadership, authentic leadership and many others. ‘Spiritual leadership’ is defined as the values, attitudes and behaviour that are necessary to intrinsically motivate oneself and others to have a sense of spiritual survival and well-being through calling and membership (Fry 2003). ‘Distributed leadership’ is defined as leadership from a distance, where communication is done through technological means such as e-mail and websites (Kayworth & Leidner 2000).
However, these new forms of leadership behaviour are beyond the scope of this study. Some researchers have questioned the applicability of these new concepts to SMEs (Kempster et al. 2010). For example, given the size of SMEs, perhaps applying distributed leadership may not be effective since there is a lack of agreement on whether distributed leadership exists, and the effects of applying this form of leadership to SMEs have yet to be explored. Therefore these new forms of leadership behaviour are not included.

Even with the introduction of newer leadership approaches, the transformational and transactional leadership theory has proved to be relevant in the context of SMEs (Matzler et al. 2008; Pedraja-Rejas et al. 2006; Damirch et al. 2011). Measures adopted to assess these types of leadership are well validated in Western literature. However, these measures need to be applied in the context of a developing country such as Malaysia to assess their suitability and transferability to a different context.

2.3 Entrepreneurship and Entrepreneurial Orientation

In today’s competitive business environment, strengthening entrepreneurship is important for any enterprise that is developing its responsiveness to a globalised and changing environment. Entrepreneurship, according to the concept introduced by Schumpeter in 1934, is characterised by innovative behaviour and a strategic orientation in pursuit of profitability and growth (Carland et al. 1988) and it involves a process of combining resources for value creation in an organisation (Tan 2007). Others have defined entrepreneurship as the creation of new enterprise (Low & MacMillan 1988), new entry (Lumpkin & Dess 1996) and taking advantage of
opportunities by blending resources in ways which have impacts on the market (Wiklund 1999).

Bruyat and Julien (2000) outlined certain basic ideas that have to be shared by researchers in the field of entrepreneurship:

i. Recognition of the individual as an important or vital element in the creation of new value. Entrepreneurs are definitely not the only people who create new value for society through venture creation or through innovations of different kinds. However, they create a large percentage of new value, which researchers in this field consider to be essential for the proper operation of the economic system.

ii. The individual is not simply a machine reacting automatically to stimuli from the environment. The individual is able to learn and develop, is capable of self-finalisation, and therefore has a certain freedom of action, regardless of whether the environment provides opportunities or imposes constraints.

iii. The resources in the environment can play a facilitating or motivating role in helping to increase the number of entrepreneurs in a country.

Compared to the leadership field that has received scholarly attention since the beginning of the 20th century, entrepreneurship is a young body of knowledge although rapidly growing (Cogliser & Brigham 2004). The study of entrepreneurship is at an early stage of development from the conceptual and methodological points of view (Aldrich & Baker 1997), relatively young compared with the leadership field (Hitt & Ireland 2000) and currently seen as being in significant growth and an emerging stage of development (Busenitz et al. 2003).
Entrepreneurial orientation (EO), on the other hand, is becoming a popular subject (Wiklund 1999) and is one of the entrepreneurship research fields where the body of knowledge is expanding (Rauch et al. 2009). Covin and Wales (2012) also recognised that the subject of EO as a driving force behind organisational effort to success has become a central focus of the entrepreneurship literature and the subject of more than 30 years of research. The study of EO is well established in strategy and entrepreneurship research in the US but is still in its infancy in non-US business environments (Runyan et al. 2012).

Miller (1983) defined an entrepreneurial firm as one that is involved in product-market innovation, willing to take some risks, and is first to come up with proactive innovations. A non-entrepreneurial firm is characterised by a minimum level of innovations, is not a risk taker, and is a follower rather than a pioneer compared to the competitors (Miller 1983). Lumpkin and Dess (1996) defined EO as ‘the process, practices and decision-making activities that lead to new entry’ (p. 771). More recently, Wiklund and Shepherd (2005) defined EO as the strategic orientation of a firm that captures specific aspects of entrepreneurial decision-making styles, methods and practices. But the definition of EO by Morris and Paul (1987) seems to suit the context of this study. They defined EO as the inclination of a company’s top management to take calculated risks, to be innovative, and to display proactiveness in their approach to strategic decision making.

This definition is not the one currently adopted by most scholars in the field of entrepreneurship studies; it is one of the earliest ones used to define EO. In this definition, EO is regarded as decisions to be made by the top management of an
organisation. For the self-assessment approach by either the owners or the top managers of SME establishments to measure EO, this definition seems to represent and support the scope of this study.

2.3.1 Key Factors of Entrepreneurial Orientation

The three main factors of EO introduced by Miller (1983) are: innovativeness, proactiveness and risk taking. These key factors of EO have been extensively used by researchers in previous studies (Covin & Slevin 1989; Lumpkin & Dess 1996; Moreno & Casillas 2008). Lumpkin and Dess (1996) added another two factors of EO: competitive aggressiveness and autonomy. Although they suggested including these two as additional factors of a firm’s EO, they agreed that innovativeness, proactiveness and risk taking are the key factors of EO.

In this study, only the three key factors of EO are adopted, namely, innovativeness, proactiveness and risk taking by strategic leaders. An innovative firm is not considered entrepreneurial if it does not take risks or is not being proactive towards competitors and the environment (Aloulou & Fayolle 2005). According to Covin and Slevin (1989), a firm that displays an excellent performance in these three factors can be considered an entrepreneurial firm or a high performing firm. They proposed that entrepreneurial style measures the degree to which top managers favour innovative activities, are inclined to take considerable business risks and proactively compete with other firms.

There are several reasons why this study excludes the new factors of EO suggested by Lumpkin and Dess (1996). Competitive aggressiveness, which represents the
element of ‘beating competitors to the punch’, might not be appropriate in the Malaysian culture. According to Hofstede (1980, 2001), in respect to cultural factors, Malaysia can be characterised as having low uncertainty avoidance and a highly collectivist culture. These cultural characteristics result in a low level of aggression and a relatively high level of tolerance. Autonomy, on the other hand, which describes a firm’s tendency to independent and autonomous action, represents the ownership issue which is a defining characteristic of SMEs (Swierczek & Thanh Ha 2003b). Kuratko et al. (2005) argued that the concept of competitiveness often overlaps with proactiveness, while autonomy can be seen as a contextual variable that allows entrepreneurial behaviour. For these reasons, only the initial factors of EO as suggested by Miller (1983) are adopted. The following passages discuss and define each component of EO used in this study.

Covin and Miles (1999) proposed that entrepreneurship would not exist without innovation. Hult et al. (2004) agreed that the key element of the success of industrial firms is innovativeness. Lumpkin and Dess (1996) defined innovativeness as the willingness of a firm to engage in and support new ideas, novelty and experimentation to create new products and services. Innovation is especially important for new organisations and entrepreneurs because without innovation, they have to rely on old ways of doing business, consecutive products or services and traditional distributions channels (Lee et al. 2001). These authors also claimed that innovativeness displayed by new firms cannot be easily imitated by their competitors since it depends on the quantity and quality of R&D personnel and complex social relationships among these research scientists. Entrepreneurs need to avoid direct competition with established firms to avoid failure due to resource shortcomings,
diseconomies of scale and unestablished reputation (Lee et al. 2001). Morris et al. (2007) defined innovativeness as the identification of creative, unusual or novel solutions to problems and needs. These solutions can take the form of new processes, new products or new services.

Proactiveness is an important element of entrepreneurship (Venkatraman 1989). Proactiveness has been described as the ability of a firm to foresee and act on future wants and needs in the market by establishing a first-mover advantage ahead of competitors (Lumpkin & Dess 1996). Proactive firms strive to be pioneers, thereby capitalising on emerging opportunities (Wiklund & Shepherd 2005). Proactiveness is also important for organisational processes since it demands a forward-looking perspective (Kropp & Zolin 2005) and is considered a hallmark of entrepreneurship (Lee et al. 2001). Therefore, it is important for entrepreneurial firms to be proactive, especially as the competition is becoming very strong in the global market, in order to capture a high return from their investment and to establish their reputation in the market. Proactiveness also relates to the implementation of something new, and to doing what is needed to anticipate and act on an entrepreneurial opportunity. Such pioneering action usually involves considerable perseverance, adaptability and tolerance of failure (Morris et al. 2007).

Risk taking can be described as the willingness of a firm to provide resources for projects where the outcomes are uncertain (Miller 1983; Wiklund & Shepherd 2005). Since the term ‘entrepreneur’ was first debated, risk-taking behaviour has been linked with entrepreneurship (Palich & Bagby 1995). Risk taking requires firms to take bold actions by launching themselves into the unknown, borrowing heavily and/or
investing significant resources in uncertain ventures or uncertain environments (Rauch et al. 2009). Risk taking supplements the entrepreneur’s innovativeness and proactivity because without taking risks, it is difficult for entrepreneurial firms to invest in the R&D needed for them to become pioneers in the marketplace.

2.3.2 Research and Practices of Entrepreneurial Orientation

There has been growing research interest in the field of EO (Kreiser et al. 2002), particularly in small businesses (Fairoz et al. 2010). Even though the concept of EO seems to be more relevant to entrepreneurs in the SME business environment, many attempts also have been made by scholars and practitioners to study the impacts of EO on large organisations (Hult et al. 2003; Short et al. 2009; Hult et al. 2004) and family firms (Zahra 2005; Zellweger et al. 2011), on students (Mazzarol 2007), on new ventures (Chen et al. 2007) and in countries all over the world such as Iran (Madhoushi et al. 2011), Brazil (Martens et al. 2010), Portugal (Ferreira & Azevado 2005), Thailand (Swierczek & Thanh Ha 2003a) and even Malaysia (Arham et al. 2012; Zainol & Ayadurai 2011).

When examining the research on EO in large organisations, Zahra published independent studies in 2005, 2003, 1996 and 1991. In her 2005 study, she examined entrepreneurial risk-taking in 209 large family firms and concluded that family ownership has a particular pattern in entrepreneurial risk-taking. Family firms tend to invest in both domestic and international markets to increase revenue. She found that the higher the number of active generations from the same owner family, the higher the focus on innovation. Multiple generations brought new ideas, knowledge and experience which enhanced the degree of innovation in the firm.
Hult et al. (2004) examined the effects of innovativeness and EO on business performance in 181 large firms in the US. They concluded that EO is one of the strongest components of performance and plays a key role in the development and maintenance of innovation in both high and low market turbulence. They suggested that EO is an important orientation for managers to promote.

In smaller business settings, EO is needed to improve the performance of the firm. Smart and Conan (2011) studied 599 independent small business retailers in the US and found that EO impacted in respect to both distinctive marketing competencies and organisational performance. Retailers with a high level of EO acknowledge that their businesses possess a wide range of marketing competencies and perform better. Successful entrepreneurs not only possess a wide variety of managerial skills and abilities and have a significant tendency for taking high risks, but they are also analytic in their approach to decision making and resource allocation. Ferreira and Azevedo (2008) studied 168 small manufacturing firms in Portugal and pointed out that entrepreneurial firms are capable of introducing many new products featuring many differentiated characteristics and these firms are efficient in exploiting their innovativeness, proactivity and risk taking. They suggested that the application of EO is an indispensable variable to growth-oriented firms.

The results from all of these studies suggest that EO is an important strategic orientation for firms of all sizes. Regardless of firm size, firms that are able to exploit, seize and utilise every opportunity to improve their EO have a high chance of improving their profitability and growth. Evidence suggests that firms that are innovative, proactive and willing to take considerable risks have a much better
chance of success than firms which are unwilling to take risks, avoid creative and innovative ideas and are not responsive to market competition.

A significant number of researchers have claimed that the application of EO at the individual level could be important for both managers and their organisations (Carland et al. 1988; Gartner 1985). The analysis of EO as an individual-level variable has started to receive some consideration from researchers (Davis et al. 2010). Aloulou and Fayolle (2005) identified that individual leaders of entrepreneurial firms show a high level of innovativeness, proactiveness and risk-taking behaviour. Wiklund and Shepherd (2005), on the hand, contended that EO is an organisational-level variable. They defined EO as referring to a firm’s strategic orientation that displays specific elements of entrepreneurial decision-making styles, methods and practices. Treating EO as an organisational-level measure would also help to reduce common method variance (Lumpkin & Dess 2001; Podsakoff & Organ 1986). This view claims that owners’ or top managers’ responses in regard to EO represent the firm’s responses (Awang et al. 2009; Yang 2008).

One of the issues in regard to EO is whether EO is a global and cross-cultural construct. Some researchers have proved that it is (Kreiser et al. 2002; Arbaugh et al. 2009). For example, Kreiser et al. (2002) examined 1067 firms from six different countries: Australia, Finland, Mexico, the Netherlands, Norway and Sweden. Their study confirmed the cross-cultural validity of the EO scale. A much larger study conducted by Arbough et al. (2009), which consisted of 1045 respondents from 17 different countries, suggested that the EO construct is not only globally generalisable to developed countries, but the construct also has a huge potential for explaining firm
behaviour in developing countries and therefore the firm-level characteristics of entrepreneurship are generalisable across borders. More recently, Runyan et al. (2012) used samples of SMEs from both the US (n=250) and China (n=187) and their findings contended that scholars should feel confident to utilise EO in an international setting since EO exhibited the same pattern of factor loadings across SMEs in both countries, allowing scholars to assume that the basic underlying purpose of EO and its factors are the same in both countries.

There is also a debate on whether EO should be treated as a uni-dimensional construct consisting of innovativeness, proactiveness and risk taking or as a multi-dimensional construct where each component varies independently of one another. In some studies, the factors of EO showed high correlations with each other so the researchers combined these factors into a single factor (Covin & Slevin 1989; Lee et al. 2001; Rauch et al. 2009). However, more recent studies have suggested that EO is a multi-dimensional construct and each independent aspect of EO may affect the performance of an organisation differently (Lumpkin & Dess 2001; Yang 2008; Runyan et al. 2012). Kreiser et al. (2002) found that the EO best model fit was produced in the total sample in six independent countries with three sub-factors consisting of innovativeness, proactiveness and risk taking. At the same time, the three sub-factors were also found to vary independently of one another.

Regardless of whether or not EO is a uni-dimensional or multi-dimensional construct, each component is essential, and even if the components can operate independently, each is not sufficient without the presence of the other two components. In other words, to be entrepreneurial is to demonstrate the ability to innovate, to be proactive
and to take a considerable amount of risk (Morris et al. 2007). The aggregated measures of EO are useful when a differential relationship is not expected between the three sub-factors of entrepreneurial orientation and the other key variables being examined in a particular research model. On the other hand, when such a relationship is expected to exist, researchers should measure innovation, proactiveness and risk taking as single variables (Kreiser et al. 2002).

In conclusion, it is important to assess the level of EO as a measure of entrepreneurial success. Whether it relates to large organisations or to small and medium-sized enterprises, EO can contribute to the overall performance of a firm. Some studies have identified a direct and statistically significant relationship between EO and organisational performance (Zahra 1991; Smart & Conan 1994; Hult et al. 2004; Ferreira & Azevedo 2008; Smart & Conant 2011). Miller (1983) stated that innovativeness, risk taking and proactiveness are all important elements of entrepreneurial activity. By investing efforts into innovativeness, firms can create new products or services, developing novel ideas and gaining first advantage in the market (Wiklund 1999; Lumpkin & Dess 1996). By taking considerable risks with the careful exploitation of those risks, entrepreneurs increase the opportunities to increase their profits. Lumpkin and Dess (1996) suggested that risk taking and organisational success were related since risk takers have a high possibility of making a profit. Finally, having the ability to anticipate changes and react to the changing environment and seizing the first-mover advantage helps firms to stay ahead of their competitors.
To summarise, EO is important for organisational success and each factor of EO might have different effects on the outcomes of organisations. This study explores this by suggesting that each factor of EO has a direct impact on measures of performance. At the same time, this study examines whether the presence of EO might mediate the relationship between leadership behaviour and organisational performance. As Avolio and Howell (1992) suggested, transformational and transactional leadership predict the levels of innovation and creativity that relate to proactiveness and risk taking.

2.4 Organisational Performance

Organisational performance is the most important dependent variable for researchers concerned with almost all areas of management (Richard et al. 2008), because it explains how well an organisation is doing (Obiwuru et al. 2011). It refers to the ability of an enterprise to achieve objectives such as high profits, good quality products, a large market share, good financial outcomes and long-term survival, using relevant strategies for action (Koonts & Donnell 1993). It is an indicator of how well a firm realises its objectives (Ho 2008). According to Lusthaus et al. (2002), the analysis of organisational performance is an important step in ensuring organisational success but yet there is little agreement as to what constitutes a valid set of criteria for measuring organisational performance due to the complexity of the construct. Even though the literature in organisational research shows that organisational performance has been used extensively as a dependent variable and that many studies concentrated on identifying the factors that affect the variability in
performance outcomes, it is still an indistinct and ‘loosely defined’ variable (Rogers & Wright 1998, p. 6; March & Sutton 1997; Richard et al. 2008).

From their analyses, Lusthaus et al. (2002) concluded that organisational performance can be defined in terms of the following elements; effectiveness (ability of the organisation to achieve its goals), efficiency (accuracy, how economically the organisation can turn resources/inputs into results), relevance (being adaptive to the stakeholders and its environment) and financial viability (ability to raise required funds). Richard et al. (2008) defined organisational performance as encompassing three specific areas of firm outcomes: (1) financial performance (profits, return on assets etc.); (2) product market performance (sales, market share etc.); and (3) shareholder return (total shareholder return, economic value added etc.). Metrics chosen to quantify the efficiency and/or effectiveness of an action by the organisation are referred to as organisational performance measures (Tangen 2003).

Carton and Hofer (2006) described five categories of performance measures: accounting measures (relying on financial information); operational measures (include non-financial variables such as market share and customer satisfaction); market-based measures (ratios of the market value of the organisation such as return to shareholders and market value-added); survival measures (long-term organisational performance); and economic value measures (adjusted accounting measures). Accounting measures could be further sub-categorised into profitability measures, growth measures, leverage, liquidity and cash flow measures, and efficiency measures.
The authors concluded that each category of measures has its strengths and weaknesses in assessing overall organisational performance. What is certain is that no individual performance measure category is commonly accepted as the best proxy for overall performance measurement and further analysis needs to be done to provide a better understanding of this construct (Carton & Hofer 2006).

Organisational performance can also be measured through financial and non-financial performance (Chong 2008). Financial measures can include profit before tax and turnover and non-financial measures can include issues relating to customers’ satisfaction and referral rates, delivery time and employee turnover. Non-financial performance measures are important indicators of financial performance (Kaplan & Norton 2001). They can provide managers with incentives to improve their long-term financial performance. On the other hand, financial performance measures are ‘backward-looking’ and focus on improving the organisation’s short-term financial performance (Moers 2000).

Zulkiiffli and Parera (2011) wrote a paper analysing the basic research methodologies and approaches for measuring business performance, especially in the context of SMEs. According to these authors, to assess business performance in the present business environment is a critical matter for academic scholars and practising managers and it is important to measure a firm’s accomplishment. When it comes to measuring the business performance of SMEs, many scholars have used subjective measures since many SMEs refuse to publicly reveal their actual financial performance. According to Dess and Robinson (1984), objective data do not fully represent an organisation’s actual performance, even if they are available, since the
managers may manipulate the data in order to avoid personal or corporate taxes. Therefore, the literature advocates subjective evaluation as an appropriate alternative to objective evaluation.

Wall et al. (2004) asserted that managers are encouraged to assess business performance through general subjective measures that can reflect more specific objective measures. In particular, the use of subjective measures is preferable for evaluating small organisations where there is a possibility of inaccurate financial records (Wall et al. 2004). Subjective measures can also be a good alternative when they focus on a firm’s current condition (Kim 2006) and they allow comparisons to be made across firms contexts such as industry type or economic conditions (Song et al. 2005).

Performance is a multi-dimensional concept (Lumpkin & Dess 1996; Carton & Hofer 2006), therefore multiple measures of performance should be used. Becoming a high performing firm is the main objective of SMEs (Ahmad & Ghani 2010; Madrid-Guijarro et al. 2007). According Madrid-Guijarro et al. (2007), high performing firms are able to generate a variety of benefits for both the company and society in general such as attracting resources, creating wealth and generating jobs. These authors also claimed that an accurate measure of performance can provide reliable insight into what affects performance and how firms can develop good strategies, arrange resources, meet consumer expectations and compete successfully. Inappropriate measures of performance will produce misleading results and tend to show a poor competitive position (Madrid-Guijarro et al. 2007). Murphy et al. (1996) confirmed that growth, profitability and efficiency are the most common performance factors in
the entrepreneurship literature. In this study, the organisational performance of SMEs is measured through growth and profitability, following the measures used in the studies conducted by Matzler et al. (2008) and Tan (2007). This decision also aligns with Covin and Slevin’s (1991) conviction that growth and profitability represent the factors of a firm’s economic performance. Steffens et al. (2006) also claimed that both are important factors for SMEs performance.

Davidsson et al. (2002) postulated that organisational growth has become mainstream in the literature with many studies incorporating growth and entrepreneurship. Growth has been argued as an essential element of sustainable competitive advantage and profitability (Markman 2002), and it is hard to dissociate sustained growth from profitability (Fitzsimmons et al. 2005).

In conclusion, growth is considered the most important performance measure since it is a more precise and more easily accessible performance measure than accounting indicators, and hence provides a superior indicator of financial performance, especially for small firms (Wiklund 1999). In the entrepreneurship literature, growth is often interpreted as evidence of success (Steffens et al. 2006) and is used as the best available proxy for organisational success due to the fact that reliable data on the financial performance of small firms can be difficult to obtain. Wiklund (1998) found that his multiple measures of growth and financial performance were positively related to one another. Based on these relationships, he concluded that growth may be an appropriate strategy for small firms that wish to enhance their financial returns. Ferreira and Azevedo (2008) suggested that organisational growth reflects an important outcome of the entrepreneurial behaviour of small firms.
Profitability is one of the most common measures of business performance that must be considered as it is unlikely that firm growth can be sustained without profits (Fitzsimmons et al. 2005). Looking at entrepreneurship as the creation of rents through innovation (Stewart 1991), in which ‘rents’ are defined as above average earnings relative to competitors (Norton & Moore 2002), then profitability measures also seem relevant to SMEs.

Thus, reviewing the proposed research questions and the scope of this study, growth and profitability might be the most relevant measures in the context of SMEs in Malaysia. These two dependent measures represent the two main objectives for any SME establishment: to continue operating and to earn a profit.

2.5 Leadership, Entrepreneurial Orientation and Organisational Performance

Good leadership and an entrepreneurial attitude have been identified as the key elements that drive the success of SMEs (Abdul Razak 2010a). Evidence suggests that inadequate leadership and poor management skills are primary factors contributing to the failure of SMEs (CEML 2002; Davies et al. 2002). It is acknowledged that an enterprise requires entrepreneurship, but what is further needed to maintain the operation and guide the enterprise to success is good leadership (Arham et al. 2011). Therefore, entrepreneurs need to develop sound leadership behaviour to steer their firms through good and bad times. Appropriate leadership behaviour in the enterprise keeps employees focused and motivated, especially at times of crisis.
The right leadership behaviour is an important ingredient for good organisational performance and to prevent organisational failures. As Fiedler (1996) recognised, effective leaders are important because they contribute to the success or failure of a group, an organisation and even a whole country. Achanga et al. (2006) conducted a study on the critical success factors for implementing lean production in SMEs. One of the main findings of this research is that to successfully implement lean manufacturing in SMEs, strong leadership is essential. Sound leadership behaviour facilitates the integration of all structures in the organisation and instils a vision for the organisation, which could lead to improved performance.

A recent study by Valdiserri and Wilson (2010), which examined the impact of leadership behaviour on the profitability and organisational success of 48 small businesses in West Virginia and Pennsylvania, postulated that transformational and transactional leadership behaviour contributes to the profitability and success of small businesses. There was a strong correlation between transformational and transactional leadership and profitability and a moderate correlation between transformational and transactional leadership and organisational performance. They concluded that transformational and transactional leaders are able to produce a positive atmosphere, and inspire and encourage employees to perform at a high level. Leaders with transformational and transactional leadership attributes contribute to a good performance of the firm by demonstrating respect, integrity and direction to all individuals in the firm. An earlier study by Hernez-Broome and Hughes (2004) suggested that leaders of small businesses need to develop a good understanding of forms of leadership behaviours in order to improve organisational performance.
A study by Chen (2004) of 749 respondents from 57 small and medium-sized enterprises in Taiwan was on the same wavelength. Looking at the effects of culture and leadership behaviour on firm performance, Chen concluded that good leadership and personal commitment by top management are critical to organisational success. Specifically, leaders with transformational leadership can promote an innovative culture in a firm and enhance the performance of the organisation.

Different forms of leadership behaviour might affect performance differently (Yang 2008). In a study by Pedraja-rejas et al. (2006), they utilised the categories of transformational, transactional and laissez-faire behaviours with a sample of 96 managers of small companies in Chile. They aimed at finding whether leadership behaviour influences the performance (effectiveness) of small firms. The results showed that the dominant form of leadership among managers of SMEs in Chile is transactional leadership. However, a positively significant relationship was found between transformational leadership and the effectiveness of the small firms. The effects of transactional and laissez-faire leadership on firm performance were negative but significant.

Using data from 121 small to medium-sized firms, Ling et al. (2008) examined the impact of CEO transformational leadership on firm performance measured by objective and subjective measures. These authors argued that SMEs provide a particularly advantageous setting for transformational CEOs to play a central role in improving firm performance. This is because the CEO of an SME is more fully empowered than those in larger organisations and is therefore more able to fully empower subordinates. In the setting of an SME, a CEO has a greater potential for
instilling individual commitment and establishing high expectations. Therefore, the potential firm-level impact of transformational leadership will be most evident in the SME environment. These arguments were supported by the finding of their study that there is a significant association between the transformational leadership of CEOs and firm performance. This finding contrasts with that of many researchers who have found the transformational leadership of CEOs to have an insignificant influence on firm performance in large firms (Agle et al. 2006; Ensley et al. 2006; Waldman et al. 2001). Ling et al. (2008) concluded that both objective and subjective measures of performance are influenced by transformational CEOs, who are able to directly encourage and support novel thinking among their subordinates due to the fact that they are closely engaged in the implementation of the firm’s strategy and usually have hands-on experience. Arnold et al. (2001) also suggested that the transformational leadership of senior managers is a good predictor of improved performance.

Behery (2008) examined the effects of transformational and transactional leadership behaviour and knowledge sharing on organisational performance in the non-Western context of the UAE business environment. Five hundred and four respondents from ten large-scale companies participated in this study. Adopting the MLQ to measure leadership behaviour, his findings validated the hypotheses of the study that both types of leadership behaviour significantly influence organisational performance. The study also demonstrated that there is universality in the MLQ as it was appropriate in a non-Western context.
In an earlier study by Geyer and Steyrer (1998), an examination of the effects of transformational leadership and objective performance on banks produced the same results. Using 1456 samples from 116 branches of 20 different banks in Austria, the results confirmed that transformational and transactional leadership scales correlated much more strongly with extra effort than objective performance measures did. Interestingly, individualised consideration was found to be unrelated to the long-term performance of banks in Austria. Even though the original factor structure of the MLQ could not be maintained, the modified MLQ still allowed for the two dimensions of transformational and transactional leadership. Further analysis confirmed that transformational leadership has an effect on performance much stronger than transactional leadership does.

While some researchers contend that leadership is important for the success of a firm, others associate the failure of small businesses with poor leadership practices (Ihua 2009; Beaver 2003). Beaver (2003), in his observation of subjective and empirical research on the success and failure of small business, concluded that most of the causes of small business failure can be attributed to internal factors, which are mainly the poor leadership and lack of management abilities of the key players in the firms. A study by Gibb and Webb (1980), which examined the records of 200 bankrupt firms, revealed that lack of knowledge and neglect by management are the primary determinants for the failure of small firms. The key players of these firms ultimately did not have the talent and abilities necessary to excel in business. He suggested that, for firms to be innovative, productive and competitive, they need to have key players with the right leadership behaviour combined with luck, good timing and adequate training and support. Most importantly, for any firm to remain in business for a long
period, the leader must have the capability to adapt to the changing business environment. These ingredients are important to sustain a successful economy

Recent empirical findings by Ihua (2009) in a comparative study conducted to assess the key failure factors of SMEs in the UK and Nigeria revealed that poor management and lack of leadership are the most crucial factor influencing SMEs’ failures in the UK while poor economic conditions and infrastructure inadequacy are the most crucial factors in Nigeria. Even though the sample of this study comprised only 45 questionnaires and two interviews with respondents from each country, and therefore would not be expected to be generalisable to the whole population, the findings still supported the notion that more efforts are needed to develop leadership and management skills, even though these factors are applicable to the UK and not to Nigeria. The findings revealed that 77% of the respondents in the UK chose leadership and management compared to only 44% in Nigeria. These internal factors need to be given more attention by policy makers in the UK to improve the performance of SMEs. On the other hand, the Nigerian government needs to address the difficult economic conditions and to improve the infrastructure inadequacy that hinders the growth of SMEs.

The strengthening of entrepreneurship is important for any type of enterprise for developing its responsiveness to a globalised and changing environment (Aloulou & Fayolle 2005) and EO is considered a key element for a firm’s success (Wang 2008). Davis et al. (2010) explored the relationship between the three entrepreneurial characteristics of top managers and the impacts of these characteristics on the performance of their organisations. The findings are consistent with past research
(Rauch et al. 2009) in supporting the contention that EO is positively related to organisational performance. Specifically, these investigators confirmed that top managers with a high tolerance of risk, those who favour innovation and those who possess a high level of proactiveness positively influence organisational performance.

A study by Lee et al. (2001) on 137 Korean technology start-up companies revealed that EO provides weak support for start-up companies’ performance. They have suggested that it may require longer than two years for an EO to enhance the performance of an organisation significantly. This finding is somewhat correlated with the study conducted by Wiklund (1999), which found that EO has a long-term effect on performance. The author suggested that it may be valuable for small firms to invest in EO since it pays off, especially in the long term.

Fairoz et al. (2010) used the innovativeness, proactiveness and risk-taking factors in their study to examine the degree of EO and its effect on the business performance of small and medium-scale enterprises in Hambantota District Sri Lanka (HDSL). This study concluded that there is a moderate degree of EO in the majority of SMEs in HDSL. There is a positive significant relationship between proactiveness, innovativeness, risk taking and overall EO on the one hand and market share growth and overall business performance on the other hand. They also reported that sales growth, profit and market share were higher for firms that with high EO than for those with low EO.

Smart and Conant (2011) analysed 599 small business firms in the US and found that firms with a high degree of EO have a stronger impact on organisational performance
than firms with a medium level of EO. A medium level of EO affects performance more strongly than a low level of EO. Their results suggest that entrepreneurs with a high level of EO are more effective in making strategic decision and allocating resources, which result in better organisational performance.

Therefore, the form of leadership behaviour being practise by leaders has implications for the level of entrepreneurship in a firm (Morris et al. 2007). In SMEs, the leadership behaviour of top management can have a strong positive impact on the innovativeness and the performance of the firm (Matzler et al. 2008). As business becomes globally competitive, SMEs require a new vision and set of directions to help them to become more competitive and to be able to sustain their business. The leadership behaviour of the CEO or owner plays a major role in ensuring appropriate directions and a clear vision to be shared with employees.

According to Stewart (1989), one of the most important elements of the entrepreneurial process is individual leadership. It is the owner’s or manager’s leadership style that helps foster entrepreneurial development in SMEs. Soriano and Martinez (2007) investigated the importance of leadership in transmitting an entrepreneurial spirit to the work team in an SME. They concluded that there is a positive impact of a relationship-oriented style of leadership when the leader is entrepreneurial. The leader supports the employees’ entrepreneurial potential and encourages it to flow freely among the members of the team by giving them support, rewards and personal consideration. This finding was supported by Wang and Poutziouris (2010). According to their study, leaders of SMEs should be encouraged
to exercise a people-oriented style of leadership rather than a task-oriented approach in order to bring success to their firms.

In their study, Hayat and Riaz (2011) investigated the influence of the leadership style and EO of top-level managers of SMEs on business performance. They claimed that effective leaders are needed in the rapidly changing global environment that increases the intensities of business. Therefore, it is important for the leaders of SMEs to fully understand the rapidly changing business environment and to adopt the appropriate leadership styles to improve business performance. The study confirmed that there is a positive relationship between the transformational and transactional leadership styles of the leaders of SMEs and their performance. This study also supported the idea that the higher the EO, the higher the SME’s performance. In regard to the factors of EO, proactiveness and innovativeness were found to add more value to the performance of SMEs than risk taking did.

Kang et al. (2010) conducted a study of three entrepreneurial companies in Korea, which examined the relationships between leadership and cultural values and organisational performance and the effect of EO as a mediating factor. This study concluded that transformational leadership and long-term orientation have direct and positive relationships with organisational performance. EO was found to have a partial mediation effect between transformational leadership and organisational performance. They claimed that transformational leadership plays a significant role in shaping employees’ perceptions of EO and concluded that employees whose manager portrays transformational leadership have more positive perceptions of EO and hence help to improve organisational performance.
Bhattacharyya (2006) posited that the right leadership behaviour is important in developing entrepreneurial behaviour since it creates the appropriate climate for entrepreneurship and innovation in an organisation. Entrepreneurs with good leadership practices, such as leaders who articulate vision, corporate objectives and expectations, are inspirational. They motivate the management team and the workforce, do not interfere in day-to-day operations unless necessary, patiently listen to what others have to say about accomplishments, and acknowledge that team achievements help the organisation to do better than their competitors. Therefore, this type of leadership behaviour creates ways for an organisation to become more entrepreneurial in its approach (Todorovic & Schlosser 2007).

There is limited research that specifically addresses the relationships between leadership, EO and organisational performance simultaneously. But the results of studies that have separately examined the relationship between leadership and organisational performance and that between EO and organisational performance are important indicators that both of these factors are essential to organisational success. Leadership is important to provide clear guidance, direction and motivation to employees and to drive the focus of the organisation, and an appropriate level of EO provides the strategic orientation that can give a competitive edge.

To summarise, leadership relates to the level of EO in an organisation (Matzler et al. 2008; Morris et al. 2007). Aloulou and Fayolle (2005) claimed that the individual leaders of entrepreneurial firms display proactive, innovative and risk-taking characteristics. Yang (2008) postulated that the success of a new business venture is critically determined by the role of the entrepreneurial leader. In his study, he found
that good predictors for differentiating between high and low organisational performance were transformational leadership, innovation, proactiveness and risk taking. This means that transformational leadership with a high entrepreneurial orientation contributes to high organisational performance. Thus, examining the mediating role of EO might provide a different avenue for understanding the direct relationship between leadership and performance.

2.6 Summary

Even though research on leadership behaviour has been widely conducted throughout the world, very little research has been done on leadership behaviour in small businesses and new ventures (Ardichvili 2001). Regardless of where the organisation is located and what it does, there is no denying that leadership is important for the success of any organisation (Lusthaus et al. 2002; Bolden 2007; Van 2005). Yukl (2002) suggested that the success of a small business clearly relies on the leader’s innovative ideas and their strong aspirations for business success, and other researchers have agreed that entrepreneurial leaders are very influential in shaping the organisational climate (Kang et al. 2010). Finally, EO is an important strategic orientation of a firm, and the leadership behaviour of the firm’s leaders is influential in projecting and strengthening this strategic orientation which can influence the firm’s performance and success (Aloulou & Fayolle 2005). To confirm the research findings presented throughout this chapter, this study has examined the direct and indirect relationships between transformational and transactional leadership and EO and performance measures. The literature review leads to the following research questions:
i. To what extent do transformational and transactional leadership behaviours have an impact on organisational performance?

ii. Does transformational leadership have a stronger effect on organisational performance than transactional leadership?

iii. To what extent does entrepreneurial orientation influence organisational performance?

iv. To what extent does entrepreneurial orientation mediate the relationship between leadership behaviour and organisational performance?

The next chapter presents a review of the literature relating to SMEs in Malaysia. The review is further extended by looking at studies on the effects of transformational leadership and EO on organisational performance in the specific context of SMEs in Malaysia.
CHAPTER 3
OVERVIEW OF SMALL AND MEDIUM ENTERPRISES (SMEs) IN MALAYSIA

3.1 Introduction

It is generally acknowledged that SMEs contribute significantly to the economic development of a country. Panitchpakdi (2006) described SMEs as a source of employment, economic dynamism, competition and innovation. SMEs encourage the entrepreneurial spirit and the diffusion of skills. SMEs are also a major contributor to improving income distribution since they are established in a wider geographical area than large companies, including rural areas. This chapter presents an overview of Malaysia and the SMEs in the country. Relevant literature on leadership and EO research and practice is also discussed.

After the introduction, this chapter provides a background of Malaysia in Section 3.2. Section 3.3 discusses the development of Malaysian SMEs. Sections 3.4 and 3.5 review the literature on research and practice in the areas of leadership and EO. Section 3.6 provides details of the performance of SMEs in the manufacturing and service industries and Section 3.7 concludes this chapter.

3.2 Background of Malaysia

Situated in Southeast Asia, Malaysia is bordered by Thailand to the north, Indonesia and Singapore to the south and the Philippines to the east. The country covers 127,320 square miles and is divided into 13 states and three federal territories. Eleven states and two federal territories are located in Peninsular Malaysia (also known as
West Malaysia) and two states and one federal territory (Labuan) are in East Malaysia, separated by the South China Sea (see Figure 3.1). Kuala Lumpur is the capital city of Malaysia, located in southeast Peninsular Malaysia. A new capital city, Putrajaya, is being developed as a new administrative centre, located just outside the overcrowded metropolitan area of Kuala Lumpur. Malaysia is situated along the Strait of Malacca, which has strategic importance as a major sea route connecting the Far East to Asia, Europe and the Middle East.

![Figure 3.1 Map of Malaysia](image)

Source: Malaysia Tourism 2011

The current population of Malaysia is estimated at around 28.3 million. *Bumiputera* (‘the sons of the soil’), who include ethnic Malays and the indigenous peoples of Peninsular Malaysia, Sarawak and Sabah, comprise 67.4% of the population, while Chinese are 24.6%, Indian 7.3% and others 0.7% (DOSM 2010).
Since Independence in 1957, Malaysia has undergone a massive transformation of its economy. The country is a fast developing economy, with qualified and skilled labour to attract foreign direct investment (Selvarajah & Meyer 2008). Malaysia’s economic development since independence presents three distinct phases (Raman & Yap 1996). In the first phase, 1965–1970, the economy was resource-based and was highly dependent on the export of rubber and tin. The second phase occurred during the 1970s, with the engine of growth being the agricultural sector, concentrating on cocoa, palm oil and timber. The third phase of development occurred during the 1980s and was marked by an improvement in the productivity of existing industries and a move towards high technology and high value-added industries (Raman & Yap 1996). These achievements have been reflected in the country’s GDP over the years (Ariff 1998).

Manufacturing industries, the service sector and the agricultural sector are the major sectors that contribute to the country’s GDP. In 2008, manufacturing industries contributed 44.6% to the country’s GDP. This sector had only contributed 13.9% in 1970 and 35.5% in 1997. The contributions of the service and agricultural sectors were estimated at around 45.7% and 9.7% respectively in 2008. The service sector had contributed 36.2% in 1970 and 45% in 1997, so there was little change. On the other hand, the contribution of the agricultural sector reduced from 29% in 1970 to 12.2% in 1997 (Ariff 1998). These trends clearly show the shifting from rubber- and tin-based industries to a more industrialised economy, together with steady growth in the service sector. As per the GDP-PPP (GDP purchasing power parity), Malaysia is ranked 29th in the world, and the GDP of Malaysia was estimated at US$207,400 billion in 2009 (Malaysia Economy 2012).
3.3 Malaysian SMEs

3.3.1 Definition of SMEs in Malaysia

The definition of SMEs varies widely among different countries. However, in Malaysia, SMEs are defined according to the number of full-time employees or the annual sales turnover and industry categories. Table 1.1 shows the definitions of SMEs based on the number of employees and the annual sales turnover.

Besides considering the number of employees or annual sales turnover, an enterprise can also be defined as an SME based on industry category. The definitions of SMEs based on the categories of manufacturing and services are as follows:

a) Manufacturing, manufacturing-related services and agro-based industries. SMEs in these industries are enterprises employing full-time staff not exceeding 150 or with annual sales turnover not exceeding RM25 million.

b) Services, primary agriculture, and information and communications technology (ICT). SMEs in these sectors are enterprises with full-time employees not exceeding 50 or with annual sales turnover not exceeding RM5 million (NSDC 2010).

3.3.2 Development of SMEs in Malaysia

To understand the context of entrepreneurship in Malaysia, a historical perspective on the economic development of the country is required. A notable practice introduced by the British under their colonial rule of Malaya (before independence in 1957) was to segregate economic activity among the ethnic groups (Simpson 2005). During that period, rubber plantations and tin mines were the major economic
resources. Due to insufficient labour pools for these large-scale industries, the British imported Indian workers to supplement the workforce needed for the rubber industry and imported Chinese workers to work in the tin mines. The majority of Malays were concentrated in the low-income agricultural sector and only members of the upper class and the royal family were allowed to participate in the bureaucracy. Supporting activities related to the rubber and tin industries such as wholesaling and retailing were inclined to benefit Indian or Chinese groups. This created a segregated economic situation among these ethnic groups and worsened the economic conditions for most Malays (Ariff 1998; Ariff & Abu Bakar 2003).

The government introduced the New Economic Policy (NEP) in 1971 with the principal intent of achieving a balance between ethnic economic situations and thus improving the general welfare of the citizens (Saad 2012; Aman et al. 2011). It showed the government’s commitment to the development of SMEs. Under the NEP, emphasis was placed on improving effective Bumiputera ownership and participation in high-income jobs, limiting the income inequality among the ethnic groups and eliminating poverty among citizens (Abdul Jamak et al. 2012). The NEP was subsequently replaced in 1990 with the National Development Policy (NDP). The strategic thrust of the NDP was to redress racial imbalance in explicit ways through various initiatives including the development of entrepreneurship, managerial expertise and skills in the Bumiputera community (Athukorala & Menon 1999).

The highlight of the government’s initiatives relating to entrepreneurs and entrepreneurship development was the establishment of the Ministry of Entrepreneur Development in 1995 (Othman et al. 2008). This Ministry is the leading agency for
the development of Bumiputera entrepreneurs and for coordinating the entrepreneurial activities in the country. This initiative shows the importance the government gives to entrepreneurs’ development and its recognition of the significant contribution of SMEs to the economic development of Malaysia (Ariff & Abu Bakar 2003).

The commitment of the Malaysian government was further strengthened and targeted through the implementation of the Malaysian Industrial Master Plans, particularly the Industrial Master Plan 2 (IMP2) for the period 2000 to 2005. This was followed by IMP 3 for 2006 to 2020 (Abdul Jamak et al. 2012; MITI 2005). Under these plans, the Malaysian government has enacted various policies and strategies to enhance the growth of the manufacturing sector across the entire value chain and cluster-based industrial developments. These plans also provide an integrated approach to the development of an industrial base and opportunities for the growth of SMEs (MITI 2005).

The contribution of SMEs to the growth and development of the economy in Malaysia cannot be denied and it has become an important aspect of economic growth in Malaysia (Chelliah et al. 2010; Hassim 2007; Othman et al. 2008). Besides providing job opportunities, SMEs play an important role in contributing to the prosperity of big and multinational corporations through their entrepreneurial creativity and innovation (Aman et al. 2011). Table 3.1 shows the overall contribution of SMEs to the Malaysian economy from 2005 to 2010. In 2010, SMEs represented about 99.2% of total business establishments and contributed 39.1% of the country’s GDP. SMEs provided 59.5% of total employment and contributed
28.4% to the exports of the country in 2010 (NSDC 11). One aim of the Ninth Malaysian Plan (9MP) for the period 2006 to 2010 was to organise and equip SMEs in the country with the required capability and capacity to meet the challenges of an increasingly competitive business environment (NSDC 2008). During this period, extensive funding of RM3.9 billion (AUD1.3 billion) and RM11.9 billion (AUD3.9 billion) was allocated to the development of SMEs in the country.

Table 3.1: SMEs’ Contribution to the Malaysian Economy

<table>
<thead>
<tr>
<th>Year / Contributions</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of SME of the total firms registered</td>
<td>96</td>
<td>96.4</td>
<td>97</td>
<td>99</td>
<td>99.2</td>
<td>99.2</td>
</tr>
<tr>
<td>Contribution to Total Export</td>
<td>19</td>
<td>29.3</td>
<td>30.7</td>
<td>29</td>
<td>18.5</td>
<td>28.4</td>
</tr>
<tr>
<td>Contribution to Gross Domestic Product</td>
<td>32</td>
<td>36</td>
<td>39</td>
<td>37</td>
<td>27.7</td>
<td>39.1</td>
</tr>
<tr>
<td>Contribution to Employment</td>
<td>56.8</td>
<td>56.9</td>
<td>58.2</td>
<td>58.9</td>
<td>59.2</td>
<td>59.5</td>
</tr>
</tbody>
</table>

Source: National SME Development Council 2011

The importance of SMEs as the main engine growth of the country’s economy was recognised through the establishment of the National SME Development Council (NSDC) in 2004 (Mohd Aris 2007; NSDC 2010). The NSDC was established to reinforce the government’s commitment to promoting the development of SMEs in Malaysia through a comprehensive and coordinated approach. The NSDC, chaired by the Prime Minister with members consisting of Ministers and Heads of key government agencies involved in SME development, has been entrusted to formulate broad policies and strategies, and to oversee the coordination of programs to improve their effectiveness. Over the period of 2005–2010, various initiatives were introduced by NSDC through the SME Development Framework, which coordinates the policies
and programs across more than 15 Ministries and 60 agencies (NSDC 2010). The key initiatives are:

- Adoption of a standard SME definition nationwide
- Introduction of an annual plan called the National SME Development Blueprint, later renamed the SME Integrated Plan Action (SMEIPA)
- Development of a comprehensive database to track the progress of SMEs
- Projections of macro-performance targets of SMEs for 2010
- Establishment of a dedicated agency for SMEs, realised through the transformation of the Small and Medium Industries Development Corporation (SMIDEC) into the SME Corporation Malaysia (SME Corp. Malaysia) as the central coordinating agency to streamline, coordinate, monitor and assess all SME development initiatives.

In 2010, the government introduced a New Economic Model (NEM) with the main goal for Malaysia to become a high-income advanced nation with inclusiveness and sustainability by 2020 (National Economic Advisory Council 2010). For Malaysia to achieve a developed nation and high income status, domestic SMEs are anticipated to be an important factor of growth. One of the main focuses of the New Economic Model (NEM) is to unleash the unexploited potential of SMEs and to transform them to become more competitive and resilient in the demanding business environment (NSDC 2010).

To realise these objectives, RM15.6 billion (AUD4.8 billion) was allocated to SMEs in 2010. Of these, a total of 267 programs with a financial commitment of RM6.9 billion (AUD2.1 billion) were implemented through SME Corp. Malaysia. The NEM
is targeted at enhancing the viability of SMEs across all sectors, promoting Bumiputera participation in the SME sector and promoting the development of knowledge-based (K-based) SMEs (NSDC 2010). Various programs and initiatives have also been organised to focus on building SMEs’ capacity and capability, enhancing their access to financing and strengthening the enabling infrastructure for SMEs.

3.3.3 Owners and Top Managers of SMEs

An analysis of the general leadership and organisational literature showed how certain individuals in an organisation can influence the actions of others, both individually and collectively (Tarabishy et al. 2005). Wiklund (1999) claimed that the strategic orientation of the leader of a firm is likely to represent the strategic orientation of the firm. Kaiser et al. (2008) identified that much prior research on leadership and performance relationship has centred on the approval of leaders by followers rather than on the effects that leaders may have on organisational performance. There has been little empirical research to study the effects of leaders on an entire organisation (Mosley 1998).

Previous studies have demonstrated that leaders can be the most significant factor for organisational performance (Thorlindson 1988; Smith et al. 1984). Zaccaro (2001) identified that most research on leadership has focused on the low levels of an organisation with little research focusing on leadership at the top level. Therefore, in this study owners or top managers of SMEs became the subject. They possess the required knowledge and expertise regarding their own firm, its operation and performance (Yang 2008; Isobe et al. 2004). Therefore, leaders seem to be the
pertinent source of data on leadership behaviour, the degree of EO practised in an organisation and organisational performance.

3.4 Leadership Research and Practices in Malaysia

One of the topics that has been and always will be the centre of much discussion in the management literature is leadership (Hannay 2009). Even though research on the leadership phenomenon in Malaysia is not as extensive as in Western countries, there have been attempts made by local and international scholars to develop an understanding of leadership practices in Malaysia. However, a recent literature review shows that very little effort has been made to examine leaders in relation to the leadership behaviour adopted in SMEs (Mohd Sam et al. 2012; Hashim et al. 2012).

Autocratic leadership was the dominant leadership style in all industries in Malaysia for many years. This style of leadership was accepted by employees due to their lack of education and poor exposure to information about the rights of employees, and possibly also because the business leaders were generally the owners of the firms. One of the strong effects of colonialism was to impose the top-down management style on the developing industries in the country, hence encouraging the leaders to practise autocratic leadership for a long time (Abdul Rani et al. 2008; Ansari et al. 2004). Ansari et al. (2004) also suggested that autocratic and directive leadership was effective for Malaysian managers during that period. However, since the mid-1980s, firms everywhere have undergone vast transformation, including firms in Malaysia (Abdul Rani et al. 2008). The growth of the knowledge economy and the transformation of the workforce have changed the ways managers lead (Jayasingam
& Cheng 2009). Employees are more knowledgeable now and require more effective leadership from their leaders and they may no longer accept the simple use of positional power and authority to lead them.

Other factors contributing to this transformation are the adoption of emerging democratic management ideas, a better education system, a vast exposure to information, joint ventures, technology adoption, and the country’s drive towards a high level of industrialisation and economic development (Abdul Rani 2006; Mansor & Kennedy 2000). These factors have been linked with the Westernisation of many management practices and various styles of leaderships practised by the leaders of the industries.

One of the largest international studies of leadership involving Malaysia is the Global Leadership and Organizational Behavior Effectiveness (GLOBE) (1999). Sixty other countries around the world were also involved in this study, which was led by Professor Robert House of the Wharton School at the University of Pennsylvania. The conceptual basis of the study was published in House et al. (1999) and preliminary analysis of the data on leadership was published by Den Hartog et al. (1999). Data collected in Malaysia were drawn from a total of 125 managers. One of the major outcomes from the study by Den Hartog et al. (1999) was that charismatic/transformational leadership has become universally endorsed leadership behaviour that is characteristic of outstanding leadership across countries.

Kennedy (2002) and Mansor and Kennedy (2000) explored the Globe study closely in regard to understanding leadership in Malaysia. They found that the results of the
Malaysian sample were similar to those of the other GLOBE countries in that charismatic/transformational leadership and team-orientation were ranked as highly important contributors to outstanding leadership. Malaysian ratings for charismatic/transformational leadership were close to the average for all the countries. The third most important factor for leadership in Malaysia is the humane factor. Malaysia was placed in the top 25 per cent of countries in this dimension. Even though the rating for participative leadership was positive for Malaysian managers, the rating was below those for most countries. Malaysian managers rated self-protective leadership the same as the other countries and rated autonomous leadership above the median rating of all GLOBE countries.

Several key attributes that differentiate the leadership culture in Malaysia are a high humane orientation rating and a low rating for participative leadership. There is universal endorsement of the importance of charismatic/transformational leadership. Managers in Malaysia are considered to be inspirational and to be prepared to accept and to employ a directive leadership style, but they are also expected to balance this style with a humane orientation – a consideration of the needs and concerns of subordinates (Kennedy 2002; Mansor & Kennedy 2000).

Different outcomes were produced by Jaharuddin (2006) when she studied the effects of the corporate culture, leadership style and performance of foreign and local organisations in Malaysia. Her data were drawn from a total of 134 companies comprising 74 local and 60 foreign companies. Regarding leadership, she found no difference between local and foreign leadership styles. The three most popular styles in both local and foreign companies are the auditor (who emphasises rules and
procedures to ensure smooth operation), the ambassador (who possesses deep knowledge about the organisation’s history, products and responsibilities) and the driver (who focuses on high performance achievement). The auditor style can be linked to transactional leadership behaviour that also focuses on maintaining operational stability. The driver style can be associated with transformational leadership that focuses on elevating employees’ awareness so that they perform beyond expectations. Interestingly, she also found that culture and leadership style are not associated with performance in either local or foreign organisations. This study concluded that organisational culture and leadership style are autonomous of organisational performance in both local and foreign companies and that organisational performance might be affected by other factors such as socio-economic conditions, competition and innovation.

Mohd Sam et al. (2012) examined the effects of different leadership styles on the company performance of SMEs in the information technology (IT) sector in Malaysia. Leadership was identified based on entrepreneurial leadership, managerial leadership or a combination of both. Based on a sample of 200 IT companies, they concluded that managerial leadership is the dominant leadership behaviour of the owners and managers of SMEs followed by entrepreneurial leadership. But entrepreneurial leadership has a statistically significant contribution to the financial performance of the firm. Their findings show that when owners or managers become more entrepreneurially orientated in the way they lead their organisation, financial performance improves.
Jayasingam and Cheng (2009) studied leadership styles and perceptions of effectiveness of 269 respondents from various industries in Malaysia. Findings from both private and public sectors showed that the perception of a leader’s effectiveness is positively affected by participative and nurturant-task leadership, which is characterised by people-oriented and relationship-oriented behaviour such as encouraging involvement in decision making and providing support and guidance. These characteristics are associated with transformational leadership, as transformational leaders try to inspire employees and create trust and confidence among them, show concern for individual employees, and encourage employees’ personal growth and development. Jayasingam and Cheng (2009) also found that autocratic leadership has a negative effect. They argued that the autocratic leadership that used to be predominant in Malaysian organisations is no longer effective leadership behaviour. Their findings also suggest that employees prefer to work as a team and participate in decision making. They also prefer to receive guidance from leaders only when necessary.

Several other authors have also closely examined transformational and transactional leadership in the context of business leaders in Malaysia. These studies were on: the role of transformational leadership in the public sector (Md Noor 2010; Asgari 2008); the roles of transformational and transactional leadership and organisational commitment in the manufacturing industry (Lo et al. 2009); the relationship between leadership behaviour and leadership effectiveness in Malaysian Government Linked Companies (GLCs) (Amirul & Daud 2012); the effects of transformational and transactional leadership on individual outcomes (Ismail et al. 2010); and the innovative performance of SMEs (Md Saad & Mazzarol 2010).
For example, Md Noor (2010) suggested that an organisation must have a transformational leader in order to respond strategically and forge ahead with transformational change. He also proposed that to raise the country to a great nation, conventional forms of leadership behaviour would not be sufficient. He stated that leaders need to transform themselves and be visionary enough to inspire greatness and to bring about sustainable transformational changes in their organisations. Ismail et al. (2010) proposed that the ability of leaders to effectively display transformational and transactional leadership behaviour may lead to increased positive individual outcomes and increased trust in leaders.

A more recent study by Amirul and Daud (2012), based on 325 respondents representing GLCs in Malaysia, revealed that transactional leadership has a slightly higher mean than transformational leadership among leaders in all positions. However, the effects of transformational leadership on leadership outcomes (measured through extra effort, effectiveness and satisfaction) are higher and stronger than the effects of transactional leadership. Their study concluded that transformational leadership is more practical and efficient than transactional leadership for bringing about positive outcomes for organisations.

Based on a survey of 160 executives from the manufacturing industry, Lo et al. (2009) concluded that transformational leadership has a more significant and stronger effect than transactional leadership on organisational commitment. Leaders who display transformational behaviour are more able to develop commitment in employees than transactional leaders are. Specifically, they also found that intellectual stimulation, idealised influence and inspirational motivation are
significant predictors for affective and normative commitment, whereas individualised consideration and intellectual stimulation are significantly related to continuance commitment.

Md Saad and Mazzarol (2010) used data from 87 SMEs from Malaysia’s Multimedia Super Corridor (MSC) to conclude that transformational leadership has a more significant impact than transactional leadership on both product and process innovation undertaken by SMEs. The results showed that transactional leadership has a minimal role in improving an organisation’s innovative performance.

The review of literature on leadership practices in Malaysia has revealed that a particular leadership behaviour does have a significant role in enhancing the performance of the organisation. However, the results are varied and inconclusive and therefore a more integrated effort is needed to understand the role of leadership behaviour in relation to organisational performance. The review also found a lack of initiative by previous scholars to examine the effect of transformational and transactional leadership in the context of SMEs in Malaysia. Therefore, this study proposes research questions that attempt to provide a better understanding of the effects of transformational and transactional leadership on organisational performance in the context of SMEs in Malaysia. As Abu Kassim and Sulaiman (2010) suggested, an understanding of leadership behaviour is critical to the further development of SMEs in Malaysia, due to their size and resource limitations.
3.5 Entrepreneurial Orientation Research and Practices in Malaysia

Entrepreneurship has become one of the new focuses of economic growth for Malaysia (Othman et al. 2008). However, the literature has suggested that studies on EO in Malaysia, especially in regard to SMEs, are still at an infant stage (Awang & Ahmad 2005). Previous scholars have concentrated on a theoretical perspective of EO as a universal remedy for improving productivity (Abdul Razak 2011), the EO of public enterprises (Entebang 2010), the relationship between distinctive capabilities and EO and the performance of SMEs in the agricultural industry (Awang et al. 2010a, 2010b), EO related to the performance of Bumiputera SMEs (Awang et al. 2009; Zainol & Ayadurai 2011; Zainol & Wan Daud 2011) and innovativeness, market orientation and firm performance (Lee & Ging 2007; Hilmi et al. 2010; Hassim et al. 2011).

A recent theoretical review by Abdul Razak (2011) suggested that entrepreneurs of SMEs in Malaysia need to develop a cognitive perspective when making decisions. This skill will help their firms to be entrepreneurially orientated and consequently lead to increased productivity.

Awang et al. (2010a) used a sample of 125 agricultural-based SMEs and concluded that only innovativeness relates positively to the return on sales. Competitive aggressiveness relates negatively to the return on sales. The other two factors (proactiveness and risk taking) are not related to sales performance. The characteristic of distinctive capabilities (financial information capability) was found to mediate the relationship between EO and financial performance. Interestingly,
these authors also suggested that future study should embark on other independent variables such as knowledge and leadership to further understand EO among entrepreneurs of SMEs in Malaysia. A much larger study conducted by Awang and his colleagues (2010b), which consisted of 615 respondents from agro-based enterprises, proposed that future study on EO should extend the level of analysis and concentrate on firms from multiple industries of SMEs in Malaysia.

Lee and Ging (2007) investigated firm-level innovation using data from the National Survey of Innovation. This involved 750 small, medium and large manufacturing firms. The authors found that for small firms, newish ones and those with more employees are more likely to innovate. For medium and large firms, the well-established amongst them are more innovative. Medium-sized firms that produce for the domestic market and have high market concentration have a higher probability of innovating.

Hilmi et al. (2010) attempted to explain product and process innovativeness in the performance of 92 SMEs. They emphasised that product innovativeness refers to the novelty and meaningfulness of new products and process innovativeness refers to the introduction of new production methods, management approaches and technology. Their study revealed that Malaysian SMEs show a high level of both product and process innovativeness but only process innovativeness is positively related to performance.

Besides examining the influence of EO on firm performance, Zainol and Wan Daud (2011) also investigated the mediating role of EO in the relationship between
government support (such as training and financial aid) and firm performance. Based on a sample of 162 family firms from the service and manufacturing industries in Malaysia, they found that EO and government support explain firm performance but EO is not a significant mediator between government support and firm performance. Similar results were produced by Zainol and Ayadurai (2011) when they looked at the personality traits of entrepreneurs as an independent variable. They also concluded that EO and personality traits affect firm performance but EO is not a significant mediator between personality traits and firm performance. Both of these studies highlighted the importance of EO on enhancing firm performance but failed to establish the mediating effects of EO when they examined the relationship between government support and personality traits and performance. These studies also suggested that further research is needed to explore the antecedents and underlying processes related to entrepreneurial activity and they suggested that acknowledging the multi-dimensional nature of EO contributes to a greater understanding of EO and its contribution to firm performance.

Another attempt by researchers was to associate market orientation and organisational innovation while examining the impact of EO on firm performance (Hassim et al. 2011). Based on 398 samples representing various SME sectors in Malaysia, these authors found significant contributions of EO to market orientation and to business performance. A firm’s innovative behaviour also related positively to performance. They suggested that for firms to achieve superior performance, they need to focus on promoting EO, market orientation and organisational innovation.
Apart from investigating the direct impact of EO on performance, Awang et al. (2009) used perceived environmental factors as moderating variables in the model developed in their study. 210 SMEs from the manufacturing, service and agriculture sectors participated in this study. Their findings revealed that factors of EO are multi-dimensional and each component is independent of one another. Autonomy and innovativeness are positively and significantly related to performance. The negative relationship between risk taking and performance is actually an indication of a U-shaped curvilinear relationship. This indicates that risk taking has a positive effect on performance up to a point; beyond that point, an increase in risk taking produces a negative effect on performance. Finally, their study also found that the moderating impacts of human capital and information technology munificence on the relationship between EO and performance are important for proactive firms. Their approach suggests that further research should investigate the impacts of other independent or mediating variables on the factors of EO.

One study of EO in public enterprises (GLCs) by Entebang and colleagues (2010) revealed that firms of this type seem to display a certain level of EO; however, most of their initiatives are new and incremental in nature. These firms demonstrate a low degree of proactiveness and a tendency to take on low-risk projects. Therefore, to be more competitive and improve financial performance, they are encouraged to take bold actions, to venture into new things with a proper risk management strategy and to be proactive in pursuing and exploiting new markets.

To summarise, all the studies presented here are concerned with understanding EO as a strategy for enhancing organisational performance. A few conclusions can be
drawn from this literature review in regard to the practice and research of EO in Malaysia, especially in SMEs’ business environments. First, EO is an important element that can contribute to superior organisational performance. Detailed studies of the factors of EO have revealed that they contribute independently to organisational performance (Awang et al. 2009; Awang et al. 2010). These findings confirmed the outcomes from Western studies by Kreiser et al. (2002) and Lumpkin and Dess (2001).

Secondly, mixed outcomes from these studies suggest that future research on EO could include other independent or mediating factors such as knowledge and leadership (Awang et al. 2010; Zainol & Ayadurai 2011). As Hassim et al. (2011) suggested, appropriate behaviour of the leaders of SMEs is an important element of a firm’s strategy to enhance its innovativeness and proactiveness. Therefore, a research question of whether EO fully mediates the relationship between leadership behaviour and organisational performance could provide a different avenue to understand how the performance of SMEs in Malaysia could be further developed and enhanced.

### 3.6 SMEs’ Performance

Because of their total numbers, sizes and the diverse natures of their businesses, SMEs in Malaysia have been acknowledged as promoting endogenous sources of growth and strengthening the infrastructure for the fast economic expansion and development of the country (Mohd Aris 2007). According to the Census on Establishment and Enterprises 2005 conducted by the Department of Statistics in Malaysia (DOSM), SMEs in Malaysia are mainly concentrated in the service sector, which has 87% of all SMEs in the country with 474,706 establishments, 381,585 of
which are considered micro-enterprises. The main business in this sector is distributive trade, which includes wholesale and retail, as well as hotels and restaurants (SME Annual Report 2009–2010). The output generated by this sector of SMEs was about 56.7% or approximately RM361.7 billion in 2003 (Mohd Aris 2007).

The manufacturing sector represents 7% of all SMEs with 39,373 establishments, 21,516 of which are micro-enterprises. The three main subsectors are textiles and apparel, metal products, and food and beverages, which together contribute 34.9% of the total output of SMEs. This is followed by the agriculture sector with 6% of SMEs, accounting for 34,188 businesses which are mostly involved in crop plantation, horticulture and fishing (SME Annual Report 2009–2010). In 2003, the agriculture sector contributes about RM8.7 billion to the SMEs’ total output (Mohd Aris 2007).

In terms of sectoral performance of SME value-added in 2009, the service sector reported the highest contribution of total SME value-added at 64.6%, followed by the manufacturing sector at 26%, agriculture at 7.6%, construction at 2.8% and mining at 0.1% (NSDC 2010).

The key businesses that drive growth performance in the service sector are the distributive trade, real estate and business services, and finance and insurance businesses. This growth is also closely linked to consumption activities supported by strong domestic demand and tourism activities. The key growth businesses in the manufacturing sector are resource-based industries such as chemicals and plastic
products, food and beverages, electrical and electronic (E&E) products, and non-metallic mineral and metal products. The growth of the manufacturing sector is greatly dependent upon global demand and prices, particularly for E&E products, rubber and chemicals (NSDC 2010).

Table 3.2 depicts the real GDP contribution by key economic activities of SMEs in Malaysia from 2009 to 2011. Table 3.3 depicts SME value-added and overall GDP growth by sector in 2010. As shown in these tables, manufacturing and the services are the industries that contribute most significantly to economic growth in Malaysia.

Table 3.2: Real GDP by Key Economic Activity

<table>
<thead>
<tr>
<th>Industry</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>0.6</td>
<td>2.1</td>
<td>3.4</td>
</tr>
<tr>
<td>Mining &amp; Quarrying</td>
<td>-6.3</td>
<td>0.2</td>
<td>-6.6</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>-9.3</td>
<td>11.4</td>
<td>3.8</td>
</tr>
<tr>
<td>Services</td>
<td>3.1</td>
<td>3.1</td>
<td>6.8</td>
</tr>
<tr>
<td>Construction</td>
<td>5.9</td>
<td>5.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Real GDP</td>
<td>1.6</td>
<td>7.2</td>
<td>4.4</td>
</tr>
</tbody>
</table>

Source: Malaysia National SME Development Council, 2011
### Table 3.3: SME Value-Added and Overall GDP Growth by Key Economic Activity in 2010

<table>
<thead>
<tr>
<th>Industry</th>
<th>Year 2010 (% annual change)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SME Value-Added Growth</td>
<td>Overall GDP Growth</td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>5.0</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>11.8</td>
<td>11.4</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>7.1</td>
<td>6.8</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>8.6</td>
<td>5.1</td>
<td></td>
</tr>
</tbody>
</table>

Source: National SME Development Council, 2011

### 3.7 Summary

To improve the performance of SMEs in Malaysia so that they are competitive with developed or other developing countries, important resources and capabilities need to be acknowledged, focused and developed. Understanding the relationships between leadership and EO as resources and capabilities could contribute to the better performance of SMEs in Malaysia. A focus on the manufacturing and service sectors, which contribute significantly to the overall performance of SMEs, could perhaps provide general findings for SME development in Malaysia. The next chapter, Chapter 4, covers the development of the theoretical framework of this study.
4.1 Introduction

This chapter discusses the development of the theoretical framework of this study. After the introduction in Section 4.1, Section 4.2 discusses the relevant theories that are the foundation of the research framework. Section 4.3 presents the research framework with the definitions of all the variables. Section 4.4 discusses the development of the hypotheses and presents evidence from the literature review to support the hypotheses. Section 4.5 discusses the scope of the proposed framework. The final section provides concluding remarks.

4.2 Theoretical Foundation of Framework

4.2.1 Transformational Leadership Theory

The first theory that contributes to the framework developed in this study is the transformational leadership theory. This theory was discussed and explained in Chapter 2 with the presentation of the evolution and transformation of different leadership theories. This chapter does not repeat the discussion of this theory, but since the theoretical framework of this study centres on the perception of the effects of leadership behaviour on organisational performance, and since there is a need to explain the relevant theories involved in the development of the theoretical framework, therefore, a brief summary of the theory is given.

It is more than 30 years since the concepts of transformational and transactional leadership were introduced by Burns (1978). In his views, transactional leaders are
concerned with followers’ low-level needs and transformational leaders boost the morale, motivation and focus of followers’ high-level needs. A transactional leader focuses on what your country can do for you and a transformational leader focuses on what you can do for your country.

Bass (1985) expanded Burns’ views of transformational and transactional leadership into the theory of transformational leadership. According to Bass (1999, 2000), a transformational leader is the kind of leader who develops followers through creating a vision that provides meaning and motivation. The ability of a transformational leader to communicate a convincing vision with enthusiasm and confidence results in followers having a strong sense of identification with the organisation and influences followers to go beyond their self-interests. Bass established that an effective leader with transformational attributes has the ability to transport his or her organisation to greater heights and to achieve greater performance (Bass 1985, 1990a, 1990b; Bass et al. 2003; Bass & Riggio 2012).

On the other hand, a transactional leader is described as providing contingent rewards and negative feedback (Hater & Bass 1988). The main elements of transactional leadership are structuring, clarifying tasks and providing rewards for extra effort. The needs of followers are fulfilled when they deliver according to the leader’s expectation (Avolio & Bass 1988). Recent studies have indicated contingent reward and active management-by-exception as effective component of leadership (Amirul & Daud 2012; Bass 2003).
Transformational leadership theory also forecasts that effective leaders are able to adjust their leadership behaviour between more or less transactional and more or less transformational in order to address dynamic situational demands (Hannah et al. 2008). In stable and clear-cut situations, transactional leadership can deliver effective performance (Bass 1985). However, when dealing with new circumstances and unpredictable situations, a transformational leadership approach may be more appropriate (Avolio 2005). Finally, Bass et al. (2003) suggested that transformational leadership is more effective than transactional leadership because transformational leaders empower employees by developing them into high involvement individuals and teams that focus on service, quality, cost effectiveness and high quantity of production output.

Based on what has been presented, transformational and transactional leadership are independent variables in the research framework and are expected to be factors that influence organisational performance. The practice and display of both types of leadership behaviour are expected have significant impacts on performance. But due to the different characteristics intrinsic to each form of leadership behaviour, it is anticipated that one form might have a greater positive impact than the other on the performance of organisations.

4.2.2 Resource-Based View

The resource-based view of the firm (RBV) has been a subject of discussion among researchers in the field of strategic management. The RBV posits that organisational success is dependent upon resources and capabilities that have certain characteristics (Galbreath 2005).
A firm’s resources and capabilities can be defined as including all assets, capabilities, organisational processes, firm attributes and knowledge controlled by the firm that allow that firm to develop and implement strategies that improve its efficiency and effectiveness (Barney 1995). This is a bundle of available factors owned and controlled by the firm that can be used to build up and implement their strategies (Amit & Schoemaker 1993). Firms’ resources and capabilities can generate a sustainable competitive advantage when they have the following characteristics; value, rarity, inimitability and non-substitutability (Barney 1991). Later, Barney (1995) emphasised that developing sustained competitive advantage requires the unique resources and capabilities that a firm could bring to competition and its environment. Business owners and managers must discover these resources and capabilities by looking within their firm for resources that are valuable, rare and imperfectly imitable, and then exploit these resources. Galbreath (2005) claimed that only firms which have resources possessing these attributes are able to generate and sustain the competitive advantage which affords continuing superior performance.

According to Barney (1991), a firm’s resources are categorised according to physical, human and organisational capital resources. Physical capital includes the physical technology, plant and equipment, geographic location and access to raw materials. Human capital includes training, experience, intelligence, relationships, and the abilities and attributes of individual managers and workers. Organisational capital includes structures for reporting, formal and informal planning, and the whole organising process in the firm. Later, Barney (1995) added a new category of financial resources that includes debt, equity and retained earnings. Alvarez and Busenitz (2001) suggested the inclusion of the entrepreneurial resources of
entrepreneurial alertness, insight, knowledge and ability to coordinate resources. Dollinger (2003) expanded the application of this theory by including reputational resources (stakeholders’ perceptions of the company) and technological resources (processes, systems, physical transformations) as sources of competitive advantage.

4.2.2.1 Leadership and Entrepreneurial Orientation as resources in the RBV

One of the most basic assumptions of the RBV of the firm is that internal intangible resources are important in understanding an organisation’s competitive success. However, little is known about which of these resources are related to one another and, if so, how they are related (Wilderom & van den Berg 2000). In this study, leadership behaviour and the EO of leaders of SMEs can be seen as a firm’s internal intangible resources or capabilities. Capabilities contribute more significantly to the success of a firm than either intangible or tangible assets do (Galbreath 2005). Strong proponents of the Capability-Based Theory of Competitive Advantage advocate that a firm can achieve sustainable competitive advantage through distinctive capabilities owned by the firm (Grant 1991; Hayes et al. 1996) and these capabilities are the most important elements of a firm’s resources due to their high levels of causal ambiguity and strong barriers to imitation and substitution (Foon 2011). Likewise, Shurchuluu (2002) mentioned that capabilities are essential for a firm to have the ability to combine cost efficiency with continuous productivity improvements to be more competitive.

Generally, the Capability-Based Theory of Competitive Advantage suggests that a firm can achieve sustainable competitive advantage through the distinctive capabilities possessed by the firm (Grant 1991; Prahalad & Hamel 1990; Hayes et al.
1996) and these distinctive capabilities allow firms to make good use of their resources and achieve rents (Mahoney & Pandian 1992). Capabilities, in fact, could be considered as the most important of a firm’s resources due to their high levels of causal ambiguity and strong barriers to imitation and substitution.

Todorovic and Schlosser (2007) claimed that both of these variables, namely, leadership and EO, can be valuable rents under the RBV. They contended that appropriate leadership behaviour by the entrepreneur may enable the firm to achieve outcomes beyond its expectations. In their views, an entrepreneur, the individual, is often identified with the firm itself. The entrepreneur’s vision may become the firm’s vision statement. The charismatic leadership (transformational leadership) of an entrepreneur can also be viewed as an organisational-level resource, thereby contributing to organisational performance (Todorovic & Schlosser 2007).

According to Lee et al. (2001), a high level of EO is something that firms cannot simply buy from the market. Firms need to invest a great amount of time to develop an entrepreneurial culture and then the EO can be a source of sustainable competitive advantage that leads to superior performance. EO consisting of innovativeness, proactiveness and risk taking is considered an internal organisational capability (Lee et al. 2001) and it has been recognised as key source of sustainable competitive advantage (Miles & Snow 1978).

Finally, Wilderom & van den Berg (2000) contended that firms require best organisational practices and strong leadership to perform effectively. EO can be seen as an organisational practice since it is in effect an organisational strategy in creating
a sustainable competitive advantage. The leadership styles of the owner or top managers represent human capital resources. The complex interactions between these two resources in a firm could help to generate a superior performance.

Consequently, in this study, leadership behaviour and EO are examined as antecedents or variables that might affect organisational performance. This study also examines the possible mediating action of EO in the relationship between leadership behaviour and organisational performance.

4.3 Research Framework

Figure 4.1 presents the research framework of this study based on the theories discussed. The variables in the framework are then defined.
4.3.1 Definitions of Variables

‘Transformational leadership’ is defined as a process where leaders broaden and raise the interest of their employees. It occurs when they generate employees’ awareness and acceptance of the purpose and mission of the group and when the employees look beyond their self-interest for the benefit of the group (Bass 1985, 1990; Bass & Riggio 2012). There are four factors of transformational leadership:

- Idealised Influence
- Inspirational Motivation
- Intellectual Stimulation
- Individualised Consideration

Transformational Leadership

- Innovativeness
- Proactiveness
- Risk Taking

Entrepreneurial Orientation

- H1, H3
- H4, H5, H6
- H7, H8
- H9, H10

Organisational Performance

- Growth
- Profitability

Transactional Leadership

- Contingent Reward
- MBE Active
- MBE Passive

Figure 4.1 Research Framework
• **Idealised influence** – leaders provide vision and sense of mission, instil pride, and get the respect and trust of employees (Bass 1990). The leaders inspire and excite the employees with the idea that they are able to accomplish great things by putting in extra effort. They create trust, confidence and act as role models for their employees (Bass & Riggio 2012).

• **Inspirational motivation** – leaders communicate high expectations, use symbols to focus effort and convey important purposes to employees in simple ways and explain what needs to be done (Bass 1990, 1996; Muenjohn & Armstrong 2008). Inspirational motivation refers to the degree to which leaders articulate a vision that is appealing and inspiring to employees (Judge & Piccolo 2004) and establish commitment to common and shared visions (Bass & Riggio 2012).

• **Intellectual stimulation** – leaders encourage intelligence, rationality and careful problem solving (Bass 1990). Leaders are willing and able to act as examples to their employees on finding new perspectives for looking at old problems. Leaders encourage employees to think outside the box and they inspire creativity (Bass & Riggio 2012).

• **Individualised consideration** – leaders provide personal attention and treat each employee individually (Bass 1990). Leaders act as mentors and spend time coaching and giving advice by paying close attention to differences among the employees (Muenjohn & Armstrong 2008; Judge & Piccolo 2004). Leaders identify and acknowledge individual differences of needs and desires (Bass & Riggio 2012).
‘Transactional leadership’ is the type of leadership where the leaders explain what is required from the employees and what compensation they will get when they accomplish these requirements. It is a transaction or an exchange process between leaders and followers (Bass 1990; Bass et al. 2003). The three factors of transactional leadership used in this study are:

- **Contingent reward** – this refers to the exchange of rewards for efforts. It promises rewards for excellent performance and it acknowledges accomplishments and punishes poor performance (Bass 1996; Muenjohn & Armstrong 2008).

- **Management-by-exception (active)** – leaders act as monitors to watch for deviations from rules and standards and take corrective actions (Bass 1990, 1996; Muenjohn & Armstrong 2008).

- **Management-by-exception (passive)** – leaders intervene only when procedures and standards are not met (Bass 1990, 1996; Bass et al. 2003).

In this study, ‘entrepreneurial orientation’ is the inclination of a company’s top management to take calculated risks, to be innovative and to display proactiveness in their approach to strategic decision making (Morris & Paul 1987). The three factors of EO used in this study are:

- **Innovativeness** is the willingness of a firm to engage in and support new ideas and experimentation to create new products and services (Lumpkin & Dess 1996).

- **Proactiveness** is the ability of a firm to foresee and act on future wants and needs in the market by establishing a first-mover advantage ahead of competitors (Lumpkin & Dess 1996).
• Risk taking is the willingness of a firm to use resources for projects where the outcomes are uncertain (Miller 1983; Wiklund & Shepherd 2005).

Organisational performance is a multi-dimensional concept (Lumpkin & Dess 1996) and becoming a high performing firm is the main objective of SMEs (Ahmad & Ghani 2010; Madrid-Guijarro et al. 2007). Hancott (2005) suggested there are five major areas to consider in measuring organisational performance. They are: market share or growth, innovative performance, productivity of all inputs, liquidity and cash flows, and profitability. In this study, the organisational performance of SMEs is measured and defined through growth and profitability, adapted from Matzler et al. (2008). According to Steffens et al. (2006), these two factors are the important dimensions of SMEs’ performance since they represent the economic performance of SMEs (Covin & Slevin 1991).

Mao (2009) described enterprise growth as the development of an enterprise from small to large and from weak to strong. Enterprise growth can be a stable growth of total performance, which includes output, sales volume, profits and asset growth, or it can be a fast enhancement of total performance. Profitability indicates the ability of a firm to earn profits. A firm with high profitability has created a product or service that delivers considerable value above cost for its customers and gets a substantial share of that value in profit (Alvarez & Barney 2004; Amit & Zott 2001).
Thus, in this study:

- Growth is the owner’s or top manager’s perception of how well their company is doing in regard to market share and overall company performance relative to their competitors.

- Profitability is the owner’s or top manager’s perception of how well their company is doing in regard to the return on investment and return on sales. It is their perception on whether or not their company is making money relative to their competitors.

### 4.4 Hypotheses Development

This section discusses the literature in relation to the development of the hypotheses proposed in this study. The ten hypotheses are based on the three main relationships between the variables: the relationships between leadership behaviour and organisational performance; the relationships between factors of EO and organisational performance; and the role of EO as a mediating mechanism in the relationship between leadership and organisational performance. Three final path models are then developed to observe these relationships. This section also includes a discussion of the literature that acts as a foundation for the development of each hypothesis.

#### 4.4.1 Leadership Behaviour and Organisational Performance

There are three hypotheses on this relationship. In order to test them, the following research objective and research questions are proposed.
**Research Objective:** To investigate the relationship between transformational and transactional leadership behaviour and the organisational performance of SMEs in Malaysia

**Research Question:** To what extent do transformational and transactional leadership behaviours have an impact on organisational performance?

**Research Question:** Does transformational leadership have a stronger effect on organisational performance than transactional leadership does?

### 4.4.1.1 Transformational leadership and organisational performance

Leaders who practise transformational leadership stimulate and heightened awareness and interest in the group or organisation, increase confidence, and move followers progressively from concern for existence to concern for achievement and growth. They develop their subordinates to enable them to take on leadership roles and perform beyond established standards of performance or goals (Bass & Avolio 1990, 1993, 1994).

There are many ways that transformational leadership helps to increase the motivation, morale and performance of followers. These include connecting the subordinate's sense of identity with the project and the collective identity of the organisation; being a role model for followers that inspires them and makes them interested; challenging followers to take greater ownership of their work; and understanding the strengths and weaknesses of followers. By doing so, leaders can match followers with tasks that enhance their performance (Odumeru & Ogbonna 2013).
Scholars and researchers have taken many initiatives to identify and assess the relationship between transformational leadership and various organisational performance measures. Much evidence suggests that these two are correlated positively (Avolio et al. 1988; Yammarino & Bass 1990; Avolio 1999; Bass 1998). Other studies have identified that transformational leadership is correlated with innovation (Keller 1992; Matzler et al. 2008; Vaccaro et al. 2010), supervisory assessments of managerial performance (Hater & Bass 1988; Waldman et al. 1987), promotion (Waldman et al. 1990), effectiveness (Behery 2008), organisational climate (Koene et al. 2002), financial performance (Koene et al. 2002) and achievement (Howel & Avolio 1993).

These positive relationships have also been reported in studies concentrating on SMEs (Hood 2003; Yang 2008; Matzler et al. 2008; Visser et al. 2005; Pedraja-Rejas et al. 2006; Damirch et al. 2011), and their findings have indicated that transformational leadership is more relevant to SMEs than to large organisations (Hayat & Riaz 2011; Matzler et al. 2008; Ling et al. 2008). Hayat and Riaz (2011) claimed that transformational behaviour is linked to SMEs as its attributes are closely related to the business approach and environment in which entrepreneurs operate.

Behery (2008) investigated the relationship between transformational leadership and firm performance among 504 respondents from 10 large-scale companies in the UAE and reported that a transformational leadership behaviour significantly influences firm performance. A control-setting study conducted by Barling et al. (1996) with 20 branch managers of the five largest banks in Canada found that the effects of transformational leadership on financial result are positive. The study indicated that
training provided to managers results in subordinates’ perception of the significant effects that transformational leadership exerts on financial performance measures. A study of large multinational organisations in China also indicated that transformational leadership is positively related to subordinates’ creative performance (Si & Wei 2012).

In the context of SMEs, Matzler et al. (2008) investigated the impact of transformational leadership on innovation, growth and profitability in Austria. Their arguments were based on the premise that transformational leadership is not limited to technical professionals but can be applied to employees at all levels. They argued that transformational leadership enables all employees to identify and to exploit business opportunities for the firm. For example, employees may develop more efficient work routines, thus reducing costs and in turn increasing profitability. Employees may also gain new customers, which increases the growth of the firm. Their empirical findings supported their argument that transformational leadership has a significant positive effect on the innovativeness, growth and profitability of a firm. Visser et al. (2005) conducted a study of transformational leadership with 535 owners and managers of SMEs in South Africa. The results were that there is a medium degree of positive relationship between transformational leadership and entrepreneurship.

Similar results of a positive relationship between transformational leadership and organisational performance have been identified in studies on SMEs in Malaysia. For example, Lo et al. (2009) conducted a study to investigate the impact of transformational leadership in the manufacturing industry. The results showed a
significant positive effect between the two variables. Md Saad & Mazzarol (2010) also indicated that transformational leadership is positively related to product and process innovation. Finally, Abdul Aziz et al. (2013) also reported in a survey of 375 SMEs in the service industry that transformational leadership has a significant relationship with performance. Therefore, based on these arguments, it is hypothesised that:

**H1: Transformational leadership is significantly and positively related to organisational performance.**

### 4.4.1.2 Transactional leadership and organisational performance

Transactional leadership, also referred to as managerial leadership, focuses on the role of supervision, organisation and group effectiveness. It is a style of leadership that encourages the compliance of subordinates through rewards and punishments. In contrast to transformational leaders, transactional leaders like to maintain operational stability and do not anticipate changing the *status quo* (Odumuru & Ifeanyi 2013). Kuhnert and Lewis (1987) asserted that transactional leadership is an exchange process between the desired outcomes of leaders and followers by fulfilling the interests of the leaders and the expectations of the followers. This process involves delivering promises or commitments embedded by respect and trust. Bass (2000) also indicated that transactional leaders effectively address the interests of their employees through contingent incentives, honour and promises for those who succeed in meeting the commitments of the leaders or the goals of the organisation.
Research has confirmed that leadership based on a contingent process can positively affect employees’ satisfaction and performance (Podsakoff & Schriesheim 1985; Paracha et al. 2012). But some researchers have declared there is a negative effect between these variables (Yammarino & Bass 1990; Pedraja-rejas et al. 2006).

Howell and Hall-Merenda (1999) concluded that transactional leadership positively predicts employees’ performance. In Russia, Elenkov (2002) initiated a study to investigate the impact of leadership on organisational performance and found that Russian managers who practise transactional leadership behaviour have positive impacts on organisational performance as well as innovation. In a military setting, which is characterised as an organisation operating in an unstable environment, Bass et al. (2003) concluded that platoon leaders who demonstrate transactional leadership characteristics increase the performance of the platoon members. Yang (2008) also reported a positive relationship between transactional leadership and business performance in SMEs in Taiwan.

A study by Pedraja-rejas et al. (2006) indicted that the dominant style of leadership among managers of SMEs in Chile is the transactional leadership style. But they also found that this form of leadership has a negative relationship with firm performance. In contrast, Obiwuru et al. (2011) found that the performance of small businesses in Nigeria is highly positively affected by transactional leadership behaviour.

In the context of GLCs in Malaysia, Amirul and Daud (2012) investigated the relationship between transactional leadership and leadership outcomes in 325 companies. The results indicated that transactional leadership is positively related to
performance outcomes. Finally, several studies on SMEs in Malaysia also reported along the same lines. For example, Lo et al. (2009) found that factors of transactional leadership have a positive relationship with organisational commitment in manufacturing SMEs. Abdul Aziz et al. (2013) found a positive significant relationship between transactional leadership and performance in their study on SMEs in the services sector.

In this study, the practice of transactional leadership behaviour is regarded as highly important for the success of SMEs. Giving due recognition, creating an effective exchange mechanism and identifying any problem or deviation before it becomes serious are the actions of transactional leaders that might exert positive effects on growth and profitability of SMEs in Malaysia. Therefore, based on these arguments, it is hypothesised that:

**H2: Transactional leadership is significantly and positively related to organisational performance.**

4.4.1.3 *Transformational versus transactional leadership and organisational performance*

Generally, in examining the effects of transformational and transactional leadership on measures of organisational performance, most of the findings reported that transformational leadership is more effective than transactional leadership (Gardner & Stough 2002; Bass 1999). Empirical data also show support for transformational leadership being superior to transactional leadership (Bass et al. 2003; Hood 2003).
Elenkov (2002) found that transformational leadership directly and positively impacts on the organisational performance of Russian companies significantly more than transactional leadership does. Hood (2003) found that transformational leaders exhibit significantly higher levels of ethical practices than either transactional or laissez-faire leaders. A meta-analysis study by Lowe at al. (1996) indicated that transformational leadership is more highly correlated to work unit effectiveness and performance than transactional leadership is. Gardner and Stough (2002) found that the effect of emotional intelligence is highly correlated with every component of transformational leadership. Recently, findings by Zhu et al. (2012) also suggested that transformational leadership has a stronger positive relationship with followers’ psychological empowerment and organisational identification than transactional leadership does.

In the Malaysian business environment, Amirul and Daud (2012) concluded that transformational leadership is more practical and effective than transactional leadership for producing positive outcomes for organisations. In manufacturing SMEs, transformational leadership is reported to have a more significant and stronger effect on organisational commitment. Leaders who display this behaviour are more able to develop commitment in employees than transactional leaders are (Lo et al. 2009). Therefore, based on these findings, this study hypothesises that:

**H3: Transformational leadership has a greater impact on organisational performance than transactional leadership does.**
Entrepreneurial Orientation and Organisational Performance

Three hypotheses are developed on this relationship. In order to test them, the following research objective and question are proposed.

**Research Objective**: To examine the relationship between entrepreneurial orientation and the organisational performance of SMEs in Malaysia

**Research Question**: To what extent does entrepreneurial orientation influence organisational performance?

4.4.2.1 Innovativeness and organisational performance

Entrepreneurship would not exist without innovation (Covin & Miles 1999) and firms that fail to innovate will die. This summarises the importance of innovation (Kuratko & Hodgetts 2007). ‘Innovativeness’ was introduced into the concept of the entrepreneurial process by Schumpeter (1942). He also coined the term ‘creative destruction’ to refer to the creation of wealth by the introduction of new goods or services which disrupts existing businesses. Morris et al. (2007) defined ‘innovativeness’ as identifying creative, unusual or novel solutions to problems and needs. These solutions can take the form of new processes, new products or new services.

Innovation is especially important for new organisations and entrepreneurs because, without innovation, they have to rely on old ways of doing business with consecutive products/services and traditional distributions channels (Lee et al. 2001). These authors also claimed that innovativeness displayed by new firms cannot be easily
imitated by their competitors since it depends on the quantity and quality of R&D personnel and complex social relationships among these research scientists.

Innovativeness has been acknowledged as a factor that significantly contributes to organisational performance (Hult et. al. 2004; Kreiser et al. 2002; Avlonitis & Salavou 2007). Avlonitis and Salavou (2007) found that the performance of Greek SMEs is linked positively with product innovativeness. Hughes and Morgan (2007) investigated the relationship between innovations at early-stage start-ups and established a positive correlation between innovation and product performance. This study was generated from 82 high-tech firm incubators in the UK. They also considered innovation to be the main means to provide differentiation and develop strategies superior to those of competitors. The outcomes from a meta-analysis study were also that innovativeness affects business performance (Rauch et al. 2004). In Sri Lanka, Fairoz et al. (2010) reported a positive significant relationship between innovativeness and market share growth and overall business performance. They also concluded that there is a moderate degree of EO in the majority of SMEs in Sri Lanka. A study of EO across four different industries in Australia revealed that innovativeness is significant for business performance, and it was identified as the most significant factor of EO (Coulthard 2007).

In the context of SMEs in Malaysia, Hilmi et al. (2010) attempted to explain the connection of product and process innovativeness to the performance of 92 SMEs. They revealed that Malaysian SMEs show a high level of both product and process innovativeness but only process innovativeness is positively related to performance. In a different study, innovativeness was found to relate positively to product
performance among 101 SMEs in the service industry (Baba & Elumalai 2011). Awang et al. (2009) investigated 210 SMEs and found that innovativeness is related significantly and positively to performance. A sample from 143 manufacturing SMEs also revealed a significant positive relationship between innovativeness and organisational performance (Ahmad & Ghani 2010).

Based on these findings, it can be argued that it is important for SMEs in Malaysia to embrace innovativeness in their strategic orientation. Therefore, this study hypothesises that:

**H4: Innovativeness is related significantly and positively to organisational performance.**

### 4.4.2.2 Proactiveness and organisational performance

Proactiveness is an important element of entrepreneurship (Venkatraman 1989). Proactiveness has been described as the ability of a firm to foresee and act on the future wants and needs of the market by establishing a first-mover advantage ahead of competitors (Lumpkin & Dess 1996). Morris (1998) described this factor as taking responsibility and doing whatever it takes to ensure an entrepreneurial venture will produce an outstanding outcome. It also involves perseverance, flexibility and readiness to assume responsibility for failure.

Research has also indicated that proactiveness positively affects the success of an organisation. In South Africa, Krauss et al. (2005) investigated the proactiveness of small business owners and identified a positive significant relationship between proactiveness and business success. Hughes and Morgan (2007) established that
proactiveness has a positive significant effect on both customers and product performance for firms at an early stage of growth, and this relationship continues as the venture ages. Lumpkin and Dess (2006) reported that, as a firm grows, the impact of proactiveness on organisational performance increases. Proactiveness is also reported to relate positively to sales level, sales growth and gross profit (Kreiser et al. 2002). Earlier, Ward et al. (1994) studied the effect on performance of proactiveness among manufacturing firms in Ohio and found that proactiveness is positively related to organisational performance. Proactiveness was also found to positively impact on market share growth and the overall business performance of SMEs in Sri Lanka (Fairoz et al. 2010).

Several studies have also reported that the strongest relationship is between proactiveness and organisational performance compared with the influence of the other factors of EO (Kreiser et al. 2002; Hughes & Morgan 2007). Comparing proactiveness and competitive aggressiveness, Lumpkin and Dess (2001) concluded that the constructs of EO are independent from one another and the relationship between EO constructs and performance differs between firms. The results from a study by Kraus et al. (2012) of 124 executives from 94 organisations showed that proactiveness has a strong significant relationship to organisational performance measures, whereas competitiveness is negatively, but not significantly, related to sales growth. Kraus et al. (2012) also found that only the factor of proactiveness is significantly and positively associated with the performance of the organisation. The other two factors (innovativeness and risk taking) do not significantly correlate with business performance.
In the context of SMEs in Malaysia, Awang et al. (2009) revealed that proactiveness has a significant relationship with the overall performance of the 210 SMEs involved in their study. They also concluded that environmental munificence promotes proactiveness as the best predictor for effective performance. Ahmad and Ghani (2010) concluded that proactiveness has the highest significant relationship to business performance, followed by innovativeness and risk taking, in the business performance of 143 manufacturing SMEs.

Based on these arguments, it is acknowledged that it is important for organisations to promote this forward-looking behaviour. The ability of an organisation to anticipate the needs and wants of the market will enable it to be one step ahead of the competitors. Therefore, it is hypothesised that:

**H5: Proactiveness is related significantly and positively to organisational performance.**

### 4.4.2.3 Risk taking and organisational performance

Risk taking is described as the willingness of a firm to fund resources for projects when the outcomes are uncertain (Miller 1983; Wiklund & Shepherd 2005). It also implies a willingness to pursue opportunities that may incur losses or have considerable performance inconsistencies (Morris 1998). Since the term ‘entrepreneur’ was first debated, risk-taking behaviour has been linked to entrepreneurship (Palich & Bagby 1995). It requires firms to take bold actions by launching into the unknown, borrowing heavily and/or investing significant resources in ventures in an uncertain environment (Rauch et al. 2009).
Mixed results are reported in regard to the impact of risk taking on organisational performance. Some scholars have reported that there is a significant positive relationship between risk taking and performance (Wang & Poutziouris 2010; Fairoz et al. 2008; Yang 2008). Their findings indicated that taking a risk is likely to improve organisational performance. A UK-based study of 236 family firms by Wang and Poutziouris (2010) examined the impact of risk taking on business performance and reported that a risk-taking propensity correlates with entrepreneurial business performance. Fairoz et al. (2010) and Yang (2008) also reported a significant relationship between risk taking and business performance measured through market share growth and financial and overall performance in their respective studies in Sri Lanka and Taiwan. A meta-analysis consisting of 51 studies with a total of 14,259 samples also indicated a positive correlation between risk taking and performance (Rauch et al. 2004).

Some studies have failed to find a significant relationship between these two variables (Kraus et al. 2012; Haselmann & Wachtel 2007) and have argued that taking a risk does not entail an impact on the performance of an organisation. Haselmann and Wachtel’s (2007) study of a random sample of 423 banks in 20 European countries found no clear relationship between banks’ risk taking and their institutional environment. Likewise, a recent finding by Kraus et al. (2012) on 164 small and medium-sized firms in the Netherlands concluded that risk taking does not have a direct significant relationship to growth and financial performance. Only when accounting for its interaction with market turbulence does risk taking show a negative impact. They also suggested that SMEs should minimise their level of risk and should avoid projects that are too risky.
Another stream of studies has proposed that risk taking produces an inverted U-shaped curvilinear relationship to sales level and sales growth (Begley & Boyd 1987; Kreiser et al. 2002; Miller & Friesen 1982). They explained that risk taking shows a positive effect on performance measures to a certain level, and beyond that level the increase in risk taking starts to show a negative effect (Begley & Boyd 1987). Therefore, firms embracing a moderate level of risk taking are higher performers than those which take high or low levels of risk (Kreiser et al. 2002).

In the context of SMEs in Malaysia, Awang et al. (2009) reported a significant negative relationship between risk taking and objective measures of performance. This negative relationship implies that there is a curvilinear relationship between these two elements. A contrasting finding was reported by Ahmad and Ghani (2010), who found a significant relationship between risk-taking propensity and the organisational performance of manufacturing SMEs. They also found that the three factors of EO (innovativeness, proactiveness and risk taking) account for 66.7% of the variance in the business performance of manufacturing SMEs.

Based on these arguments, this study argues that being a risk taker supplements an entrepreneur’s innovativeness and proactiveness. Without the factor of risk taking, it is very difficult for entrepreneurial firms to make things happen. Taking on risk is expected to provide growth and profitability. Therefore, in this study, it is hypothesised that:

**H6: Risk taking is related significantly and positively to organisational performance.**
4.4.3 Leadership Behaviour, Entrepreneurial Orientation and Organisational Performance

Four hypotheses are developed for this relationship. In order to test them, the following research objective and research question are proposed.

**Research Objective:** To investigate the mediating effect of entrepreneurial orientation on the relationship between leadership behaviour and the organisational performance of SMEs in Malaysia.

**Research Question:** To what extent does entrepreneurial orientation mediate the relationship between leadership behaviour and organisational performance?

The objective of examining EO as a mediating variable in the relationship between leadership behaviour and organisational performance is based on suggestions from the literature. Lumpkin and Dess (1996) urged for research to examine EO as a mediating variable. Several authors who studied EO in the context of Malaysian SMEs also suggested future research to identify other independent or antecedent variables that could provide a better understanding of the performance of SMEs (Zainol & Ayadurai 2011). Leadership is one of the proposed variables (Awang et al. 2010).

4.4.3.1 Transformational Leadership, Entrepreneurial Orientation and Organisational Performance

Different types of leadership behaviour can have different effects on the capacity to transmit entrepreneurial spirit and to encourage small business innovation (Soriano & Martinez 2007). According to Eyal & Kark (2004), transformational leadership is one
of the main processes in influencing followers and improving their devotion, loyalty and enthusiasm, and it is acknowledged to set the basic conditions for a radical entrepreneurial approach. Previous studies have shown that transformational leadership contributes significantly to the factors of EO (Eyal & Kark 2004; Yang 2008).

Among the various factors affecting the innovativeness of an organisation, the top manager’s leadership behaviour is recognised as being ‘one of the most, if not the most, important’ (Jung et al. 2003, p. 525; Dess & Picken 2000). According to Walumbawa and Lawler (2003), transformational leaders encourage followers to think critically and develop new ideas and approaches to existing practices. In other words, firms that motivate experimentation and change encourage a culture that stimulates an entrepreneurial attitude.

Morris et al. (2007) claimed that entrepreneurship is more consistent with transformational than with transactional leadership. The results from their correlation matrix showed that EO is significantly correlated with both leadership styles, with transformational leadership having a greater value than transactional leadership. They concluded that the more transformational leadership qualities are demonstrated, the more entrepreneurial the organisation tends to be. This is because transformational leadership gives employees more discretion in how to do their jobs. Entrepreneurial firms also tend to have boards of directors that are actively involved in the firm.

Berson et al. (2001) expressed that transformational leadership is helpful for any innovation implemented by an organisation in the era of competition. A
transformational leader can smooth the progress of innovations and changes by valuing the enlargement of the vision and by encouraging subordinates to pursue that vision. Matzler et al. (2008) found that the path coefficients between transformational leadership and innovativeness on the one hand and growth and profitability on the other hand are all positive and significant. This gives a strong indication that the relationship between transformational leadership and organisational performance could be mediated by the presence of EO.

From a sample of 283 respondents from service and manufacturing SMEs in Malaysia, Arham et al. (2012) also found that transformational leadership is related to EO and that EO is significantly related to growth and profitability. Hassim et al. (2011) proposed that appropriate behaviour of the leaders of SMEs is an important factor of a firm’s strategy for enhancing its entrepreneurial stance. Based on these outcomes, the following two hypotheses are proposed:

H7: Entrepreneurial orientation fully mediates the relationship between transformational leadership and growth performance.

H8: Entrepreneurial orientation fully mediates the relationship between transformational leadership and profitability performance.

4.4.3.2 Transactional Leadership, Entrepreneurial Orientation and Organisational Performance

Leadership has implications for the level of entrepreneurship in a firm (Morris et al. 2007). Tarabishy et al. (2005) suggested that the leader and their type of leadership style influence both their subordinates and the organisation’s strategic entrepreneurial
orientation. Their study showed that there is a significant relationship between the CEO’s leadership style, for both transformational and transactional leadership, and an organisation’s strategic entrepreneurial orientation represented by proactiveness, innovation and risk taking.

Transactional leadership implies that a leader has monitoring behaviour which seeks to control others to ensure stability in the workplace and to ensure that procedures are followed (Bass 1985). There are contradictory findings on leadership behaviour and EO in previous studies. Yang (2008) found that transactional leadership has a small positive relationship to EO but in a study conducted by Eyal and Kark (2004), no significant relationship was found between transactional leadership and EO. They claimed that managers who employ transactional leadership behaviour, which is related to managerial stance, are less inclined to be proactive or to encourage innovativeness.

Jung et al. (2008) contended that the leaders of an organisation have a direct influence on organisational performance through their characteristics and behaviour and an indirect influence through the strategic choices they make. EO can be seen as a firm’s strategic choice that captures the specific entrepreneurial aspects of decision-making styles, methods and practices (Wiklund & Shepherd 2005) and it is a key to enhance organisational performance (Covin & Slevin 1989; Lumpkin & Dess 1996).

In the context of of SMEs in Malaysia, Arham et al. (2012) established that transactional leadership is related to EO, and EO is significantly related to growth
and profitability. This perspective supports the development of the final two hypotheses in this study:

**H9**: Entrepreneurial orientation fully mediates the relationship between transactional leadership and growth performance.

**H10**: Entrepreneurial orientation fully mediates the relationship between transactional leadership and profitability performance.

### 4.5 Scope of the Research Framework

Based on the proposed research framework, the following factors define the scope of this framework:

i. This framework only forecasts transformational and transactional leadership at the construct level. The factor-level relationships of other variables are not observed. This means that this study does not separately examine the effects of the four types of behaviour that represent transformational leadership or the three types of behaviour that represent transactional leadership.

ii. The effects of leadership behaviour on employees and leadership outcomes such as satisfaction, extra effort and effectiveness are not observed. This framework only forecasts the perceptions of leaders regarding the effects of their leadership behaviour on growth and profitability.

iii. This framework focuses on SMEs in Malaysia in the service and manufacturing industries only.

iv. This study acknowledges that there are other factors that might influence organisational performance. Besides leadership and EO, other factors such as
culture, strategy and environment have been discussed as affecting outcomes. But in the scope of this study, factors other than leadership and EO are not included in the framework.

4.6 Summary

This chapter has presented and discussed the development of a theoretical framework. Prior to the development of the research framework, two relevant theories of transformational leadership and the RBV were discussed. These theories serve as the foundation of this study. Then the research framework was presented, followed by the definitions of the variables in the framework.

Based on this framework, ten hypotheses were proposed that focus on the relationships between leadership behaviour and organisational performance, EO and organisational performance and the role of EO as a mediator in the relationship between leadership behaviour and organisational performance. The relevant literature and empirical findings to support each hypothesis were reviewed and discussed. The next chapter discusses the justification of the research methodology employed in this study.
CHAPTER 5
RESEARCH DESIGN AND JUSTIFICATION OF RESEARCH METHODOLOGY

5.1 Introduction

The previous chapter presented the research framework for examining the relationships between leadership behaviour, EO and organisational performance. It also summarised the relevant literature that supported the development of the ten hypotheses.

The purpose of this study is to develop a theoretically derived and empirically tested final path model in order to test these relationships. To achieve that, this chapter describes and discusses the research design and methodology adopted in this study. After the introduction, Section 5.2 discusses the research paradigm that supports the selection of the research design and methodology of this study. Section 5.3 provides an explanation of the research design adopted. Steps involved in each stage are discussed. Section 5.4 provides the justification of the research design. Section 5.5 discusses the actions related to quantitative research design and data analysis. Section 5.6 explains the qualitative research design and analysis. Ethical considerations are covered in Section 5.7. Section 5.8 concludes this chapter.

5.2 Research Paradigm

A paradigm can be a conceptual model or a person’s view of the world (Mertens 2003; Guba & Lincoln 1994). Several paradigms could influence the selection of the methodology used in a study. These paradigms are depicted in Table 5.1, which
displays the major elements in different schools of thought on research paradigms, as discussed by Creswell (2003).

**Table 5.1: Alternative Research Paradigms**

<table>
<thead>
<tr>
<th>Postpositivism</th>
<th>Constructivism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determination</td>
<td>Understanding</td>
</tr>
<tr>
<td>Reductionism</td>
<td>Multiple participant meanings</td>
</tr>
<tr>
<td>Empirical observation and measurement</td>
<td>Social and historical construction</td>
</tr>
<tr>
<td>Theory verification</td>
<td>Theory generation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advocacy/Participatory</th>
<th>Pragmatism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political</td>
<td>Consequences of actions</td>
</tr>
<tr>
<td>Empowerment issue oriented</td>
<td>Problem-oriented</td>
</tr>
<tr>
<td>Collaborative</td>
<td>Pluralistic</td>
</tr>
<tr>
<td>Change oriented</td>
<td>Real world practice oriented</td>
</tr>
</tbody>
</table>

Source: Creswell 2003

Postpositivism is sometimes also called the scientific method, positivist research or quantitative research. The term ‘postpositivism’ refers to developments after positivism which challenged the traditional view of the absolute truth of knowledge (Phillips & Burbules 2000). Other researchers question whether a researcher can ever be totally objective (Coffey 1999; Creswell 2003). Coffey, for example, argued that objectivity may perhaps be an illusion for positivist researchers, since in ‘real life’ one does not find out about other individuals by remaining remote from them. In this paradigm, researchers study causes that influence outcomes. Thus, in this method, they begin with a theory, collect data related to the theory that either support or reject their hypotheses, then make necessary revisions before conducting additional tests (Cresswell 2003). In a different paradigm, the constructivist paradigm, the
researcher’s aim is to make sense of the meanings others have about the world. They inductively generate and develop a theory or pattern of meaning.

The advocacy/participatory approach is another school of thought. It sees enquiry needs as entwined with politics and a political agenda. Thus, research should incorporate an action agenda for reforms that may change the lives of the participants and the researcher, and may change the institutions in which the participants work and live. Finally, pragmatism is a school of thought that is not committed to any one system of philosophy or reality. It applies to mixed methods research in that researchers draw conclusion from quantitative and qualitative data. According to this school of thought, the researcher is free to choose the methods, techniques and procedures that best meet their purposes and demands. The world is not viewed as an absolute unity. Pragmatists view the truth as being what works at the time; it is not based on a strict dualism between the mind and reality (Creswell 2003; Cherryholmes 1992).

Research is about asking questions and finding information to answer the questions that we pose (Mukherji & Albon 2010). The selection of a research paradigm for this study was influenced by the research questions proposed in this study (see Section 1.5). To find answers to those research questions, this study adopts the pragmatic research paradigm. Pragmatism has elements of both positivism and constructivism (Healy & Perry 2000). Under this paradigm, this study adopts a combination of methodologies with the aim of providing the best understanding of the research problems (Creswell 2003).
The positivist element requires a scientific, systematic approach to research that leads this research to the quantitative methodology, which is the main method of data collection in this study. In this approach, researchers focus on the confirmatory stages of the research cycle that consist of the formulation of hypotheses and the collection of numerical data to test those hypotheses (Mukhreji & Albon 2010). Sale et al. (2002) also suggested that the quantitative paradigm is derived from positivism. In addition, Sobh and Perry (2006) agreed that the use of quantitative methods for theory formulation and model testing validates the positivist approach.

The constructivist approach leads to the use of qualitative methods to understand a particular phenomenon in its social context. The use of semi-structured interviews as a secondary source of data enhances the findings from the quantitative outcomes. Thus the pragmatic stance adopted in this study allows for the application of methods and a philosophy to fit together the factual results provided by quantitative research and the insights provided by qualitative research to produce practical and feasible solutions (Johnson & Onwueguzie 2004).

5.3 Research Design

This study employs mixed methods research, a combination of quantitative and qualitative approaches to data collections and analysis. Mixed methods research has evolved to a point where it is a distinct methodological orientation with its own world view, vocabulary and techniques. In this research, the researcher combines quantitative and qualitative research techniques, methods, approaches, concepts and language in a single study (Tashakkori & Teddlie 2003; Johnson & Onwuegubuzie 2004).
According to Cassell and Symon (1994), quantitative approaches alone are unable to assess how and why a change has occurred and therefore qualitative data is also needed. For example, the results from quantitative data may describe the strength or the extent of the relationships between variables. But why two independent variables might have different effects on a dependent variable could be explained only through the use of qualitative data. Thus, mixed methods can be defined as ‘research in which the investigator collects and analyses data, integrates the findings, and draws inferences using both qualitative and quantitative approaches and methods in a single study or a program of inquiry’ (Tashakkori & Creswell 2007, p. 4).

There are several types of mixed method designs. This study adopts the sequential explanatory design. In this research design, the researcher collects and analyses the quantitative data and then the qualitative data in two consecutive stages (Ivankova et al. 2006). This approach was selected to provide a broad and in-depth understanding of the relationships between the variables in this study.

In this study, the role of the quantitative data is to test the proposed hypotheses and, most importantly, to provide answers to the research questions. In accordance with the purpose of mixed methods research design proposed by Creswell (2003) and Tashakkori and Teddlie (2003), the role of the qualitative data in this study is to confirm and to expand on the understanding obtained from the quantitative findings. In this instance, the purpose of obtaining qualitative data is to gain insights into the factors which influence hypothesised situations. For example, in the interviews, respondents were asked whether or not they thought their leadership behaviour contributed to organisational performance. If they said not, they were allowed to
explain the other factors that they considered more critical for organisational success.

Figure 5.1 depicts the sequential model adopted in this study and Figure 5.2 provides a snapshot view of the research design and the detailed stages involved in this study.

Figure 5.1: Sequential Explanatory Design

Source: Adopted from Creswell & Clark (2007)
Figure 5.2: Stages of Research Design

Stage 1: Literature review and research design
- Literature review in broad area of study
  - Literature review of leadership behaviour
  - Literature review of entrepreneurial orientation
  - Literature review of organisational performance
  - Identify research problem
  - Identify key constructs
  - Develop research framework
  - Develop research questions and hypotheses

Stage 2: Quantitative data collection and analysis
- Develop questionnaire
  - Pilot questionnaire
  - Refine questionnaire
  - Administer questionnaire
  - Data entry and cleaning
    - EFA, CFA and SEM
  - Hypothesis testing
- Operateionalise key construct
- Develop sample frame
- Qualitative data collection
- Stage 3: Qualitative data collection and analysis
  - Development of interview protocol
  - Pilot interview
  - Interview participants
  - Data analysis: Thematic analysis
  - Interpret and report findings: Quantitative and Qualitative

Source: Adapted from Neuman (2006); Creswell & Clark (2007)
Before collecting quantitative data, this research began with an extensive review of the literature in the areas of leadership, entrepreneurial orientation and organisational performance (see Figure 5.2). The literature review facilitated the development of the conceptual model and the formulation of the research objectives, research questions and hypotheses. Then the final constructs to be included in the model were operationalised and the research instruments were developed. The final process was the identification of sampling frames to be used in data collection.

The second stage of the research design was the pilot test and quantitative data collection and analysis. Pilot testing was conducted to ensure the clarity and accuracy of the translated questionnaire and to obtain feedback on its format, design, clarity, understanding and the ease and time for completion. Several modifications were made to refine the survey questionnaire for use in the data collection stage. Details of the pilot testing are in Section 5.5.9. The administration of questionnaires involved the distribution of survey questionnaires to potential respondents. After obtaining the required number of respondents based on the population of this study (see Section 5.5.4), data analysis was preceded by data entry and data cleaning, and followed by quantitative analysis to test the proposed hypotheses. Exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and structural equation modelling (SEM) were conducted to examine the proposed relationships.

Methods chosen by researchers should be able to address their research questions (Punch 2003). Creswell (1994) mentioned that quantitative approaches to scientific inquiry generally rely on testing theoretical propositions. The quantitative research method is suggested when the research is designed to investigate causal relationships.
between underlying variables (Neuman 2011). Quantitative research enables the researcher to establish statistical evidence of the strengths of the relationships between independent and dependent constructs (Amaratunga et al. 2002). Furthermore, these authors suggested that the statistical results from quantitative research show the directions of relationships and can be used to verify hypotheses. Therefore, in order to answer the research questions in this study and to develop a theoretically derived and empirically tested final path model to test the proposed hypotheses, the quantitative approach to data collection and analysis seemed to be the most appropriate method for this study. In addition, researchers on leadership typically adopt quantitative approaches (Antonakis et al. 2004). Based on the content analysis by Lowe & Gardner (2001) of 188 articles published in The Leadership Quarterly until 1999, 71% of this type of research used quantitative approaches. There were about 40 qualitative studies but only 13 of those had employed mixed methods research.

The third stage was qualitative data collection. Four activities are involved in this, beginning with the development of the interview schedule (see Appendix G). Then, pilot interviews were conducted to identify any flaws, mistakes or weaknesses in the design of the interview questions. Some modifications were consequently made to the interview questions. A total of nine semi-structured interviews were scheduled and carried out to compare with the findings obtained from the analysis of the quantitative data. Semi-structured interviews were employed since they involve an in-depth examination of the respondents and the topics (Minichiello et al. 1995). Interview data were analysed by using thematic analysis.
There is a growing interest in studying leadership and entrepreneurship from a qualitative perspective (Arham & Sulaiman 2013; Murphy & Ensher 2008). Parry (2006) indicated that for many years organisational leadership research has been dominated by quantitative methods. But this scenario is beginning to change. Conger and Toegel (2002) proposed three reasons for the qualitative method being an important tool for leadership research. First, the qualitative method can help us to understand how leadership is exercised differently at various organisational levels. Second, due to the dynamic process of leadership, this tool can add a depth and richness that is lacking in data gathered from survey questionnaires. Third, the qualitative approach assists in understanding a construct from multiple perspectives. Thus, the second and third reasons matched the purposes of collecting qualitative data in this study.

The final stage involved the interpretation and reporting of findings obtained from quantitative and qualitative data collection. The results are presented in Chapter 6.

5.4 Justification of Research Design

There are several elements of research design discussed by Sekaran and Bougie (2010) that need to be considered by a researcher. These essential elements are the following:

i) Purpose of study

ii) Type of investigation

iii) Extent of researcher interference

iv) Study setting

v) Unit of analysis
vi) Time horizon of study

Table 5.2 indicates how these elements are involved in this study.

<table>
<thead>
<tr>
<th>Elements of research design</th>
<th>Application in this study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose of study</td>
<td>Hypothesis testing</td>
</tr>
<tr>
<td>Type of investigation</td>
<td>Correlational</td>
</tr>
<tr>
<td>Extent of researcher interference</td>
<td>Minimal</td>
</tr>
<tr>
<td>Study setting</td>
<td>Non-contrived; field study</td>
</tr>
<tr>
<td>Unit of analysis</td>
<td>Organisational level</td>
</tr>
<tr>
<td>Time horizon</td>
<td>Cross-sectional</td>
</tr>
</tbody>
</table>

Source: Sekaran & Bougie (2010)

The main purpose of this study is to empirically test the ten hypotheses as proposed in Chapter 4. The quantitative approach was included to explain the nature of certain relationships between two or more variables or to predict organisational outcomes. When the researcher is interested in describing or explaining the important variables associated with an issue, this is referred to as a correlational study (Sekaran & Bougie 2010). This study examines the correlation effects of leadership behaviour and EO on the organisational performance of SMEs.

The extent of interference by the researcher can be categorised into minimal, moderate and excessive interference. A correlational study involves minimal interference by the researcher with the normal flow of work and is conducted in a natural setting (Sekaran & Bougie 2010). Since this study was done in a natural environment where work proceeds normally, it is referred to as non-contrived setting.
The correlational studies conducted in organisations are classified as field study (Sekaran & Bougie 2010).

The unit of analysis is at the organisational level since the concern of this study is to examine whether the performance of an organisation is influenced by leadership behaviour and EO. The owners or top managers of SMEs in the service and manufacturing industries are the target population of this study. Wiklund (1999) claimed that the strategic orientation of the chief executive officer is likely to represent the strategic orientation of the firm. Finally, this study is a cross-sectional study, in which data are gathered just once (Sekaran & Bougie 2010). Cross-sectional surveys provide the opportunity to assess the relationships between variables (Reis & Judd 2000) and have been identified as the most popular form of survey method (Zikmund 2003). A cross-sectional survey is also less expensive and time-consuming than a longitudinal study and for that reason too it has been employed in this study.

The sections that follow explain and justify the elements involved in both quantitative and qualitative data collection and analysis. It begins with the main source of data, the quantitative survey.

5.5 Quantitative Data Collection

5.5.1 Population

The three main sectors of SMEs in Malaysia are manufacturing, services and agriculture. Mining and construction are also considered Key Economic Activities that contribute to the GDP of Malaysia. Table 5.3 presents the number of
establishments in the three main sectors of SMEs and Table 5.4 presents the contribution of SMEs to GDP based on key economic activities.

### Table 5.3: Number of Establishments by Sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
<th>Total SMEs</th>
<th>Total SMEs</th>
<th>% Share</th>
<th>Number</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>21,516</td>
<td>15,796</td>
<td>2,061</td>
<td>39,373</td>
<td>7.2</td>
<td>1,420</td>
<td>40,793</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>381,585</td>
<td>83,037</td>
<td>10,084</td>
<td>474,706</td>
<td>86.6</td>
<td>2,819</td>
<td>477,525</td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>31,838</td>
<td>1,775</td>
<td>575</td>
<td>34,188</td>
<td>6.2</td>
<td>343</td>
<td>34531</td>
<td></td>
</tr>
<tr>
<td>Total SMEs</td>
<td>434,939</td>
<td>100,608</td>
<td>12,720</td>
<td>548,267</td>
<td>100.00</td>
<td>4,582</td>
<td>552,849</td>
<td></td>
</tr>
</tbody>
</table>

Source: National SME Development Council 2010

### Table 5.4: Contribution of SMES to GDP by Key Economic Activity

<table>
<thead>
<tr>
<th>YEAR</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>% share to GDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>2.4</td>
<td>2.4</td>
<td>2.2</td>
<td>2.3</td>
<td>2.4</td>
</tr>
<tr>
<td>Mining &amp; Quarrying</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>Construction</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.9</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>9.0</td>
<td>9.2</td>
<td>9.2</td>
<td>8.7</td>
<td>8.1</td>
</tr>
<tr>
<td>Services</td>
<td>17.3</td>
<td>17.6</td>
<td>18.7</td>
<td>19.4</td>
<td>20.1</td>
</tr>
</tbody>
</table>

Source: National SME Development Council 2010

The population of this study comprises the small and medium-sized categories of SMEs in the manufacturing and service sectors in Malaysia (see Table 1.1 for definitions of small and medium-sized SMEs). This population is chosen because these are the two main industries of SMEs that contribute to the development of the economy in Malaysia (see Table 5.4). The micro-enterprise category of SMEs is not
included in this study. As shown in Table 5.3, there are currently 17,857 manufacturing establishments and 93,121 service establishments of SMEs in the country. The total of these two categories, 110,978 enterprises, is used in this study as the entire population.

5.5.2 Sampling

According to Sekaran and Bougie (2010), sampling involves the process of selecting a sufficient number of the target population so that a generalisation can be made to the whole population. The manner in which samples are taken influences the accuracy of the survey results and their generality.

Since this study examines the leadership behaviour of entrepreneurs, the owners or the top managers of SMEs were selected as the target sample of the population. This decision was made due to owners’ or top managers’ knowledge and expertise regarding the establishment, operation and direction of their firms. Owners and top managers are also the most informed individuals about their firm’s overall operational activities (Yang 2008). The decision to rely on the single respondent approach was also based on the size of the firm and the respondent’s familiarity with the research topic and the information sought. More explicitly, the views of a single respondent when he or she is the owner or top manager are likely to represent those of the firm (Lyon et al. 2000). In addition, according to Isobe et al. (2004), small and medium-sized enterprises tend to have a relatively limited number of core products and technology and therefore the owners or managers of SMEs are likely to have a clear understanding of their business operation, consequently enhancing the accuracy of their responses.
5.5.3 Sampling Frame

A sampling frame is a representation of the elements of the population. Sekaran and Bougie (2010) defined a sampling frame as ‘a physical representative of all elements in the population from which the sample is drawn’ (p. 267). This physical representative could be a company database, random-digit dialling or a membership roster (Hair et al. 2000). It consists of a list or set of directions for identifying the target population. For this study, lists of SME establishments were obtained from the SME Corp. Malaysia at http://www.smecorp.gov.my and also at http://www.smeinfo.com.my. The researcher was able to access information that included the name of the company, e-mail address, industry type or specialisation, postal address, website and telephone numbers.

5.5.4 Sampling Technique

There are two basic types of sampling design: probability and nonprobability sampling. In probability sampling, every unit of the population has some known, non-zero chance or probability of being chosen as a sample subject. It is used when the representativeness of the sample is important for generalisations. In nonprobability sampling, the elements of the population do not have a known or predetermined chance of being selected as subjects. It is used when time or other factors are more important than generalisability (Sekaran & Bougie 2010).

In this study, probability sampling, in which each member of the population has an equal chance of being selected for the sample, was employed (Jackson 2008). Specifically, the type of probability sampling used in this study was simple random sampling. Since this study intended generalisation to the entire population, simple
random sampling seemed appropriate. Simple random sampling is a technique where every unit in the population has a known and equal chance of being chosen for the sample (Jackson 2008; Sekaran & Bougie 2010).

5.5.5 Sample Size

When calculating the sample size, the most appropriate size is an important decision to be made. If too large, the sample might lead to inefficiencies and wastage of resources. Yet too small a sample will yield information that might not be valid for making inferences about the population. Roscoe (1975) suggested that a rule of thumb for determining sample size is that a sample size of between 30 and 500 is suitable for most research. To ensure a good decision, Krejcie and Morgan (1970) simplified the model for the sample size needed given the number of population for research. Based on the table they proposed, this study required a sample size of 384 to represent the entire population (see also Sekaran & Bougie 2010).

The use of SEM as the main analytical procedure in this study also required a careful decision in regard to the sample size. Hair et al. (1998) recommended that the sample should be at least 100 observations to obtain reliable results. Recent recommendations suggest a critical sample size of 200 to provide sufficient statistical power for data analysis and to obtain reliable results (Yuksel et al. 2010; Hoe 2008). Researchers have also strongly suggested avoiding a small sample size when using SEM since this might create problems and provide unstable results (Gerbing & Anderson 1988; Fornell & Larcker 1981). Since this study uses a maximum likelihood estimation in SEM, the target of 384 samples also seemed to fit well with the requirement of sample size for SEM.
5.5.6 Recruitment Strategy

Two strategies were adopted to recruit the intended number of respondents for the sample. The first strategy was a web-based survey and the second strategy was self-administered questionnaires distributed through the training programs, seminars and other events organised by the SME Corp. Malaysia and other agencies such as the Malaysian Institute of Management and Majlis Amanah Rakyat (MARA). These agencies provide training and seminars for the entrepreneurs registered with SME Corp. Malaysia.

Details of SMEs in the manufacturing and service sectors were assessed through the databases provided by SME Corp. Malaysia at http://www.smecorp.gov.my and at http://www.smeinfo.com.my. A letter of approval from SME Corp. Malaysia to access these databases is attached as Appendix B. For the web-based survey, in order to obtain the intended number for the sample, a total of 1000 individuals were first identified, considering the possibility of a low response rate from the target population (Hunt & Chonko 1987). 50% of the SMEs were selected from the manufacturing sector and 50% from the service sector, based on the sampling technique chosen. The questionnaire was distributed to them by e-mail.

The researcher anticipated that the response from the online survey might be very low. Therefore, three follow-up e-mail reminders were scheduled and sent. Follow-up telephone calls were also made to increase the response rate. In case the response was still inadequate, the researcher had planned another approach to data collection and this second strategy for reaching the population of this study was required. During the period of collecting data from the online approach, the researcher initiated...
direct contact with the SME Corp. Malaysia and several other entrepreneurial
development agencies to obtain permission to distribute survey questionnaires during
events, seminars and training programs organised by them. Positive feedback was
received from some of those agencies, which were willing to assist with the
distribution and collection of the survey questionnaires.

For those who were willing to assist in the distribution of the survey questionnaires,
there was a further discussion with the main contact person of each agency or
department. In this discussion, the researcher further explained the purpose of
conducting the survey, the respondents targeted for the survey, the role of the person
who would be distributing the survey and the timing for the survey to be distributed.
Copies of the survey questionnaire were provided to them based on the expected
number of participants for each program or event.

5.5.7 Research Instrument

A self-reporting instrument was developed for this research in the form of a
questionnaire containing a total of 60 items in five sections: leadership behaviour (32
items), EO (11 items), organisational performance (8 items), background of
business/participant (8 items) and participant’s willingness to participate in a future
interview with the researcher (1 item).

Section 1 contains the measurements for leadership behaviour that were adopted
from the Multifactor Leadership Questionnaire (MLQ) by Bass and Avolio (2004).
They were measured on a five-point Likert scale that ranged from 0 (Not at all) to 4
(Frequently, if not Always).
Section 2 measures the EO construct, which in this study comprises the initial factors developed by Miller (1983): innovativeness, proactiveness and risk taking. The measurement of these factors was adopted from Covin and Slevin (1989) and Wang (2008).

Section 3 measures the organisational performance construct through growth and profitability. The measurement of these factors was adopted from Matzler et al. (2008) and Tan (2007). To standardise the scaling format of the research instrument, all items for EO and organisational performance were also measured on five-point Likert scales ranged from 0 (Strongly Disagree) to 4 (Strongly Agree). (A copy of the survey questionnaire is in Appendix E.)

Section 4 asks for demographic information and business background of the respondents. Eight questions are in four different categories. These questions were asked to obtain information about the background of the respondents and their businesses which could be used to enhance the outcomes of this study. The demographic questions are listed in Table 5.5.

The final section of the survey questionnaire asks whether the respondent would be willing to participate in an interview with the researcher. If he or she agrees, they are required to provide further contact details in the section provided. If not, that is the end of the survey questionnaire.
Table 5.5: Questions on Background of Respondent

<table>
<thead>
<tr>
<th>Categories of Questions</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Questions</td>
<td>Age</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
</tr>
<tr>
<td></td>
<td>Race</td>
</tr>
<tr>
<td>Role of Respondent</td>
<td>Position in Organisation</td>
</tr>
<tr>
<td></td>
<td>Education Level</td>
</tr>
<tr>
<td>Type of industry</td>
<td>Which industry that is best to describe your organisation?</td>
</tr>
<tr>
<td>Firm size</td>
<td>What is your sales turnover last year?</td>
</tr>
<tr>
<td></td>
<td>How many full time employees do you have?</td>
</tr>
</tbody>
</table>

The following sections present a detailed explanations of the measurements selected for each of the variables in this research.

5.5.7.1 Leadership Behaviour Measures

In the organisational sciences, the Multifactor Leadership Questionnaire (MLQ) is the most commonly used instrument for measuring transformational and transactional leadership behaviour (Tejeda et al. 2001; Muenjohn & Armstrong 2007). The researcher has obtained permission from Mind Garden to use the MLQ Leader 5X short form that consists of 45 items. Only 32 items representing transformational and transactional leadership were included in the questionnaire. The remaining items were excluded from this study since they are used to measure laissez-faire leadership and leadership outcomes, which are not included in the scope of this study.

Twenty questionnaire items in total measure four types of behaviour of transformational leadership. Eight items measure idealised influence. There are four items to measure each of the following: inspirational motivation, intellectual stimulation and individualised consideration. Twelve items in total measure three
types of behaviour of transactional leadership. There are four items to measure each of the following: contingent reward, management-by-exception (active) and management-by-exception (passive). Due to the copyright issue, the researcher can only present samples of the items used in this research (see Table 5.6). It is not permitted to include all the items used in the survey. The scale used is: 0=Not at all, 1=Once in a While, 2=Sometimes, 3=Fairly Often and 4=Frequently, if not Always.

Table 5.6: Samples MLQ Items

<table>
<thead>
<tr>
<th>Leadership Behaviour</th>
<th>Behaviour</th>
<th>Sample Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational</td>
<td>Idealised influence</td>
<td>I talk about my important values and beliefs.</td>
</tr>
<tr>
<td>behaviour</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intellectual</td>
<td>I re-examine critical assumptions to question whether they are appropriate.</td>
</tr>
<tr>
<td></td>
<td>stimulation</td>
<td></td>
</tr>
<tr>
<td>Transactional</td>
<td>Contingent reward</td>
<td>I provide others with assistance in exchange for their efforts.</td>
</tr>
<tr>
<td>leadership</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Management-by-</td>
<td>I focus attention to irregularities, mistakes, exceptions and deviations</td>
</tr>
<tr>
<td></td>
<td>exception (active)</td>
<td>from standards.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


5.5.7.2 Entrepreneurial Orientation Measures

As mentioned previously, the items used to measure EO were adopted from the factors developed by Miller (1983) that consist of innovativeness, proactiveness and risk taking. The measurement of these factors was adopted from Covin and Slevin (1989) and Wang (2008). The EO scale that consists of these three factors is the most widely used measure of EO in entrepreneurship literature (Runyan et al. 2012). Table 5.7 shows the questionnaire items used to assess EO. Four items measure innovativeness, four items measure proactiveness and three items measure risk
taking. The scale used was: 0=Strongly disagree, 1=Disagree, 2=Neither agree or disagree, 3=Agree and 4=Strongly agree.

**Table 5.7: Items for Entrepreneurial Orientation**

<table>
<thead>
<tr>
<th>Innovativeness (Inn)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>My company has marketed many new lines of products or services.</td>
</tr>
<tr>
<td>Q4</td>
<td>I believe that changes in the product/service lines in my company have been mostly minor in nature(^a).</td>
</tr>
<tr>
<td>Q6</td>
<td>In general, I favour a strong emphasis on research &amp; development, technological leadership and innovations.</td>
</tr>
<tr>
<td>Q8</td>
<td>I am willing to try new ways of doing things and seek unusual, novel solutions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proactiveness (PA)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3</td>
<td>In dealing with competitors, my company typically responds to actions which competitors initiate(^a).</td>
</tr>
<tr>
<td>Q5</td>
<td>In general, I like to anticipate events occurring related to my job(^b).</td>
</tr>
<tr>
<td>Q9</td>
<td>In dealing with competitors, my company typically initiates actions which competitors then respond to.</td>
</tr>
<tr>
<td>Q11</td>
<td>In dealing with competitors, my company is very often the first to introduce new products and administrative techniques.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk Taking (RT)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2</td>
<td>My company has a strong proclivity/tendency for high risk projects (with chances of very high returns).</td>
</tr>
<tr>
<td>Q7</td>
<td>When confronted with decision making situations involving uncertainty, my company adopts a bold strategy in order to maximise the probability of exploiting opportunities.</td>
</tr>
<tr>
<td>Q10</td>
<td>When confronted with decision making situations involving uncertainty, my company adopts a cautious ‘wait-and-see’ strategy(^b).</td>
</tr>
</tbody>
</table>

Remarks: \(^a\)Indicates reverse items for quantitative analysis  
\(^b\)Developed by the researcher

Sources: Covin & Slevin (1989) and Wang (2008)

### 5.5.7.3 Organisational Performance Measures

The following table shows the questionnaire items used to measure organisational performance. These measures are used to assess the two factors of performance. Four items measure growth and four items measure profitability, adopted from Matzler et
al. (2008) and Tan (2007) with some modifications to fit the context of this study. For example, Item 8 asks respondents to evaluate their growth during the past three years. Carneiro et al. (2007) suggested that a three-year time frame seems reasonable for assessment of past performance by leaders of organisations. The scale used is: 0=Strongly disagree, 1=Disagree, 2=Neither agree or disagree, 3=Agree and 4=Strongly agree.

**Table 5.8: Items for Organisational Performance**

<table>
<thead>
<tr>
<th>Profitability (PROF)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>We are satisfied with the return on our investments.</td>
</tr>
<tr>
<td>Q3</td>
<td>We have higher return on investment (than our competitors).</td>
</tr>
<tr>
<td>Q5</td>
<td>We are satisfied with our return on sales.</td>
</tr>
<tr>
<td>Q7</td>
<td>In general, my company has achieved a very positive financial outcome*.</td>
</tr>
<tr>
<td>Growth (GR)</td>
<td></td>
</tr>
<tr>
<td>Q2</td>
<td>The growth of our company is above average.</td>
</tr>
<tr>
<td>Q4</td>
<td>Our growth is satisfying.</td>
</tr>
<tr>
<td>Q6</td>
<td>Our market shares are increasing faster than those of our competitors.</td>
</tr>
<tr>
<td>Q8</td>
<td>My company is growing steadily for the past three years*.</td>
</tr>
</tbody>
</table>

Remark: *Developed by the researcher

Source: Matzler et al. (2008) and Tan (2007)

5.5.8 Scaling of Measures

The use of a Likert scale is quite common in leadership, entrepreneurship and social science studies in general. Hinkin (1995) noted that over the past several decades, many scales have been developed to measure various attitudes, perceptions and opinions of people in all walks of life. It is also common practice for surveys to be adopted by leaders of organisations as a source of information for decision making. A five-point scale is used in this study because research shows that a five-point scale is
as good as any, and that an increase from a scale of five to a scale of seven or nine points does not improve the reliability of the ratings (Elmore & Beggs 1975).

5.5.9 Pre-testing and Pilot Testing

To strengthen the content validity of the survey instruments, a pre-test was conducted prior to the pilot survey. This was done by observing the degree of relevance of each variable item and receiving feedback from an industry expert to confirm the acceptability of proposed items and questions from a practical perspective. Items which were found to be misleading or confusing were modified and an unimportant item was eliminated.

The initial survey instruments were originally developed in English, then they were translated into Bahasa Melayu, the Malaysian native language or the official language of Malaysia to be used in this study. Even though Bahasa Melayu is the official language, English has been widely spoken and accepted as the means of business communication. Thus it is expected that the entrepreneurs in Malaysia should be able to understand the survey instruments provided in English as well as Bahasa Melayu. The translation procedure followed the guidelines established by Brislin (1980, 1986) in regard to the double-back translation procedure. All items translated into Bahasa Melayu were then translated back into English by the researcher and then they were submitted to the National Translation Institute of Malaysia for a final review of the translation.

The translated version of the questionnaire was then further discussed with an expert from the industry who manages and organises training for SMEs in the country. His
views on the choice of wording and sentence structure were much appreciated since he has the experience of involvement with entrepreneurs and entrepreneurial development in the country. Then, final modifications were made accordingly to the translated version of the questionnaire. The English version of the questionnaire was finalised with the principal and second supervisors of the study.

To ensure that the items translated into Bahasa Melayu measured the same constructs, the questionnaire was compared with the original one written in English. There was no significant difference. Sayuti (2013) indicated that providing a translated version of a questionnaire in Bahasa Melayu guarantees clear communication with the respondent in Malaysia. A copy of the Malay version of the questionnaire is attached as Appendix F.

A pilot test was then conducted with 15 international higher degree students who are proficient in both languages to ensure the clarity and accuracy of the translated questionnaire and also to monitor the time allocation needed to complete the survey. A pilot test can also reveal any deficiency in the design of survey instruments so that this issue can be addressed before the actual research is carried out. Those 15 respondents were a convenience sample selected by the researcher due to their proficiency in both languages (English and Malay). The university students were found to have similar views on motivations and barriers to entrepreneurship (Pruett et al. 2009) and therefore their responses were significant for the purpose of the pilot study. Zainuddin and Ismail (2009) argued that students who enroll in business-related programs have career interests skewed towards business-related fields.
5.5.10 Data Analysis

There were four stages involved in data analysis: data screening, exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and path analysis. Data were analysed using PASW 18.0 and Amos 18.0. PASW 18.0 (formally referred to as Statistical Package for Social Science or SPSS) was used to conduct data cleaning, preliminary analysis of data and EFA. PASW is a powerful, user-friendly software package for the manipulation and statistical analysis of data used in social science research (Landau & Everitt 2004; Miller & Acton 2009). Amos 18.0 (Analysis of Moment Structures) was used to perform structural equation modelling (SEM) through CFA and the development of path analyses for testing the hypotheses. SEM has become a popular technique for researchers across a variety of disciplines and progressively is a ‘must’ for research in the social sciences (Hooper et al. 2008).

The following steps of data analysis were performed sequentially:

i. EFA with principal component analysis (PCA) and varimax rotation to identify factors
ii. an examination of correlation matrices
iii. CFA with multi-factor measurement models
iv. construct reliability and validity of each factor
v. composite variable calculation based on congeneric measurement models
vi. path analysis for hypothesis testing
5.5.10.1 Exploratory Factor Analysis

The primary objective of using EFA is to determine the number of common factors influencing a set of measurements. Kahn (2006) suggested that EFA facilitates the identification of the factors that explain the covariances among variables. Principal component analysis (PCA) with varimax rotation was used for factor analysis. PCA, which is the most popular factor extraction model (Conway & Huffcutt 2004), is concerned with which linear components exist within the data and how a particular variable contributes to that component. It involves a variable reduction technique which reduces the number of observed variables to a smaller number of principal components which account for most of the variance of the observed variables (Suhr 2005).

Varimax rotation is used to derive factor loadings and it is the most common rotation method. It involves an orthogonal rotation of the factor axes to maximise the variance of the squared loadings of a factor (column) on all the variables (rows) in a factor matrix. This orthogonal technique is widely used since it simplifies the factor matrix and also interpretation (Churchill 1979; Hair et al. 2010). A varimax rotation produces results which it make it easy to identify each variable with a single factor. Basilevsky (1994) suggested that orthogonal was preferred to oblique rotations when the underlying constructs are considered to be independent. Finally, this type of rotation provides solutions that are clearer for interpretation and reporting.

Conway and Huffcutt (2004) identified several purposes for conducting EFA. The first reason is for data reduction and the second reason is to understand latent constructs. In data reduction, the research aims to reduce a fairly large set of
variables to a manageable number while retaining as much of the original variance as possible. For understanding latent constructs, EFA is used for the preliminary evaluation of variables, which assists in preparation for the testing of the hypotheses, which is the central purpose of most studies. For these reasons, EFA was performed in this study. In addition, EFA has been widely applied in business and marketing research relating to the constructs used in this study, such as transformational leadership, transactional leadership and EO (Costello & Osborne 2005; Boonyachai 2011; Awang et al. 2010).

Criteria for Factors Extraction in Exploratory Factor Analysis

To decide how many factors to retain, several criteria were observed when extracting factors: (1) items’ loadings (items with loadings less than 0.30 and loaded on multiple factors were removed during the EFA process); (2) eigenvalues (Kaiser 1960) (The Kaiser rule states that all components with eigenvalue less than 1.0 should be dropped.); (3) variance percentage (solutions accounting for at least 50% of the total variance); (4) scree plot; and (5) prior research (Hair et al. 2005).

Eigenvalues measure the variance in all of the variables accounted for by each factor. The ratio of eigenvalues represents the ratio of the explanatory importance of the factors relative to the variables. When a factor has a low eigenvalue, that factor is contributing little to the explanation of variances in the variables and therefore it can be ignored as redundant. The Kaiser criterion is to drop all components with eigenvalues less than 1.0. However, that should not be the only cut-off point as eigenvalues often over-extract the true number of factors (Bandalos & Boehm-
Kaufman 2009). Jolliffe (1986) criticised the Kaiser criterion as being too strict and recommended retaining all factors with eigenvalues of 0.7 and above.

5.5.10.2 Confirmatory Factor Analysis

CFA is used as a statistical technique to confirm the factor structure of a set of observed variables. CFA allows the researcher to test the hypothesis that a relationship exists between the observed variables and their principal latent construct (Suhr 2006). It involves the development of measurement models based on theoretical principals that represent the relationships between the observed items and the latent constructs that they are supposed to represent. The results developed from the measurement models through CFA are also used to examine internal consistency (construct reliability) and distinct validity (variance extracted), to calculate composite weighted scores and to test for convergent and discriminant validity.

To build the measurement models for each of the constructs, Amos 18.0 was used and path analysis was performed to test all the hypotheses proposed in this study. In each measurement model, the ellipses represent latent variables and the rectangles represent scale items. The observed variables are connected to the latent variables by a double-headed arrow, which reflects the theoretical relation to the construct. The values placed on top of each connecting arrow represent loading coefficients. The value for loading coefficients should be between 0 and 1 and it denotes the correlation with the construct. The response error (e.g., e3), represented in a circle for each of the measurement item, represents the portion of the variable that does not measure the hypothesised variable. Values placed on each of the observed variables
indicate the variance of each item and show the reliability of the measurement items (Schumacker & Lomax 1996).

As suggested by Arbuckle (1998), the use of modification indices (MI) in Amos could improve the fit of tested models by correlating selected parameters in the models. A modification index represents the reduction in the value of chi square when the parameter is estimated or freed in a subsequent revised model (Hair et al. 2010). This modification strategy helps to improve the overall structural validity without having to change the original factor models (Arbuckle 1998). Therefore, this strategy was used.

A two-stage approach of SEM as suggested by Anderson & Gerbing (1988) was adopted. In this approach, CFA was first conducted for each construct to determine the uni-dimensionality and model fit, including measuring internal consistency, convergent validity and discriminant validity. Second, SEM was conducted through path analysis to test the proposed hypotheses. The results of both analyses are presented in Chapter 6.

5.5.11 Evaluation for Goodness-of-fit

To assess the goodness-of-fit for the hypothesised models, multiple criteria were examined. These fit criteria are important to determine the congruence between the theoretical model and the sample data. The determination of a model fit is not as easy and straightforward as in other multivariate statistical tests. To identify a correct model given the sample data, there is no single statistical test of significance for SEM
fit indices, especially given the existence of equivalence or alternative models that yield exactly the same data-to-model fit (Schumacker & Lomax 2004; Byrne 2010).

Once the researcher has achieved a specified theoretical model, he or she needs to test for its plausibility based on the sample data for the purpose of evaluating the adequacy of the congruence between the hypothesised model and the sample data (Byrne 2001). The most important task of the estimation process in SEM is to minimise the discrepancy between the predicted covariance matrices.

Many criteria are used to measure goodness-of-fit. Each model-fit measure is unique and they can be categorised into three categories: absolute, incremental and parsimony-fit (Byrne 2010; Hair et al. 2010). Hair et al. (2010) also indicated that it is acceptable to combine various model-fit criteria to evaluate global-fit measures. It is important to decide on the use of one or more appropriate fit indices, as some critical factor may influence the performance of fit indices on evaluating model fit (Hu & Bentler 1995, 1999).

In every selection of categories, there are different fit indices and some rules of thumb about the required minimum level of score/value for acceptable suitability (Byrne 2001). Kline (2005) concluded that many different fit indices have some problems in the evaluation process since there is no single standard or criterion that has been used in journals and applied by reviewers. Each reports their own preferred indices (Maruyama 1998). For example, Kenny and McCoach (2003) maintained that there is no consistent standard for evaluating an acceptable model, and they used only CFI, TLI, and RMSEA as common fit indices. In evaluating the structural validity of MLQ, Muenjohn and Armstrong (2008) used only the CMIN ($\chi^2$/df), GFI, AGFI and
RMSEA. In this study, the following are considered to evaluate fit indices: RMSEA, GFI, AGFI, CFI and CMIN ($\chi^2$/df). Table 5.9 summarises the criteria used to measure overall fit of the model.

Table 5.9: Criteria Used for Model Fit

<table>
<thead>
<tr>
<th>Fit indices</th>
<th>Acceptable value</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Absolute Fit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goodness-of-fit Index (GFI)</td>
<td>Values close to 0.9 reflects a good fit</td>
<td>Thadani &amp; Cheung (2011)</td>
</tr>
<tr>
<td>Root Mean Square Error Approximation (RMSEA)</td>
<td>Value below 0.1 reflects an acceptable fit</td>
<td>Thadani &amp; Cheung (2011)</td>
</tr>
<tr>
<td><strong>Incremental Fit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted Goodness-of-Fit Index (AGFI)</td>
<td>Values &gt;0.8 reflects a good fit</td>
<td>Chau &amp; Hu (2001)</td>
</tr>
<tr>
<td>Comparative Fit Index (CFI)</td>
<td>Values &gt; 0.9 good reflects a good fit</td>
<td>Hair et al. (2010)</td>
</tr>
<tr>
<td></td>
<td>Values &gt; 0.8 sometimes permissible</td>
<td></td>
</tr>
<tr>
<td>Non-normed Fit Index (TLI)</td>
<td>Values &gt;0.90 reflects a good fit</td>
<td>Bentler &amp; Bonnet (1980)</td>
</tr>
<tr>
<td></td>
<td>Values &gt; 0.8 sometimes permissible</td>
<td>Hooper et al., 2008; Hair et al., 2010</td>
</tr>
<tr>
<td>** Parsimony Fit**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chi Square Statistics (X2/df)</td>
<td>Values less than 5 indicate a reasonable fit</td>
<td>Ullman (1996)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bollen (1989)</td>
</tr>
</tbody>
</table>

5.5.11.1 Absolute fit

Absolute fit indices are used to determine how well an a priori model fits the sample data (McDonald & Ho 2002) and to demonstrate which proposed model has the best fit. In this category, the model fit of Root Mean Square Error Approximation (RMSEA) and Goodness-of-fit Index (GFI) guidelines are used. The RMSEA
measure assists in correcting the tendency of chi-square to reject specified models. It takes into account error approximation in the population. The GFI measure indicates the relative amount of variance and covariance together explained by the model (Byrne 1989). The GFI value is calculated by comparing the discrepancy value for the model under test to the discrepancy value for a saturated version of the model, which is counted as representing a 100% fit or 1.0. However, this measure is not adjusted for degrees of freedom (Hair et al. 1995), ranging from 0 (indicating a poor fit) to 1 (indicating a perfect fit), where a recommended level of acceptance is 0.90 (Kline 2005; Schumacker & Lomax 2008; Byrne 2010). Still, Thadani and Cheung (2011) suggested that a value close to 0.90 reflects a good fit model.

5.5.11.2 Incremental fit

Incremental fit indices are also known as comparative (Miles & Shevlin 2007) or relative fit indices (McDonald & Ho 2002), referring to indices that do not use the chi-square in its raw form but compare the chi-square value to a baseline model. For these models, the null hypothesis is that all variables are uncorrelated (McDonald & Ho 2002; Hair et al. 2005).

Related to the GFI is the Adjusted Goodness-of-Fit Index (AGFI) which adjusts the GFI based on degrees of freedom, with more saturated models reducing fit (Tabachnick & Fidell 2007). Values for the AGFI also range between 0 and 1 and it is generally accepted that values of 0.80 or greater indicate well-fitting models (Chau & Hu 2001).

The Comparative Fit Index (CFI: Bentler 1990) is a revised form of the Normed Fit Index (NFI) which takes into account sample size (Byrne 1998) and performs well
even with a small sample size (Tabachnick & Fidell 2007). This statistic assumes that all latent variables are uncorrelated (null-independence model) and compares the sample covariance matrix with this null model. As with the NFI, values for this statistic range between 0.0 and 1.0 with values close to 1.0 indicate good fit. A cut-off criterion of $\text{CFI} \geq 0.90$ was initially advanced. However, recent studies have shown that a value greater than 0.90 is needed in order to ensure that misspecified models are not accepted (Hu & Bentler 1999). They range from 0 (poor fit) to 1 (perfect fit), and a level of 0.90 or greater is highly recommended (Hair et al. 2010).

Non-Normed Fit Index (NNFI), also known as the Tucker-Lewis index, is an index that prefers simple models. However, in situations where small samples are used, the value of the NNFI can indicate poor fit despite other statistics pointing towards good fit (Bentler 1990; Kline 2005; Tabachnick & Fidell 2007). A final problem with the NNFI is that, due to its non-normed nature, values can go above 1.0 and can thus be difficult to interpret (Byrne 1998). Recommendations are that a cut-off as low as 0.80 is permissible (Hooper et al. 2008; Hair et al. 2010) but a value above 0.90 is recommended (Hair et al. 2010).

5.5.11.3 Parsimony fit

According to Hair et al. (2010), the third category of parsimonious fit tests the parsimony of the proposed model by evaluating the fitness of the model to the number of estimated coefficients required to achieve the level of fit. In this category, the normed chi-square ($\chi^2/\text{df}$), also known as CMIN, is the most popular fitness index used to evaluate this model. In this measure, a range of acceptable values for the $\chi^2/\text{df}$ ratio has been suggested, ranging from less than 5.0 to indicate a reasonable
fit model (Ullman 1996; Bollen 1989). In this study, this measure is used as an indicator of overall fit, in conjunction with other measures, but not as a basis for rejecting or accepting the model.

5.5.12 Construct Reliability and Average Variance Extracted

Construct reliability (CR) refers to the measure of reliability and internal consistency of the measured variables representing a latent construct, and it must be established before construct validity can be determined (Hair et al. 2010). Average variance extracted (AVE) measures the amount of variance captured by a construct in relation to the variance due to random measurement error (Fornell & Larcker 1981). CR and AVE were also examined as measures of scale or construct reliability.

In order to achieve good reliability measure and high internal consistency, the CR values should be higher than 0.6 (Bagozzi & Yi 1988). Hair et al. (2010) asserted that reliability between 0.6 and 0.7 is an acceptable indicator of good reliability. AVE is also used as measure of convergent validity. Bagozzi and Baumgartner (1994) asserted that AVE values >0.4 are considered acceptable measures of convergence validity. The findings on the measures of CR and AVE are explained in detail after the description of the development of measurement models in this chapter.

5.5.13 Validity

According to Field (2009), it is relevant to determine the accuracy of the measurement scales in order to assess the extent to which proposed constructs have been captured, that is, to examine the validity of the instrument. Two types of validity are examined in this study: content validity and construct validity. Content
validity is the agreement among experts that the scale is measuring what it is expected to measure. Hair et al. (2010) refer to construct validity as the extent to which an empirical measurement reflects a specific domain of the content. In this thesis, the instruments used to evaluate all the main constructs possess content validity because the measurement items selected were obtained from well validated previous research. In addition to that, a group of international higher degree students were asked to critically evaluate the survey instrument before it was used. Some modifications to the instrument were made accordingly and therefore the scales were deemed to reflect the constructs as defined.

Construct validity refers to the ability of a measure to verify a network of related hypotheses generated from theory based on constructs. Churchill (1979) elucidated that construct validity concerns what the instruments are measuring. The two types of construct validity examined in this thesis are convergent validity and discriminant validity. Convergent validity refers to the degree to which two measures of the same concept are correlated whereas discriminant validity is the measure of the extent that constructs that theoretically should not be related to each other are observed to differ from each other (Hair et al. 2010). Convergence validity is defined when the AVE value for each factor is greater than 0.4 (Bagozzi & Baumgartner 1994). Discriminant validity is defined when the AVE for each factor is greater than the average shared squared variance (ASV) (Hair et al. 2010). Multi-factor analyses were carried out in order to assess the convergent and discriminant types of validity.
According to Schumacker and Lomax (1996), the convergent validity of an instrument is also realised when the loading between measurement items and the latent construct is higher than 0.5.

5.6 Qualitative Data Collection

The previous sections of this chapter discussed the overall research design and the research methodology used to collect and analyse the quantitative data of this study. The remaining sections of this chapter describe the research methodology employed to collect and analyse the qualitative data of this study. The aim of qualitative data is to explore the following questions that emerged after the analysis of the quantitative data:

1. Do you agree that leadership is important for organisational success?
2. Does entrepreneurial orientation contribute to organisational performance?
3. What other factors do you think are important for organisational success?

5.6.1 Recruitment Strategy

As mentioned in the research design section, explanatory research requires the collection and analysis of qualitative data after the collection and analysis of quantitative data. Thus, semi-structured interviews were conducted after the survey, to enable the quantitative results to be explored qualitatively. Five to ten interviews with selected owners or top managers of SMEs seemed adequate (Neves & Amaro 2012). This small number was sufficient for the purpose of confirming, disconfirming and further elucidating quantitative findings.
Two recruitment strategies were prepared for the collection of the qualitative data. The first strategy was to recruit respondents based on their agreement expressed in the final section of the survey questionnaire, which asked the respondents whether they were willing to be interviewed. To obtain the intended number of participant, 15 respondents who said they were willing to be interviewed were contacted for further discussion. The second strategy was to contact them by telephone and e-mail using details from the list previously obtained from the SME Corp. Malaysia. These combined approaches were chosen to provide ensure there would be sufficient interview participants.

5.6.2 Interview Process

A 20–40 minutes interview was scheduled with each participant. At the beginning of each interview, the purpose of the study was explained and the participants was asked for permission to share their stories. All participants gave permission to share their views and stories. At the conclusion of the interview, the researcher thanked the participant and provided them with an opportunity to give feedback and express any further thoughts. Appendix G contains the interview schedule used to collect qualitative data.

5.6.3 Pilot Testing

To ensure that the questions in the semi-structured interview were clear and reasonably fit, a pilot test was conducted with two of the researcher’s personal contacts. Those two were Higher Degree by Research students currently enrolled in the same university as the researcher. As Zikmund (1994) stated, it is usual to carry out a ‘try out’ of a questionnaire since this testing process is exceedingly beneficial.
It allows the researcher to determine if the respondents might have any difficulty in understanding the questions and if there are any ambiguous or biased questions. Pilot testing also gave the researcher an opportunity to practise his interviewing skills.

5.6.4 Data Analysis

The qualitative part of this study was intended to support and strengthen the findings from the quantitative analysis. For qualitative analysis, the data was analysed through thematic analysis (Boyatzis 1998; Tuckett 2005), due to the small number of interviews conducted. Thematic analysis is an approach to identify, analyse and report patterns (themes) in the data. It thoroughly organises and describes the data set. It is a straightforward form of qualitative analysis, which does not require the detailed theoretical and technical knowledge that discourse and content analysis do. A researcher can easily conduct a good thematic analysis on qualitative data even without much previous experience (Braun & Clark 2006).

These authors also proposed that there are several advantages to using thematic analysis. These advantages are:

- Flexibility
- Relatively easy and quick method to learn and carry out
- Accessible to researchers with little or no experience of qualitative research
- Results are generally accessible to the educated general public
- Can usefully summarise key features of a large body of data and/or offer a rich description of the data set
- Can highlight similarities and differences across the data set
- Can generate unanticipated insights
• Allows for social as well as psychological interpretations of data
• Can be useful for qualitative analysis suited to informing policy development

Even though many of these advantages were already known and thus did not require an extensive grounded theory, new themes, such as the role of government, strategy and competition, still emerged through analysis of the interview data.

According to Braun and Clark (2006), six steps are involved in thematic analysis. The steps are illustrated in Table 5.10.

Table 5.10: Phases of Thematic Analysis

<table>
<thead>
<tr>
<th>Stages of Thematic Analysis</th>
<th>Phase Description of the Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Familiarising yourself with your data</td>
<td>Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.</td>
</tr>
<tr>
<td>Generating initial codes</td>
<td>Coding interesting features of the data in a systematic fashion across the entire dataset, collating data relevant to each code. These codes are developed based on the literature.</td>
</tr>
<tr>
<td>Searching for themes</td>
<td>Collating codes into potential themes, gathering all data relevant to each potential theme.</td>
</tr>
<tr>
<td>Reviewing themes</td>
<td>Checking that the themes work in relation to the coded extracts (Level 1) and the entire dataset (Level 2).</td>
</tr>
<tr>
<td>Defining and naming themes</td>
<td>Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells; generating clear definitions and names for each theme.</td>
</tr>
<tr>
<td>Producing the report</td>
<td>The final opportunity for analysis. Selection of vivid, compelling extracts as examples, final analysis of selected extracts, relating the analysis to the research question and literature, producing a scholarly report of the analysis.</td>
</tr>
</tbody>
</table>

Source: Braun & Clark (2006)

Thematic analysis is widely used, but there is no consensus about what thematic analysis is and how to go about doing it (Boyatzis 1998; Tuckett 2005). Based on the steps proposed by Braun and Clark (2006), the steps undertaken by the researcher in
analysing the qualitative data are described below. The elements of reliability and validity are discussed throughout the analysis.

According to Hesse-Biber and Leavy (2006), the process of collecting and analysing qualitative data is actually an interactive process. The analysis of the data usually begins during the data collection stage when the interview is taking place. In this study, the first stage of the data analysis began shortly after each interview, when the researcher listened to the recorded interview. This helped the researcher to gain a general understanding of the important elements communicated during the interview. This exercise also helped the researcher to refine the interview protocol for subsequent interviews. Eisenhardt (1989) suggested that data analysis should be done after each interview. The data from one interview are collected and then analysed before the next interview is conducted. However, in this study, no transcribing was done at this stage.

The next stage involved transcribing the interviews. According to Green (2005), it is beneficial for the interview to be transcribed immediately after it is conducted. When the researcher does the transcribing, it provides him or her with more familiarity with the data than is gained by just reading the transcripts. According to Rubin and Rubin (2005), by transcribing the interview, the researcher is able to develop some insights into the data and is able to identify important concepts, themes and events that were recorded. Poland (2003) said that the process of transcribing the interview also allows the researcher to make informed decisions about punctuating the text, since punctuation can alter the meaning of a sentence. Therefore, Poland (2003)
recommended that the researcher transcribe each interview prior to the next interview to ensure the accuracy of the data.

The recorded interviews provided a rich source of verbatim material. Bucher et al. (1956) suggested that a recorded interview not only eliminates the omissions, distortions, elaborations, condensations and other modifications of data that usually occur in written answers but a recorded interview also provides an objective basis for assessing the adequacy of the interview data in relation to the performance of the interviewer. The use of recorded data is one of the strategies which increase validity in the qualitative research paradigm (McMillan & Schumacher 2006).

The third stage of qualitative data analysis involves the process of typing the interview transcripts. Despite being a time-consuming and tedious process (Gibbs, 2007), in this study the researcher typed all the interview transcripts himself. As Rubin and Rubin (2005) suggested, the transcribing process enhances the researcher’s understanding of the important points made during the interviews as well as allowing a search for their intended meanings. Therefore, while typing each interview transcript, notes were made from time to time when important concepts, themes or events emerged from the interviews. Specific quotations that could be used to support the quantitative findings or to answer the research questions were also noted. Transcribing the data, as suggested by Lamnek (1988), also enabled the researcher to ‘clean’ the manuscript by deleting errors and contradictions.

The fourth stage of the qualitative analysis was the actual analysis of the interview data. To perform this task, the researcher listened again to all the recorded interviews
and made final comparisons with the transcripts. Poland (2003) asserted that this process is important for the researcher to ensure the accuracy of the interview data as well as to confirm their reliability. The important themes extracted from the interview data were identified. These themes were developed based on the literature and also directly through an analysis of uncoded data. Categories were then developed to separate the emerging themes: the background of respondents, leadership behaviour and factors affecting leadership, entrepreneurial orientation and factors affecting entrepreneurial orientation, and factors affecting organisational performance. Other themes that emerged from the interviews were also recorded in case the emerging new themes might be relevant.

Two types of coding were used in data analysis. The first type was *a priori* coding, which was the codes developed before examining the interview data. The second type was inductive coding, which were the codes developed by the researcher through examination of the interview data (Willis 2006). Miles and Huberman (1984) referred to inductive codes as post-data coding, which allows the researcher to remain sensitive to the diversity and context of the data – to let the data ‘speak for itself’ and allow codes to emerge. Through these two types of coding approaches, the researcher reread each interview transcript carefully and identified quotations or remarks by the respondents that would fit into the themes or sub-themes of this study. The final analysis was conducted by the researcher going back and forth between the themes and interview transcripts to check if there were any significant issues that had been not identified in the process of creating themes. Patton (2002) suggested that a qualitative analyst returns to the data over and over again to see if the constructs, categories, explanations and interpretation make sense. This process also allows the
researcher to search for ‘disconfirming data’ for the identified themes (Cresswell 1998). Miles and Huberman (1984) proposed this action as one of the tactics for testing or confirming findings and also checking for the meaning of outliers and extreme cases. In addition, it can be useful for identifying the strength of the findings and developing reliable conclusions. This ongoing analysis also helped the researcher to refine the specifics of each of the themes identified in this study.

To ensure that rigorous analysis was being conducted, several actions had been implemented by the researcher. These were the use theoretical memos, examining uncoded data and constant comparison between themes and data. The final stage of thematic analysis involved producing the analysis report. The findings of the qualitative data analysis are reported together with the findings of the quantitative data analysis in Chapter 6.

5.7 Ethical Considerations

This study followed the Ethics Guideline Procedures stipulated by RMIT University in the Ethics Review Process. Ethics approval was obtained to carry out this research. Detailed information about the background of the study, the research design and methodology, together with the survey questionnaire and interview questions, were sent for evaluation by the research committee. This was to ensure that the interview questions met the standards required by the committee and to ensure that no demeaning questions were included in the survey. The researcher was prepared, organised and considerate of participants’ confidentiality in this study. Ethics approval was obtained from the RMIT Human Research Ethics Committee (HREC) prior to commencement of the research stage involving respondents. A copy of the
Plain Language Statement used when collecting the quantitative data is in Appendix C and that used when collecting the qualitative data is in Appendix D. The Ethics Approval is in Appendix A.

5.8 Summary

As discussed throughout this chapter, the main objective of this study is to empirically test research hypotheses. Quantitative research was chosen as the primary source of data collection and qualitative data were used to enhance, confirm or contradict the findings from quantitative data analysis.

This chapter summarised the research design and explained the process of survey development. Most importantly, this chapter provided details on how the data gathered would be analysed. The following chapter focuses on the findings derived from the analysis of the quantitative and qualitative data.
CHAPTER 6
ANALYSIS AND FINDINGS

6.1 Introduction

As previously mentioned, this study employed mixed method research in which both quantitative and qualitative data were collected and analysed. Chapter 5 presented the justification for the research methodology chosen for this study. The objective of this chapter is to report on the analyses and findings of the results gathered from the quantitative and qualitative data collected. These analyses and findings are discussed into two parts. Part A discusses the findings from the analysis of the quantitative data, which are the main type of data in this study and Part B discusses the findings from the analysis of the qualitative data. The quantitative data in this study were analysed by using PASW 18.0 and AMOS 18.0, and the qualitative data were analysed by using thematic analysis.

After the introduction in Section 6.1, Part A comprises Section 6.2 to Section 6.10. Part B comprises Section 6.11 to Section 6.20. Section 6.21 concludes this chapter.

PART A QUANTITATIVE FINDINGS

Part A presents the analyses and findings for the quantitative data in this study. Section 6.2 reports on the response rate to the survey. Section 6.3 discusses the response bias test. Section 6.4 discusses the data screening procedures done before any other tests were performed. The data were checked for accuracy of data entry and missing values, and then checked for violations of the multivariate statistical assumptions of normality, homogeneity of variance, multicollinearity and outliers.
Section 6.5 presents measures of reliability. Reliability coefficients are reported at construct level and at factor level. The descriptive analyses are discussed in Section 6.6. The demographic characteristics of respondents from both methods of data collection are presented. This section also covers the means and standard deviation for each variable at construct level and factor level. The results from t-test analyses based on several demographic characteristics are compiled and discussed in Section 6.7.

Section 6.8 presents the initial analysis of variables in the initial full model consisting of all the variables, and the initial measurement model of each variable. Due to unsatisfactory results from this initial analysis, the section that follows discusses the statistical procedures involved in the development of final path models. Exploratory factor analysis (EFA), confirmatory factor analysis (CFA), the development of a multi-factor measurement model, and construct reliability and validity are also discussed.

For EFA, Principal Component Analysis (PCA) with varimax rotation was used to determine the number of factors associated with transformational leadership, transactional leadership, EO and organisational performance measured through growth and profitability. Through EFA, initial factor structures were discovered and survey items with loadings <0.3 on factors were eliminated (Hair et al. 2005). CFA was conducted to develop four measurement models to examine if each of the variables, as suggested in the proposed framework, loads on to its respective construct (Anderson & Gerbing 1988). In other words, CFA is used to confirm the factor structure discovered through the EFA and to allow the measurement of
discriminant and convergent validity. Section 6.10 presents the final path models developed to test the research hypotheses. The sections that follow discuss the findings from the analysis of the qualitative data.

6.2 Response Rate

In the survey, a total of 1700 questionnaires were distributed to the respondents via e-mail or self-administered throughout Malaysia. From 1000 questionnaires distributed through the website, there were 103 responses. Of these, 23 were not usable either because they fell into the category of micro-SME (which was not included in the target sample) or they were incomplete. In the second approach through training agencies, a total of 700 questionnaires were distributed and 370 responses were received. Of these, 45 were not usable for the same reasons mentioned above. To sum up, out of a total of 1700 questionnaires distributed, there were 473 responses but there were only 405 usable questionnaires, representing an effective response rate of 24% in this study.

6.3 Response Bias Test

An independent sample t-test was carried out to examine if there was any statistically significant difference between the two sources of data. Dillman (2000) argued that different approaches to data collection often produce different results. To address this issue, the researcher followed the suggestion of Cole (2005) and compared the mean scores between the online and self-administered questionnaires. Table 6.1 shows the distribution of the mean scores between the two sources of data in the three main variables.
Table 6.1: Mean Comparisons of Variables between Online and Self-Administered Surveys

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean Online</th>
<th>Mean Self-Administered</th>
<th>T-value</th>
<th>Significant Effect Size</th>
<th>( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership Behaviour</td>
<td>2.76</td>
<td>2.65</td>
<td>-2.198</td>
<td>0.029</td>
<td>0.01</td>
</tr>
<tr>
<td>Entrepreneurial Orientation</td>
<td>2.70</td>
<td>2.57</td>
<td>-2.282</td>
<td>0.023</td>
<td>0.01</td>
</tr>
<tr>
<td>Organisational Performance</td>
<td>2.59</td>
<td>2.64</td>
<td>0.786</td>
<td>0.432</td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 6.1, there was no statistical significant in the mean scores between the online (M=2.59, SD=0.57) and self-administered surveys (M=2.64, SD=0.55; t (405) =0.786, p =0.43) on organisational performance. There is a statistical significant in the mean scores between online and self-administered surveys on leadership behaviour (t (405) =-2.198, p=0.029) and EO (t (405) =-2.282, p=0.023) scales. However, following the guidelines proposed by Cohen (1998), the magnitude of the differences in their means was small \( (\eta^2 = 0.01) \). Therefore, these results show that the sample can be considered sufficient to draw conclusions on the owners/top managers of SMEs in Malaysia for this study.

6.4 Data Screening

A total of 405 usable questionnaires were first examined for accuracy of data entry and missing values, and then checked for violations of the multivariate statistical assumptions of normality, homogeneity of variance, multicollinearity and outliers.

To address the issue of missing data, the researcher used the ‘expectation-maximisation’ (EM) iterative method available in SPSS. EM is an effective method that is often used in data analysis to manage missing data (Schäfer & Olsen 1998). It
is a procedure that occurs in two discrete steps to replace the missing value. EM overcomes the problems generated through other techniques such as mean substitution or regression substitution, which produce biased estimates and underestimate the standard errors.

To test the normality of the data, the residuals were screened for normality through expected normal probability plot and detrended normal probability plot. From the normal probability plot, a reasonably straight line denoted a normal distribution. Figures 6.1 to 6.3 present the normal probability plot of each of the main variables in this study.

![Normal probability plot](image)

**Figure 6.1: Normal P-P Plot of Regression Standardised Residual: Leadership Behaviour**

An examination of the normal probability plot of leadership behaviour suggested there is no significant deviation from normality for the data. As can be seen in Figure 6.1, a reasonably straight line indicates a normal distribution. A further examination
of the detrended probability plot also suggested that the present data are normal as there is no real clustering of scores in the output, with most around the zero line.

Figure 6.2: Normal P-P Plot of Regression Standardised Residual: Entrepreneurial Orientation

An examination of the normal probability plot of EO suggested there is no significant deviation from normality for the data. As can be seen in Figure 6.2, a reasonably straight line indicates a normal distribution. A further examination of the detrended probability plot also suggested that the present data are normal, as there is no real clustering of scores in the output, with most around the zero line.
An examination of the normal probability plot of organisational performance suggested there is no significant deviation from normality for the data. As can be seen in Figure 6.3, a reasonably straight line indicates a normal distribution. An examination of the detrended probability plot also suggested that the present data are normal, as there is no real clustering of scores in the output, with most around the zero line.

Correlation matrices and collinearity statistics were analysed to address assumptions for multicollinearity. When the correlation between independent variables is high (>0.7), Tabachnick and Fidell (2001) suggested considering deleting one of the variables or forming them into one. For the data in this study, the correlations between independent variables are low to middling, ranging from 0.011 to 0.514 (see
Table 6.2). None of the correlation between independent variables exceeds 0.7. This shows that the assumption of multicollinearity is not violated and therefore all variables are retained for further analysis.

**Table 6.2: Correlations between Independent Variables**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Transformational Leadership</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Transactional Leadership</td>
<td>0.514***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Innovativeness</td>
<td>0.449***</td>
<td>0.036</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4. Proactiveness</td>
<td>0.427***</td>
<td>0.200***</td>
<td>0.494***</td>
<td>1</td>
</tr>
<tr>
<td>5. Risk Taking</td>
<td>0.240***</td>
<td>0.011</td>
<td>0.447***</td>
<td>0.377***</td>
</tr>
</tbody>
</table>

Notes: *p<0.05, **p<0.01, ***p<0.001

Collinearity statistics were examined through the tolerance values (1 minus squared multiple correlation) and variance inflation factors. When this value is very low (close to zero), it shows that the multiple correlation with other variables is high, proposing a possibility of multicollinearity (Pallant 2001). The data indicated that the values range from 0.532 to 0.765, suggesting that this assumption is not violated.

Outliers refer to values that are significantly lower or higher than other values in the data set (Pallant 2001). Outliers can be detected by examining the box plot of the distribution of scores for all the variables in this study and also from Mahalanobis distance (D) statistics. Ten outliers were detected from the box plots, extended more than 1.5 box lengths from the edge of the box. ID numbers 29, 61, 136, 216, 225, 234, 294, 238, 364 and 381 were removed from the data set, bringing the set to a total of 395 cases without the missing data that remained for further analysis.
To test the assumption of multivariate outliers, D statistics was used. Multivariate outliers are cases with a strange combination of scores on the various dependent variables (e.g., very low on one variable but very high on another). D statistics refers to the distance of a particular case from the centroid of the remaining cases, where the centroid is the sample means of all the variables (Tabachnick & Fidell 1996). To identify any strange pattern of scores across variables, it is necessary to determine the critical chi-square (values greater than critical value are considered multivariate outliers) by using the number of independent variables equal to the degree of freedom. Based on Tabachnick and Fidell’s (1996) suggestion, the critical value of these data is equal to 20.52. There are five independent variables in this study with D values range from 0.47 to 17.25. None of the cases has value greater than the critical value and this indicates that the data have no multivariate outliers. The following section discusses reliability measures, followed by descriptions of the demographic characteristics of the respondents and each scale used in this study.

6.4.1 Assessment of Common Method Variance

As previously mentioned, this study is a cross-sectional study. Cross-sectional research involves collection of all data through the same questionnaire during the same period of time. However, the use of single respondents to answer all questions might produce common method variance (CMV), variance that is credited to the measurement method rather than to constructs of interest (Podsakoff et al. 2012, 2003). Craighead et al. (2011) referred to CMV as the amount of spurious correlation between variables that is created by using the same method, often a survey, to measure each variable. This variance may cause systematic measurement errors,
which may lead to incorrect estimates of the true relationships between variables by inflating or deflating findings.

Based on the suggestion made by Podsakoff et al. (2003), the Harman single-factor test was used to assess the CMV in this study. This is the most widely used technique for assessing CMV. Researchers in the leadership field have used this test to address the issue of CMV (Salanova et al. 2011; Cheung & Wong 2011; Norris 2008). According to Podsjooff et al. (2003), this test is used to identify and measure variables that reflect the observed constructs. It requires loading all the measures in the study into an exploratory factor analysis, with the assumption that CMV is present if there is a single factor that emerges from the factor analysis or a general factor accounting for the majority of the covariance among measures.

All variables were loaded into exploratory factor analysis, using principal component analysis with unrotated factor solution. The results from the extraction sums of squared loading indicated that only 19.5% of variance was attributed to the measured items. Since one general factor did not account for the majority of the covariance among the measures (Podsakoff et al. 2003), it can be concluded that CMV did not appear to be a problem in this study.

6.5 Measures of Reliability: Cronbach’s Alpha Coefficient

According to Hair et al. (2005), instrument reliability shows the internal consistency of items representing a latent construct. It refers to the extent to which instruments are consistently measuring what they are supposed to. Reliability coefficients or Cronbach’s alpha coefficients were calculated for all measures used in this study.
This is commonly used as a measure of internal consistency. Table 6.3 reports the results of the Cronbach’s alpha coefficients for all variables at construct level and factor level.

As shown in Table 6.3, Cronbach’s alpha coefficients for total leadership behaviour, total EO and total organisational performance all achieved 0.70 or above, indicating an acceptable statistic testing level (Nunnaly 1967).

The overall Cronbach’s alpha coefficient for transformational leadership was 0.87 while the Cronbach’s alpha coefficients of the four transformational leadership factors ranged from 0.60 to 0.73. The overall Cronbach’s alpha coefficient for transactional leadership was 0.61 while the Cronbach’s alpha coefficients of the three transactional leadership factors ranged from 0.50 to 0.65.

The overall Cronbach’s alpha coefficient for EO was 0.72 while the Cronbach’s alpha coefficients of the three EO factors ranged from 0.50 to 0.55. Finally, Cronbach’s alpha coefficients of the two organisational performance factors ranged from 0.59 to 0.70.

Even though there were some values, especially at the factor level, that did not achieved a value of 0.70 or above, Nunnaly (1967) stated that reliabilities of $\alpha = 0.50$ to $\alpha = 0.60$ are sufficient for the early stage of basic research. Hair et al. (1998) also suggested that a value of above 0.6 is an acceptable value for internal consistency. Given that these measures have also been used by other well-validated research, a decision was made to retain all the factors of each construct.
Table 6.3: Results of Cronbach’s Alpha Coefficients

<table>
<thead>
<tr>
<th>Measures</th>
<th>Number of Items</th>
<th>Coefficients α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Leadership Behaviour</td>
<td>32</td>
<td>0.86</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>20</td>
<td>0.87</td>
</tr>
<tr>
<td>Idealised Influence</td>
<td>8</td>
<td>0.70</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>4</td>
<td>0.73</td>
</tr>
<tr>
<td>Individualised Consideration</td>
<td>4</td>
<td>0.60&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>4</td>
<td>0.71</td>
</tr>
<tr>
<td>Transactional Leadership</td>
<td>12</td>
<td>0.61</td>
</tr>
<tr>
<td>Contingent Reward</td>
<td>4</td>
<td>0.64&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Management-by-exception (active)</td>
<td>4</td>
<td>0.50&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Management-by-exception (passive)</td>
<td>4</td>
<td>0.65</td>
</tr>
<tr>
<td>Total Entrepreneurial Orientation</td>
<td>11</td>
<td>0.72</td>
</tr>
<tr>
<td>Innovativeness</td>
<td>4</td>
<td>0.50</td>
</tr>
<tr>
<td>Proactiveness</td>
<td>4</td>
<td>0.53</td>
</tr>
<tr>
<td>Risk taking</td>
<td>3</td>
<td>0.55</td>
</tr>
<tr>
<td>Total Organisational Performance</td>
<td>8</td>
<td>0.80</td>
</tr>
<tr>
<td>Growth</td>
<td>4</td>
<td>0.59</td>
</tr>
<tr>
<td>Profitability</td>
<td>4</td>
<td>0.70</td>
</tr>
</tbody>
</table>

Notes: <sup>a</sup> after deletion of IC2  
<sup>b</sup> after deletion of CR1  
<sup>c</sup> after deletion of MBEA1

6.6 Descriptive Analysis

6.6.1 Demographic Characteristics of Respondents

Table 6.4 presents a summary of the nine demographic characteristics of respondents. The total number of respondents retained for the remaining analysis was 395 (N = 395). In regard to the type of industry, 206 respondents were from the manufacturing industry, representing 52.2% of the sample. The remaining 189 respondents came from the service industry, representing 47.8% of the sample. 45.8% of the
respondents (n = 181) were the owners of the firms and the remaining 54.2% were the top managers (n = 214).

The majority of the respondents were relatively young, aged between 31 and 40, representing 44.8% (n = 177) and 26.6% (n = 105) were aged between 41 and 50. The third largest age group was between the ages of 25 and 30, representing 13.45% (n = 53) of the sample. Respondents aged over 51 represented 8.4% (n = 33) of the sample and respondents aged under 25 represented 6.8% (n = 27) of the sample population.

In terms of gender distribution, there were 247 male respondents, representing 62.5% of the sample population while the 148 female respondents represented 37.5%.

The majority of the respondents were Malay, representing 84.3% (n = 333) of the sample population. There were 46 Chinese respondents (11.6%), nine Indian respondents (2.3%) and seven respondents from other races (1.8%).

In regard to the highest education level, the majority of the respondents had at least a Degree (Bachelor), representing 45.6% (n = 180). This was followed by those with a Certificate or Diploma qualification represented by 28.1% (n = 111) of the sample. 52 respondents had a Master’s degree, represented 13.2% of the sample. 26 respondents (9.1%) had had only secondary education. 11 respondents (2.8%) had a PhD or or other doctorate while there were only five respondents with other qualifications, representing 1.3% of the sample population.
The majority of the respondents (52.7%; n = 208) employed between five and 19 employees; 105 respondents (26.6%) employed between 20 and 50 employees; 53 respondents (13.4%) employed between 51 and 150 employees; 24 respondents (6.1%) employed fewer than five employees; and only five respondents (1.3%) employed more than 150 employees.

In terms of sales turnover, 35.4% (n = 140) of the respondents had a sales turnover between RM200,000 and RM1,000,000; 33.7% (n = 133) had a sales turnover between RM1,000,000 and RM5,000,000; 10.9% (n = 43) had a sales turnover between RM5,000,000 and RM10,000,000; 9.1% (n = 36) had a sales turnover between RM10,000,000 and RM25,000,000; 9.1% (n = 36) had a sales turnover of less than RM200,000; and 1.8% (n = 7) did not disclose this information.

As mentioned in Chapter 3, the classification of SMEs in Malaysia can be based on the number of employees or the sales turnover (see Table 3.1). Based on the number of employees, a number of respondents were retained in the final analysis even though they employed fewer than five or more than 150 employees, which should be in the categories of micro- or large enterprises, respectively. However, they were kept in the final analysis since their sales turnovers were still in the category of small and medium enterprises. This process was also applied to the sales turnover classification. Even though there were a number of enterprises that generated less than RM200,000, which should be in the category of micro-enterprises, they were retained in this data analysis since they employed more than five full-time employees.
To determine the category of the enterprise, the researcher classified each enterprise based on either the number of employees or the sales turnover, in accordance with the definition of SME provided by the SME Corp. Malaysia (see Table 3.1). As a result, small enterprises represented 68.6% (n = 271) of the sample population and medium-size enterprises represented the remaining 31.4% (n = 124).

Table 6.4: Demographic Characteristics of Respondents (Quantitative: N=395)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Industry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing/Manufacturing related services</td>
<td>206</td>
<td>52.2</td>
</tr>
<tr>
<td>Services/ICT</td>
<td>189</td>
<td>47.8</td>
</tr>
<tr>
<td><strong>Role</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner</td>
<td>181</td>
<td>45.8</td>
</tr>
<tr>
<td>Top Manager</td>
<td>214</td>
<td>54.2</td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 25</td>
<td>27</td>
<td>6.8</td>
</tr>
<tr>
<td>25 – 30</td>
<td>53</td>
<td>13.4</td>
</tr>
<tr>
<td>31 – 40</td>
<td>177</td>
<td>44.8</td>
</tr>
<tr>
<td>41 – 50</td>
<td>105</td>
<td>26.6</td>
</tr>
<tr>
<td>Over 51</td>
<td>33</td>
<td>8.4</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>247</td>
<td>62.5</td>
</tr>
<tr>
<td>Female</td>
<td>148</td>
<td>37.5</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malay</td>
<td>333</td>
<td>84.3</td>
</tr>
<tr>
<td>Chinese</td>
<td>46</td>
<td>11.6</td>
</tr>
<tr>
<td>Indian</td>
<td>9</td>
<td>2.3</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>1.8</td>
</tr>
<tr>
<td>Characteristics</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Highest Education Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Education</td>
<td>36</td>
<td>9.1</td>
</tr>
<tr>
<td>Certificate/Diploma</td>
<td>111</td>
<td>28.1</td>
</tr>
<tr>
<td>Degree (Bachelor)</td>
<td>180</td>
<td>45.6</td>
</tr>
<tr>
<td>MBA</td>
<td>52</td>
<td>13.2</td>
</tr>
<tr>
<td>PhD/Doctorate</td>
<td>11</td>
<td>2.8</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>1.3</td>
</tr>
<tr>
<td>Number of Employees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fewer than 5</td>
<td>24</td>
<td>6.1</td>
</tr>
<tr>
<td>5 – 19</td>
<td>208</td>
<td>52.7</td>
</tr>
<tr>
<td>20 – 50</td>
<td>105</td>
<td>26.6</td>
</tr>
<tr>
<td>51 – 150</td>
<td>53</td>
<td>13.4</td>
</tr>
<tr>
<td>More than 150</td>
<td>5</td>
<td>1.3</td>
</tr>
<tr>
<td>Sales Turnover</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than RM 50,000</td>
<td>15</td>
<td>3.8</td>
</tr>
<tr>
<td>RM 50,000 &lt; RM 200,000</td>
<td>21</td>
<td>5.3</td>
</tr>
<tr>
<td>RM 200,000 &lt; RM 1,000,000</td>
<td>140</td>
<td>35.4</td>
</tr>
<tr>
<td>RM 1,000,000 &lt; RM 5,000,000</td>
<td>133</td>
<td>33.7</td>
</tr>
<tr>
<td>RM 5,000,000 &lt; RM 10,000,000</td>
<td>43</td>
<td>10.9</td>
</tr>
<tr>
<td>RM 10,000,000 &lt; RM 25,000,000</td>
<td>36</td>
<td>9.1</td>
</tr>
<tr>
<td>Undisclosed</td>
<td>7</td>
<td>1.8</td>
</tr>
<tr>
<td>Category</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Enterprise</td>
<td>271</td>
<td>68.6</td>
</tr>
<tr>
<td>Medium Enterprise</td>
<td>124</td>
<td>31.4</td>
</tr>
</tbody>
</table>

### 6.6.2 Leadership Behaviour

32 items on a 5-point Likert scale (0-4) of the MLQ were used to measure transformational leadership and transactional leadership. The Likert scale used measures of 0 = not at all, 1 = once in a while, 2 = sometimes, 3 = fairly often and 4 = frequently, if not always. Table 6.5 reports the means and standard deviations for
the leadership behaviour scales with each factor of transformational and transactional leadership behaviour used in this study.

Table 6.5: Means and Standard Deviation for Leadership Behaviour (N=395)

<table>
<thead>
<tr>
<th>Measures</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Idealised Influence</td>
<td>2.90</td>
<td>0.47</td>
</tr>
<tr>
<td>Individualised Consideration</td>
<td>2.90</td>
<td>0.51</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>2.73</td>
<td>0.58</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>2.84</td>
<td>0.64</td>
</tr>
<tr>
<td>Transactional Leadership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingent Reward</td>
<td>2.33</td>
<td>0.37</td>
</tr>
<tr>
<td>Management-by-exception (Active)</td>
<td>2.94</td>
<td>0.57</td>
</tr>
<tr>
<td>Management-by-exception (Passive)</td>
<td>2.78</td>
<td>0.56</td>
</tr>
<tr>
<td>Total Leadership Behaviour</td>
<td>3.13</td>
<td>0.57</td>
</tr>
</tbody>
</table>

As shown in Table 6.5, the mean score for total leadership behaviour was 2.69 (SD=0.39). Comparing the two forms of leadership behaviour, the mean score for transformational leadership was 2.90 (SD = 0.47), which was higher than the mean score for transactional leadership 2.33 (SD = 0.37). This shows that the respondents in this study display transformational leadership more frequently than transactional leadership behaviour.

In regard to the factors of transformational leadership, the highest mean was attributed to the inspirational motivation factor with a mean score of 3.13 (SD = 0.57). This was followed by idealised influence with a mean score of 2.90 (SD = 0.51). The mean score for intellectual stimulation was 2.84 (SD = 0.64).
Individualised consideration was the form of transformational leadership least perceived by respondents with a mean score of 2.73 (SD = 0.58). This shows that in regard to the factors of transformational leadership, the respondents perceived that they practise the attribute of inspirational motivation more often than the other attributes of transformational leadership.

In analysing the factors of transactional leadership, the highest mean was attributed to contingent reward with a mean score of 2.94 (SD = 0.57). This was followed by management-by-exception (active) with a mean score of 2.78 (SD = 0.56) and management-by-exception (passive) with a mean score of 1.26 (SD = 0.73). This shows that when it comes to transactional leadership, the respondents display the attribute of contingent reward quite often, followed by the management-by-exception (active) attribute. It also shows that the respondents practise the management-by-exception (passive) attribute only ‘once in a while’.

6.6.3 Entrepreneurial Orientation

For EO, there were 11 items on a 5-point Likert scale (0-4) to measure innovativeness, proactiveness and risk taking. The Likert scale used measures of 0 = strongly disagree, 1 = disagree, 2 = neither, 3 = agree and 4 = strongly agree. Table 6.6 shows the means and standard deviations for the scales used to measure EO in this study.
Table 6.6: Means and Standard Deviation for Entrepreneurial Orientation (N=395)

<table>
<thead>
<tr>
<th>Measures</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovativeness</td>
<td>2.82</td>
<td>0.52</td>
</tr>
<tr>
<td>Proactiveness</td>
<td>2.49</td>
<td>0.53</td>
</tr>
<tr>
<td>Risk taking</td>
<td>2.48</td>
<td>0.70</td>
</tr>
<tr>
<td>Total Entrepreneurial Orientation</td>
<td>2.60</td>
<td>0.46</td>
</tr>
</tbody>
</table>

As shown in Table 6.6, the total mean score for EO was 2.60 (SD = 0.46). On average, the respondents agreed that EO was practised in their organisations. In regard to the mean scores for each factor of EO, innovativeness had the highest mean score of 2.82 (SD = 0.52). The mean score for proactiveness was 2.49 (SD = 0.53) and the mean score for risk taking was 2.48 (SD = 0.70). These results indicate that the respondents perceived that their organisations display more of the innovative attribute of EO than proactiveness and risk taking.

6.6.4 Organisational Performance

The organisational performance scale had eight items on a 5-point Likert scale (0-4) to measure growth and profitability. The Likert scale used measures of 0 = strongly disagree, 1 = disagree, 2 = neither, 3 = agree and 4 = strongly agree. Table 6.7 shows the means and standard deviations for the scales used to measure organisational performance in this study.
Table 6.7: Means and Standard Deviation for Organisational Performance (N=395)

<table>
<thead>
<tr>
<th>Measures</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth</td>
<td>2.69</td>
<td>0.54</td>
</tr>
<tr>
<td>Profitability</td>
<td>2.59</td>
<td>0.63</td>
</tr>
<tr>
<td>Total Organisational Performance</td>
<td>2.64</td>
<td>0.55</td>
</tr>
</tbody>
</table>

As shown in Table 6.7, the total mean score for organisational performance was 2.64 (SD = 0.55). On average, most of the respondents are satisfied with their performance. In regard to the mean scores for each factor of organisational performance, growth has the highest mean score of 2.69 (SD = 0.54) and the mean score for profitability is 2.59 (SD = 0.63). These results indicate that in regard to organisational performance measures, the respondents value growth much more than profitability.

6.7 T-tests: Analysis of Size, Type of Industry, Gender and Position between Leadership Behaviour, Entrepreneurial Orientation and Organisational Performance

To extend the profile of the population, t-tests were conducted to examine whether or not there were statistical differences on the main variables of this study (leadership behaviour, EO and organisational performance), based on the size of the enterprise, type of industry, gender of respondent and type of ownership/position in the organisation. Levene’s test for equality of variance was also used. All variables did not violate the assumption of equal variance. The results are presented in Tables 6.8 to 6.11.
In regard to the size of enterprises (see Table 6.8), there was a statistically significant difference in the mean scores for transformational leadership and organisational performance between small and medium enterprises, both with a very small effect size. The mean score for transformational leadership of small enterprises was 2.86 compared to 3.00 for medium enterprises, t (395) = -2.87, p = 0.004.

The mean score for the organisational performance of small enterprises was 2.58 compared to 2.78 for medium enterprises, t (395) = -3.65, p = 0.000. However, there was not a statistically significant difference in the mean scores of transactional leadership, EO and each factor of EO for small and medium enterprises.
Table 6.9: T-test: Type of Industry

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean Manufacturing</th>
<th>Mean Services</th>
<th>T-value</th>
<th>Significant</th>
<th>Effect Size η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership</td>
<td>2.79</td>
<td>3.02</td>
<td>-4.91</td>
<td>0.000</td>
<td>0.058</td>
</tr>
<tr>
<td>Transactional Leadership</td>
<td>2.28</td>
<td>2.38</td>
<td>-2.56</td>
<td>0.011</td>
<td>0.016</td>
</tr>
<tr>
<td>EO</td>
<td>2.56</td>
<td>2.66</td>
<td>-2.26</td>
<td>0.025</td>
<td>0.013</td>
</tr>
<tr>
<td>Innovativeness</td>
<td>2.77</td>
<td>2.86</td>
<td>-1.77</td>
<td>0.078</td>
<td></td>
</tr>
<tr>
<td>Proactiveness</td>
<td>2.44</td>
<td>2.55</td>
<td>-1.99</td>
<td>0.047</td>
<td>0.001</td>
</tr>
<tr>
<td>Risk taking</td>
<td>2.42</td>
<td>2.53</td>
<td>-1.60</td>
<td>0.111</td>
<td></td>
</tr>
<tr>
<td>Organisational Performance</td>
<td>2.59</td>
<td>2.70</td>
<td>-1.89</td>
<td>0.059</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>206</td>
<td>189</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In regard to the type of industry (see Table 6.9), there were statistically significant differences in the mean scores for transformational leadership, transactional leadership, EO and proactiveness, each with a small to moderate effect size. The mean for transformational leadership of manufacturing was 2.79, compared to 3.02 for the service industry, $t(395) = -4.91$, $p<0.001$. The mean for transactional leadership of manufacturing was 2.28, compared to 2.38 for the service industry, $t(395) = -2.56$, $p = 0.011$.

The mean for EO of manufacturing was 2.56, compared to 2.66 for the service industry, $t(395) = -2.26$, $p = 0.025$. The mean for proactiveness of manufacturing was 2.44, compared to 2.55 for the service industry, $t(395) = -1.99$, $p = 0.047$. However, respondents from the manufacturing and service industries of SMEs in
Malaysia did not show any significant differences in organisational performance and the other two factors of EO.

**Table 6.10: T-test: Gender**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean Male</th>
<th>Mean Female</th>
<th>T-value</th>
<th>Significant</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership</td>
<td>2.94</td>
<td>2.85</td>
<td>1.78</td>
<td>0.076</td>
<td></td>
</tr>
<tr>
<td>Transactional Leadership</td>
<td>2.35</td>
<td>2.29</td>
<td>1.49</td>
<td>0.138</td>
<td></td>
</tr>
<tr>
<td>EO</td>
<td>2.62</td>
<td>2.59</td>
<td>0.64</td>
<td>0.523</td>
<td></td>
</tr>
<tr>
<td>Innovativeness</td>
<td>2.81</td>
<td>2.81</td>
<td>0.09</td>
<td>0.926</td>
<td></td>
</tr>
<tr>
<td>Proactiveness</td>
<td>2.56</td>
<td>2.41</td>
<td>2.28</td>
<td>0.023</td>
<td>0.013</td>
</tr>
<tr>
<td>Risk taking</td>
<td>2.45</td>
<td>2.52</td>
<td>-0.87</td>
<td>0.383</td>
<td></td>
</tr>
<tr>
<td>Organisational Performance</td>
<td>2.64</td>
<td>2.64</td>
<td>-0.02</td>
<td>0.986</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>247</td>
<td>148</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In regard to gender (see Table 6.10), there was no statistical difference in the mean scores of each of the variables between male and female respondents, except for one factor of EO, which was proactiveness. The mean for proactiveness of males was 2.56, compared to 2.41 for females, t (395) = -2.28, p = 0.023.
### Table 6.11: T-test: Position

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean Owners</th>
<th>Mean Top Managers</th>
<th>T-value</th>
<th>Significant</th>
<th>Effect Size</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership</td>
<td>3.05</td>
<td>2.78</td>
<td>6.00</td>
<td>0.000</td>
<td>0.084</td>
<td></td>
</tr>
<tr>
<td>Transactional Leadership</td>
<td>2.39</td>
<td>2.28</td>
<td>3.01</td>
<td>0.003</td>
<td>0.023</td>
<td></td>
</tr>
<tr>
<td>EO</td>
<td>2.73</td>
<td>2.50</td>
<td>5.18</td>
<td>0.000</td>
<td>0.064</td>
<td></td>
</tr>
<tr>
<td>Innovativeness</td>
<td>2.89</td>
<td>2.75</td>
<td>2.70</td>
<td>0.007</td>
<td>0.018</td>
<td></td>
</tr>
<tr>
<td>Proactiveness</td>
<td>2.65</td>
<td>2.35</td>
<td>5.67</td>
<td>0.000</td>
<td>0.081</td>
<td></td>
</tr>
<tr>
<td>Risk taking</td>
<td>2.62</td>
<td>2.35</td>
<td>3.81</td>
<td>0.000</td>
<td>0.037</td>
<td></td>
</tr>
<tr>
<td>Organisational Performance</td>
<td>2.70</td>
<td>2.60</td>
<td>1.91</td>
<td>0.057</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>181</td>
<td>214</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In regard to the position of the respondents in their organisations (see Table 6.11), there were statistically significant differences in the mean scores for transformational leadership, transactional leadership, EO and every factor of EO, each with a small to moderate effect size. The mean for transformational leadership of owners was 3.05, compared to 2.78 for top managers, t (395) = 6.00, p < 0.001. The mean for transactional leadership of owners was 2.39, compared to 2.28 for top managers, t (395) = 3.01, p = 0.003.

The mean for EO of owners was 2.73, as compared to 2.50 for top managers, t (395) = 5.18, p < 0.001. The mean for innovativeness of owners was 2.89, compared to 2.75 for top managers, t (395) = 2.70, p = 0.007. The mean for proactiveness of owners was 2.65, compared to 2.35 for top managers, t (395) = 5.67, p < 0.001.
mean for risk taking of owners was 2.62, compared to 2.35 for top managers, \( t(395) = 3.81, p < 0.001 \).

However, there was not a statistically significant difference in the mean scores of organisational performance for the owners and top managers of SMEs in Malaysia. The following section discusses the instruments used for the initial analysis in this study.

### 6.8 Initial Analysis of Variables

As mentioned in the Chapter 5, before any other tests were conducted to examine the psychometric properties of the questionnaire in this study, an initial full model was examined consisting of all items for each of the variables simultaneously. Figure 6.4 shows the initial full model of this study. This model was developed to examine whether it would fit with the data of this study since all constructs were adopted from well-validated research. No modification of the model was made. The results of the path analysis of the initial full model indicated that the goodness-of-fit statistics produced a very poor result. This means that the model did not fit well with the data of this study. The goodness-of-fit statistics were as follows: \( \chi^2 = 3968.106, df = 1062, \chi^2/df = 3.736 \), RMSEA = 0.083, GFI = 0.709, CFI = 0.573, TLI = 0.546 and AGFI = 0.678.
Based on the results produced by the initial full model of this study, a decision was made to look into the measurement model of each variable. This decision was made to look at the goodness-of-fit statistics for each variable and to see whether each measurement model would fit the data well. If all models fitted the data well, then EFA would not be run. However, if the model did not fit the data well or produced poor goodness-of-fit statistics, then EFA and CFA to test the psychometric properties of the questionnaire would be run. Figures 6.5 to 6.8 present the initial measurement models for each of the variables.

Figure 6.4: Initial Full Model of All Variables
Figure 6.5: Initial Measurement Model: Transformational Leadership
As Figure 6.5 illustrates, the initial measurement model of transformational leadership comprised 20 items. One item (item IC2) was deleted during the stage of measuring scale reliability. Two covariances between the latent variables (II and IC; IS and IC) exceeded 1.00. Goodness-of-fit statistics for the initial measurement model for transformational leadership were: \( \chi^2 = 716.252, \ df = 164, \ \chi^2/df = 4.367, \ RMSEA = 0.092, \ GFI = 0.837, \ CFI = 0.782, \ TLI = 0.748 \) and \( AGFI = 0.917 \). These results showed that the initial measurement model for transformational leadership produced poor goodness-of-fit statistics.

![Figure 6.6: Initial Measurement Model: Transactional Leadership](image-url)
As Figure 6.6 illustrates, the initial measurement model for transactional leadership comprised 12 items. Two items (items CR1 and MBEA1) were deleted during the stage of measuring scale reliability. Goodness-of-fit statistics for the initial measurement model for transactional leadership were: \( \chi^2 = 103.175, df = 32, \frac{\chi^2}{df} = 3.224, \) RMSEA = 0.075, GFI = 0.952, CFI = 0.880, TLI = 0.831 and AGFI = 0.917. These results showed that the initial measurement model for the transactional leadership construct shows an acceptable (moderate) fit of the data.

Figure 6.7: Initial Measurement Model: Entrepreneurial Orientation
As Figure 6.7 illustrates, the initial EO measurement model comprised 11 items. One covariance between latent variables exceeded 1.00. Goodness-of-fit statistics for the initial measurement model for EO were: \( \chi^2 = 185.6.9, df = 41, \frac{\chi^2}{df} = 4.527, \) RMSEA = 0.095, GFI = 0.920, CFI = 0.791, TLI = 0.720 and AGFI = 0.871. These results showed that the initial measurement model for the EO construct produced acceptable goodness-of-fit statistics.

![Initial Measurement Model: Organisational Performance](image)

**Figure 6.8: Initial Measurement Model: Organisational Performance**

As Figure 6.8 illustrates, the initial organisational performance measurement model comprised eight items. The covariance between latent variables exceeded 1.00. Goodness-of-fit statistics for the initial measurement model for organisational performance were: \( \chi^2 = 196.5.07, df = 19, \) P-value = .000, \( \frac{\chi^2}{df} = 10.342, \) RMSEA = 0.154, GFI = 0.896, CFI = 0.796, TLI = 0.699 and AGFI = 0.804. These results
showed that the initial measurement model for the organisational performance construct did not fit the data well.

To summarise, the results based on the initial measurement models for each variable concluded that some of the models did not produce an acceptable level of goodness-of-fit statistics. Also, there were some covariances between latent variables that exceeded 1.00 in almost all of the initial measurement models. Overall, the $\chi^2$/df ranged from 3.224 to 10.342. The RMSEA ranged from 0.075 to 0.154. The GFI ranged from 0.837 to 0.952. The CFI ranged from 0.791 to 0.880. The TLI ranged from 0.699 to 0.831 and the AGFI ranged from 0.791 to 0.917. Therefore, due to these unsatisfactory results from the initial measurement models, the researcher ran the EFA and the CFA procedures to identify whether or not the final measurement models for each variable would produce better results for the final analysis. The following section discusses the procedures and findings involved in the EFA and CFA processes.

6.9 Development of Path Model

6.9.1 Exploratory Factor Analysis (EFA)

The primary objective of using EFA is to determine the number of common factors influencing a set of measurements based on the data. Kahn (2006) suggested that EFA facilitates the identification of the factors that explain the covariances among variables. To decide how many factors to retain, several criteria were observed when extracting the factors of: (1) loadings of items (items with loadings less than 0.30 and loaded on multiple factors were removed during the EFA process); (2) eigenvalues
(Kaiser 1960) (The Kaiser rule states that all components with eigenvalues less than 1.0 should be dropped); (3) variance percentage (solutions accounting for at least 50% of the total variance); (4) scree plot; and (5) prior research (Hair et al. 2005). Tables 6.12 to 6.15 show the factor loadings associated with each of the constructs following the EFA process. All factors loading < 0.30 are not shown for all tables.

Table 6.12  Factor Loadings Associated with Transformational Leadership Scale Following Principal Component Analysis

<table>
<thead>
<tr>
<th>Transformational Leadership Measures</th>
<th>Factor 1 Intellectual Stimulation</th>
<th>Factor 2 Inspirational Motivation</th>
<th>Factor 3 Idealised Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS3</td>
<td>0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IS1</td>
<td>0.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IS4</td>
<td>0.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM4</td>
<td></td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>IM1</td>
<td></td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>IM3</td>
<td></td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>II5</td>
<td></td>
<td></td>
<td>0.81</td>
</tr>
<tr>
<td>II1</td>
<td></td>
<td></td>
<td>0.71</td>
</tr>
</tbody>
</table>

| Eigenvalues                         | 1.79                             | 1.68                             | 1.61                        |
| Percentage of variance explained (63.53%) | 22.35                             | 21.04                             | 20.14                        |

KMO and Bartlett’s Test
Kaiser-Mayer-Olkin Measure of Sampling Adequacy = 0.79
Bartlett’s Test of Sphericity = 636.15, Sig = 0.000

Table 6.12 shows the results of the EFA for transformational leadership measures. Initially, there were 20 items representing transformational leadership. There were eight items for the idealised influence factor and four items each for inspirational motivation, intellectual stimulation and individualised consideration. One item (item IC2) was deleted at the earlier stage of measuring scale reliability. In the EFA process, a total of 11 items were deleted: six items for idealised influence, one item
for intellectual stimulation, one item for inspirational motivation and all three remaining items for individualised consideration, due to low loadings and items not loading on their corresponding constructs. The decision to remove those items was taken with the consideration that the measures of transformational leadership were taken from a well-developed scale (Avolio & Bass 2004). Therefore, items that did not load onto their corresponding constructs were removed from the next analysis.

Relating items and their associated factors to the theoretical construct, the outcome from the three-factor solution of the transformational leadership accounted for 64% of the variance. It also revealed a good KMO result of 0.79. The result of Bartlett’s test of sphericity for the presence of correlation among the variables should be significant (p<0.05); in this case, it produced a favourable result of 0.000.

<table>
<thead>
<tr>
<th>Transactional Leadership Measures</th>
<th>Factor 1 Management-by-exception Passive</th>
<th>Factor 2 Contingent Reward</th>
<th>Factor 3 Management-by-exception Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBEP2</td>
<td>0.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBEP1</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBEP4</td>
<td>0.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBEP3</td>
<td>0.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR2</td>
<td></td>
<td>0.77</td>
<td></td>
</tr>
<tr>
<td>CR3</td>
<td></td>
<td>0.77</td>
<td></td>
</tr>
<tr>
<td>CR4</td>
<td></td>
<td>0.65</td>
<td></td>
</tr>
<tr>
<td>MBEA2</td>
<td></td>
<td></td>
<td>0.82</td>
</tr>
<tr>
<td>MBEA4</td>
<td></td>
<td></td>
<td>0.65</td>
</tr>
<tr>
<td>MBEA3</td>
<td></td>
<td></td>
<td>0.59</td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>2.03</td>
<td>1.92</td>
<td>1.52</td>
</tr>
<tr>
<td>Percentage of variance explained (54.71%)</td>
<td>20.32</td>
<td>19.24</td>
<td>15.17</td>
</tr>
</tbody>
</table>
Initially, 12 items represented transactional leadership. There were four items each for contingent reward, management-by-exception (active) and management-by-exception (passive). Two items (items CR1 and MBEA1) were deleted at the earlier stage of measuring scale reliability. Table 5.13 shows the results of the EFA of the remaining ten items of transactional leadership measures. Three factors were identified. All items were found to load on their respective constructs, corresponding well with the theory. Relating items and their associated factors to the theoretical construct, the outcome from the three-factor solution of the transactional leadership accounted for 55% of the variance. It also revealed a good KMO result of 0.71. The result of Bartlett’s test of sphericity for the presence of correlation among the variables should be significant (p<0.05); in this case, it produced a favourable result of 0.000.

Table 6.14 (below) shows the results of the EFA for the EO measures. Initially, 11 items represented EO. There were four items for innovativeness, four items for proactiveness and three items for risk taking. Four items (two items for innovativeness and two items for proactiveness) were deleted in the EFA process due to low loadings and items not loading on their corresponding constructs. By relating items and their associated factors to the theoretical construct, the outcome from the three-factor solution of the entrepreneurial orientation accounted for 64% of the variance. It also revealed a good KMO result of 0.71. The result of Bartlett’s test of
sphericity for the presence of correlation among the variables should be significant (p<0.05); in this instance, it achieved a favourable result of 0.000.

Table 6.14: Factor Loadings Associated with Entrepreneurial Orientation Scale Following Principal Component Analysis

<table>
<thead>
<tr>
<th>Entrepreneurial Orientation Measures</th>
<th>Factor 1 Proactiveness</th>
<th>Factor 2 Risk taking</th>
<th>Factor 3 Innovativeness</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA4</td>
<td>In dealing with competitors, my company is very often the first to introduce new products and administrative techniques.</td>
<td>0.83</td>
<td></td>
</tr>
<tr>
<td>PA3</td>
<td>In dealing with competitors, my company typically initiates actions which competitors then respond to.</td>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>RT1</td>
<td>My company has a strong proclivity/tendency for high risk projects (with chances of very high returns).</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td>RT3</td>
<td>When confronted with decision making situations involving uncertainty, my company adopts a cautious “wait-and-see” strategy.a</td>
<td>0.64</td>
<td></td>
</tr>
<tr>
<td>RT2</td>
<td>When confronted with decision making situations involving uncertainty, my company adopts a cautious “wait-and-see” strategy.a</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td>INN2</td>
<td>I believe that changes in the product/service lines in my company have been mostly minor in nature.b</td>
<td>0.87</td>
<td></td>
</tr>
<tr>
<td>INN1</td>
<td>My company has marketed many new lines of products or services.</td>
<td>0.66</td>
<td></td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>Percentage of variance explained (64.13%)</td>
<td>1.61</td>
<td>22.98</td>
</tr>
<tr>
<td>KMO and Bartlett’s Test</td>
<td>Percentage of variance explained (64.13%)</td>
<td>1.51</td>
<td>21.63</td>
</tr>
<tr>
<td>Kaiser-Mayer-Olkin Measure of Sampling Adequacy = .71</td>
<td>Percentage of variance explained (64.13%)</td>
<td>1.37</td>
<td>19.51</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity = 369.97, Sig = 0.000</td>
<td>Percentage of variance explained (64.13%)</td>
<td>22.98</td>
<td>21.63</td>
</tr>
</tbody>
</table>

Note: * = reverse coded item
Table 6.15: Factor Loadings Associated with Organisational Performance Scale Following Principal Component Analysis

<table>
<thead>
<tr>
<th>Organisational Performance Measures</th>
<th>Factor 1 Profitability</th>
<th>Factor 2 Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRO1 We are satisfied with the return on our investments.</td>
<td>0.93</td>
<td></td>
</tr>
<tr>
<td>PRO2 We have higher return on investment (than our competitors).</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td>PRO3 We are satisfied with our return on sales.</td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td>GRO3 Our market shares are increasing faster than those of our competitors.</td>
<td></td>
<td>0.89</td>
</tr>
<tr>
<td>GRO4 My company is growing steadily for the past three years.</td>
<td></td>
<td>0.61</td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>1.63</td>
<td>1.55</td>
</tr>
<tr>
<td>Percentage of variance explained (63.02%)</td>
<td>32.61</td>
<td>31.02</td>
</tr>
</tbody>
</table>

KMO and Bartlett’s Test
Kaiser-Mayer-Olkin Measure of Sampling Adequacy = .63
Bartlett’s Test of Sphericity = 349.88, Sig = 0.000

Table 6.15 shows the results of the EFA of the organisational performance measures. Initially, eight items represented the organisational performance. There were four items each measuring profitability and growth. Three items (two items for growth and one item for profitability) were deleted in the EFA process due to low loadings and items not loading on their corresponding constructs. By relating items and their associated factors to the theoretical construct, the outcome from the two-factor solution of the organisational performance accounted for 64% of the variance. It revealed a KMO score of 0.63. The result of Bartlett’s test of sphericity for the
presence of correlation among the variables should be significant (p<0.05); in this
instance, it achieved a favourable result of 0.000.

To summarise the EFA process, up to 12 items were deleted for each construct due to
low loadings and cross-loadings. The majority of the items loaded onto their
respective constructs, endorsing the theory behind each of them. Tables 6.16 to 6.19
show the descriptive statistics and correlation coefficients of retained items for the
main variables.

Table 6.16: Descriptive Statistics and Correlation Matrix for Transformational
Leadership Construct

<table>
<thead>
<tr>
<th>Transformational Leadership Items</th>
<th>Mean Score</th>
<th>Std. Dev</th>
<th>II1</th>
<th>II5</th>
<th>IS1</th>
<th>IS3</th>
<th>IS4</th>
<th>IM1</th>
<th>IM3</th>
</tr>
</thead>
<tbody>
<tr>
<td>II1</td>
<td>2.94</td>
<td>0.91</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II5</td>
<td>2.45</td>
<td>1.04</td>
<td>0.33***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IS1</td>
<td>2.82</td>
<td>0.84</td>
<td>0.17***</td>
<td>0.23***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IS3</td>
<td>2.84</td>
<td>0.86</td>
<td>0.17**</td>
<td>0.05</td>
<td>0.30***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IS4</td>
<td>2.88</td>
<td>0.89</td>
<td>0.21***</td>
<td>0.10*</td>
<td>0.26***</td>
<td>0.53***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM1</td>
<td>3.01</td>
<td>0.86</td>
<td>0.37**</td>
<td>0.29***</td>
<td>0.25**</td>
<td>0.28***</td>
<td>0.30***</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>IM3</td>
<td>3.08</td>
<td>0.76</td>
<td>0.21***</td>
<td>0.26***</td>
<td>0.34***</td>
<td>0.27***</td>
<td>0.40***</td>
<td>0.46***</td>
<td>1</td>
</tr>
<tr>
<td>IM4</td>
<td>3.29</td>
<td>0.71</td>
<td>0.10**</td>
<td>0.09*</td>
<td>0.15**</td>
<td>0.30***</td>
<td>0.34***</td>
<td>0.36***</td>
<td>0.42***</td>
</tr>
</tbody>
</table>

Notes: *p<0.05. **p<0.01. ***p<0.001.

Based on the correlation matrix produced during factor analysis of transformational
construct, there was no correlation between variables that exceeded 0.9. As
Tabachnick and Fidell (2001) suggested, when there is a high correlation (>0.9)
between variables, the assumption of multicollinearity is violated. Thus the data
presented no violation of the assumption.
Table 6.17: Descriptive Statistics and Correlation Matrix for Transactional Leadership Construct

<table>
<thead>
<tr>
<th>Transactional Leadership Items</th>
<th>Mean Score</th>
<th>Std. Dev</th>
<th>CR2</th>
<th>CR3</th>
<th>CR4</th>
<th>MBEA2</th>
<th>MBEA3</th>
<th>MBEA4</th>
<th>MBEP1</th>
<th>MBEP2</th>
<th>MBEP3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR2</td>
<td>2.88</td>
<td>0.87</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR3</td>
<td>2.87</td>
<td>0.87</td>
<td>0.46***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR4</td>
<td>3.13</td>
<td>0.72</td>
<td>0.28***</td>
<td>0.38***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBEA2</td>
<td>2.90</td>
<td>0.85</td>
<td>0.13**</td>
<td>0.09*</td>
<td>0.08</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBEA3</td>
<td>2.95</td>
<td>0.86</td>
<td>0.24***</td>
<td>0.33***</td>
<td>0.24***</td>
<td>0.29***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBEA4</td>
<td>2.70</td>
<td>0.92</td>
<td>0.16**</td>
<td>0.22***</td>
<td>0.13**</td>
<td>0.28***</td>
<td>0.20***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBEP1</td>
<td>1.22</td>
<td>0.96</td>
<td>-0.06</td>
<td>-0.12**</td>
<td>-0.22***</td>
<td>0.09*</td>
<td>0.04</td>
<td>-0.04</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBEP2</td>
<td>1.01</td>
<td>0.98</td>
<td>0.03**</td>
<td>-0.13**</td>
<td>-0.21***</td>
<td>-0.01</td>
<td>-0.11*</td>
<td>0.02</td>
<td>0.47***</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MBEP3</td>
<td>1.92</td>
<td>1.14</td>
<td>0.11*</td>
<td>-0.05</td>
<td>0.00</td>
<td>0.08</td>
<td>-0.01</td>
<td>0.01</td>
<td>0.24***</td>
<td>0.28***</td>
<td>1</td>
</tr>
<tr>
<td>MBEP4</td>
<td>.90</td>
<td>1.05</td>
<td>-0.16**</td>
<td>-0.30***</td>
<td>-0.26***</td>
<td>-0.09*</td>
<td>-0.08</td>
<td>-0.08*</td>
<td>0.37***</td>
<td>0.42***</td>
<td>0.19***</td>
</tr>
</tbody>
</table>

Notes: *p<0.05. **p<0.01. ***p<0.001.
Based on the correlation matrix produced during the factor analysis of the transactional leadership construct, there was no correlation between variables exceeding 0.9. As Tabachnick and Fidell (2001) suggested, when there is high correlation (>0.9) between variables, the assumption of multicollinearity is violated. Thus the data presented no violation of the assumption.

Table 6.18: Descriptive Statistics and Correlation Matrix for Entrepreneurial Orientation Construct

<table>
<thead>
<tr>
<th>Entrepreneurial Orientation Items</th>
<th>Mean Score</th>
<th>Std. Dev</th>
<th>INN1</th>
<th>INN2a</th>
<th>PA3</th>
<th>PA4</th>
<th>RT1</th>
<th>RT2</th>
</tr>
</thead>
<tbody>
<tr>
<td>INN1</td>
<td>2.86</td>
<td>0.84</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INN2(^{a})</td>
<td>1.97</td>
<td>0.99</td>
<td>0.32***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA3</td>
<td>2.57</td>
<td>0.91</td>
<td>0.10***</td>
<td>0.03</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA4</td>
<td>2.58</td>
<td>0.85</td>
<td>0.31***</td>
<td>0.11*</td>
<td>0.44***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RT1</td>
<td>2.40</td>
<td>1.04</td>
<td>0.22***</td>
<td>0.08</td>
<td>0.17***</td>
<td>0.18*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>RT2</td>
<td>2.91</td>
<td>0.83</td>
<td>0.27***</td>
<td>0.17***</td>
<td>0.32***</td>
<td>0.30***</td>
<td>0.32***</td>
<td>1</td>
</tr>
<tr>
<td>RT3(^{a})</td>
<td>2.12</td>
<td>1.02</td>
<td>0.17***</td>
<td>0.272***</td>
<td>0.19***</td>
<td>0.17***</td>
<td>0.25***</td>
<td>0.31***</td>
</tr>
</tbody>
</table>

Notes: *p<0.05. **p<0.01. ***p<0.001; \(^{a}\) Reversed Items

Based on the correlation matrix produced during the factor analysis of the EO construct, there was no correlation between variables exceeding 0.9. As Tabachnick and Fidell (2001) suggested, when there is a high correlation (>0.9) between variables, the assumption of multicollinearity is violated. Hence the data presented no violation of the assumption.
Table 6.19: Descriptive Statistics and Correlation Matrix for Organisational Performance Construct

<table>
<thead>
<tr>
<th>Organisational Performance Items</th>
<th>Mean Score</th>
<th>Std. Dev</th>
<th>Pro1</th>
<th>Pro2</th>
<th>Pro3</th>
<th>Gro3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro1</td>
<td>2.58</td>
<td>0.94</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pro2</td>
<td>2.36</td>
<td>0.78</td>
<td>0.48***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pro3</td>
<td>2.57</td>
<td>0.91</td>
<td>0.36***</td>
<td>0.31***</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Gro3</td>
<td>2.36</td>
<td>0.80</td>
<td>0.08</td>
<td>0.40***</td>
<td>0.32***</td>
<td>1</td>
</tr>
<tr>
<td>Gro4</td>
<td>3.13</td>
<td>0.81</td>
<td>0.27***</td>
<td>0.25***</td>
<td>0.30***</td>
<td>0.31***</td>
</tr>
</tbody>
</table>

Notes: *p<0.05. **p<0.01. ***p<0.001.

Based on the correlation matrix produced during the factor analysis of the organisational performance construct, there was no correlation between variables that exceeded 0.9. As Tabachnick and Fidell (2001) suggested, when there is a high correlation (>0.9) between variables, the assumption of multicollinearity is violated. Hence the data presented no violation of the assumption. To verify the factor structure derived from this EFA process, measurement models were then developed.

The following section discusses the multi-factor measurement models, part of the CFA process of this study.

6.9.2 Confirmatory Factor Analysis (CFA)

As noted earlier, CFA enables the researcher to test how well the measured variables represent the intended constructs. CFA also allows the researcher to assess the contribution of each scale item as well as how well the scale measures the related concept (Hair et al. 2010). The first step in CFA involved developing measurement models based on the theoretical principles that reflect the relationships between the observed items and the latent constructs that they are supposed to represent. To build
the measurement models for each of the construct, AMOS version 18.0 (Analysis of Moment Structures) was used. It is also used to develop path analysis to test all the hypotheses.

6.9.2.1 Multi-factor measurement model

There is considerable support for conducting multi-factor model analysis to test for the multi-dimensionality of each theoretical construct. Bass and Avolio (1994) posited that transformational and transactional leadership are multi-dimensional constructs. Regarding EO, even though earlier scholars used aggregated scores to suggest EO is a uni-dimensional construct (Miller 1983; Covin & Slevin 1989), others have suggested that EO should be treated as a multi-dimensional construct (Lumpkin & Dess 1996; Yang 2008). Finally, organisational performance is also a multi-dimensional construct, as suggested by Lumpkin and Dess (1996) and Cameron (1978). In addition, Covin and Slevin (1991) postulated that growth and profitability represent the factors of a firm’s economic performance.

The used of multi-factor measurement models also helped to determine the values for composite reliability, average variance extracted and average shared variance. These measures were used to examine internal consistency and to test for convergent and discriminant validity. Figures 6.9 to 6.12 and Tables 6.20 to 6.23 show the final four multi-factor measurement models and the results of fit analysis associated with each final model.
Figure 6.9: Final Measurement Model: Transformational Leadership

Table 6.20: Fit Analysis: Transformational Leadership

<table>
<thead>
<tr>
<th>Fit Measure</th>
<th>Result</th>
<th>Fit Measure</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi Square ($x^2$)</td>
<td>38.973</td>
<td>GFI</td>
<td>0.976</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>13</td>
<td>CFI</td>
<td>0.958</td>
</tr>
<tr>
<td>$x^2$/df</td>
<td>2.998</td>
<td>TLI</td>
<td>0.910</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.071</td>
<td>AGFI</td>
<td>0.934</td>
</tr>
</tbody>
</table>

Four factors represent transformational leadership: idealised influence, inspirational motivation, intellectual stimulation and individualised consideration. There were
eight items for idealised influence, and four items each for inspirational motivation, intellectual stimulation and individualised consideration. One item (item IC2) was deleted during the measurement for scale reliability. The remaining 19 items were examined for factor structure. As Figure 6.9 shows, the final transformational leadership measurement model comprises only eight items and fits the data well. Goodness-of-fit statistics are: \( \chi^2 = 38.973, df = 13, \chi^2/df = 2.998, \) RMSEA = 0.071, GFI = 0.976, CFI = 0.958, TLI = 0.910 and AGFI = 0.934. The fit results (Table 6.20) indicate an acceptable fit and therefore convergent validity is demonstrated.

![Figure 6.10: Final Measurement Model: Transactional Leadership](image)

Figure 6.10: Final Measurement Model: Transactional Leadership
Table 6.21: Fit Analysis: Transactional Leadership

<table>
<thead>
<tr>
<th>Fit Measure</th>
<th>Result</th>
<th>Fit Measure</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi Square ($x^2$)</td>
<td>70.299</td>
<td>GFI</td>
<td>0.963</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>20</td>
<td>CFI</td>
<td>0.910</td>
</tr>
<tr>
<td>$x^2$/df</td>
<td>3.515</td>
<td>TLI</td>
<td>0.838</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.08</td>
<td>AGFI</td>
<td>0.917</td>
</tr>
</tbody>
</table>

Three factors represent transactional leadership: contingent reward, management-by-exception (active) and management-by-exception (passive). There were four questions representing each factor. Two items were deleted during the measurement of scale reliability. The remaining 10 items were examined for factor structure. As Figure 6.10 illustrates, the final transactional leadership measurement model comprises only nine items and fits the data well. Goodness-of-fit statistics are: $\chi^2 = 70.299$, $df = 20$, $\chi^2/df = 3.515$, RMSEA = 0.080, GFI = 0.961, CFI = 0.910, TLI = 0.838 and AGFI = 0.917. The fit results (Table 6.21) indicate an acceptable fit and therefore convergent validity is demonstrated.
Figure 6.11: Final Measurement Model: Entrepreneurial Orientation

Table 6.22: Fit Analysis: Entrepreneurial Orientation

<table>
<thead>
<tr>
<th>Fit Measure</th>
<th>Result</th>
<th>Fit Measure</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi Square ($\chi^2$)</td>
<td>12.785</td>
<td>GFI</td>
<td>0.991</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>6</td>
<td>CFI</td>
<td>0.981</td>
</tr>
<tr>
<td>$\chi^2$/df</td>
<td>2.131</td>
<td>TLI</td>
<td>0.933</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.053</td>
<td>AGFI</td>
<td>0.957</td>
</tr>
</tbody>
</table>

Notes: * denotes reversed items
Three factors represent EO: innovativeness, proactiveness and risk taking. There were four items for innovativeness, four items for proactiveness and three items for risk taking. The 11 items were assessed for factor structure via goodness-of-fit statistics. As Figure 6.11 shows, the final EO measurement model comprises only seven questions and fits the data well. Goodness-of-fit statistics are: \( \chi^2 = 12.785, df = 6, \frac{\chi^2}{df} = 2.131, \) RMSEA = 0.053, GFI = 0.991, CFI = 0.981, TLI = 0.933 and AGFI = 0.957. These statistics as presented in Table 6.22 indicate an acceptable fit and therefore the convergent validity is demonstrated.

![Two-factor Organisational Performance Measurement Model](image)

**Figure 6.12: Two-factor Organisational Performance Measurement Model**
Table 6.23: Fit Analysis: Organisational Performance

<table>
<thead>
<tr>
<th>Fit Measure</th>
<th>Result</th>
<th>Fit Measure</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi Square ($x^2$)</td>
<td>7.361</td>
<td>GFI</td>
<td>0.992</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>2</td>
<td>CFI</td>
<td>0.984</td>
</tr>
<tr>
<td>$x^2/df$</td>
<td>3.68</td>
<td>TLI</td>
<td>0.922</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.082</td>
<td>AGFI</td>
<td>0.943</td>
</tr>
</tbody>
</table>

Two factors represent organisational performance: growth and profitability. There were four items for growth and four items for profitability. The eight items were assessed for factor structure via goodness-of-fit statistics. As Figure 6.12 shows, the final organisational performance measurement model comprises only five questions and fits the data well. Goodness-of-fit statistics are: $\chi^2 = 7.361$, $df = 2$, $\chi^2/df = 3.68$, RMSEA = 0.082, GFI = 0.992, CFI = 0.984, TLI = 0.922 and AGFI = 0.943. These statistics as presented in Table 6.23 indicate an acceptable fit and therefore the convergent validity is demonstrated.

To summarise, the results from the multi-factor measurement models fitted the data well. The $x^2/df$ ranged from 2.131 to 3.741. The RMSEA ranged from 0.053 to 0.082. The GFI ranged from 0.963 to 0.992. The CFI ranged from 0.910 to 0.984. The TLI ranged from 0.838 to 0.933 and the AGFI ranged from 0.917 to 0.957. The outcomes of the final measurement models for each of the variables derived from the EFA and CFA processes produced much better results than their initial measurement models. Almost all indices were well improved. The comparisons are summarised in Table 6.24. The results of each of the measurement models, construct reliability, convergent and discriminant validity, were then examined.
Table 6.24: Goodness-of-fit Comparison between Initial and Final Measurement Models

<table>
<thead>
<tr>
<th></th>
<th>RMSEA</th>
<th>GFI</th>
<th>CFI</th>
<th>AGFI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transformational Leadership</strong></td>
<td>0.071</td>
<td>0.976</td>
<td>0.958</td>
<td>0.934</td>
</tr>
<tr>
<td></td>
<td>(0.092)</td>
<td>(0.837)</td>
<td>(0.782)</td>
<td>(0.917)</td>
</tr>
<tr>
<td><strong>Transactional Leadership</strong></td>
<td>0.080</td>
<td>0.963</td>
<td>0.910</td>
<td>0.917</td>
</tr>
<tr>
<td></td>
<td>(0.075)</td>
<td>(0.952)</td>
<td>(0.880)</td>
<td>(0.917)</td>
</tr>
<tr>
<td><strong>EO</strong></td>
<td>0.053</td>
<td>0.991</td>
<td>0.981</td>
<td>0.957</td>
</tr>
<tr>
<td></td>
<td>(0.095)</td>
<td>(0.920)</td>
<td>(0.791)</td>
<td>(0.871)</td>
</tr>
<tr>
<td><strong>OP</strong></td>
<td>0.082</td>
<td>0.992</td>
<td>0.984</td>
<td>0.943</td>
</tr>
<tr>
<td></td>
<td>(0.154)</td>
<td>(0.896)</td>
<td>(0.796)</td>
<td>(0.804)</td>
</tr>
</tbody>
</table>

Note: Numbers in parentheses were fit statistics from initial measurement models

6.9.3 Construct Reliability and Validity

As proposed by Bagozzi and Yi (1988), values above 0.6 show a good measure of construct reliability and high internal consistency. To assess for convergent validity, the values for AVE should be higher than 0.4 (Bagozzi & Baumgartner 1994). Hair et al. (2010) suggested that the values for ASV should be lower than the values of AVE to establish discriminant validity among constructs. These parameters were used to confirm the construct reliability, and the convergent and discriminant validity for each construct. Tables 6.25 to 6.28 display the standardised factor loadings, t-values, constructs reliability, average variance values and average shared variances for each of the multi-factor measurement models.
Table 6.25: A Standardised Factor Loading, T-values, Constructs Reliability, Average Variance Extracted Values and Average Shared Variances for the Three-factor Transformational Leadership Measurement Model

<table>
<thead>
<tr>
<th>Construct</th>
<th>Standardised Factor Loadings</th>
<th>t-value</th>
<th>Construct Reliability (CR)</th>
<th>Average Variance Extracted (AVE)</th>
<th>Average Shared Variance (ASV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idealised Influence</td>
<td></td>
<td></td>
<td>0.65</td>
<td>0.48</td>
<td>0.17</td>
</tr>
<tr>
<td>II1</td>
<td>0.70</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II5</td>
<td>0.68</td>
<td>Scaling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td></td>
<td>0.69</td>
<td>0.43</td>
<td>0.30</td>
<td></td>
</tr>
<tr>
<td>IS1</td>
<td>0.62</td>
<td>Scaling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IS3</td>
<td>0.68</td>
<td>6.38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IS4</td>
<td>0.77</td>
<td>6.58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td></td>
<td>0.68</td>
<td>0.42</td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td>IM1</td>
<td>0.63</td>
<td>9.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM3</td>
<td>0.76</td>
<td>Scaling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM4</td>
<td>0.54</td>
<td>8.83</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Scaling means value indicator of standardised factor loadings set to 1 to enable latent factor identification.

As shown in Table 6.25, values for construct reliability among transformational leadership constructs represented by idealised influence, intellectual stimulation and inspirational motivation were 0.66, 0.69 and 0.68, respectively. All values were above the threshold value of 0.6 as recommended by Bagozzi and Yi (1988). Therefore these constructs show good measure of reliability and internal consistency. Convergent validity was demonstrated for all constructs since the values for AVE were all above 0.4. Discriminant validity was also demonstrated when the values of ASV for each construct were lower than the values of AVE.
Table 6.26: A Standardised Factor Loading, T-values, Construct Reliability, Average Variance Extracted Values and Average Shared Variances for the Three-factor Transactional Leadership Measurement Model

<table>
<thead>
<tr>
<th>Construct</th>
<th>Standardised Factor Loadings</th>
<th>t-value</th>
<th>Construct Reliability (CR)</th>
<th>Average Variance Extracted (AVE)</th>
<th>Average Shared Variance (ASV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingent Reward</td>
<td></td>
<td></td>
<td></td>
<td>0.66</td>
<td>0.40</td>
</tr>
<tr>
<td>CR2</td>
<td>0.57</td>
<td></td>
<td>Scaling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR3</td>
<td>0.77</td>
<td></td>
<td>7.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR4</td>
<td>0.52</td>
<td></td>
<td>7.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management-by-exception (Active)</td>
<td></td>
<td>0.73</td>
<td></td>
<td>0.51</td>
<td>0.10</td>
</tr>
<tr>
<td>MBEA2</td>
<td>0.34</td>
<td></td>
<td>2.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBEA3</td>
<td>0.94</td>
<td></td>
<td>Scaling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBEA4</td>
<td>0.73</td>
<td></td>
<td>5.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management-by-exception (Passive)</td>
<td></td>
<td>0.74</td>
<td></td>
<td>0.49</td>
<td>0.07</td>
</tr>
<tr>
<td>MBEP1</td>
<td>0.55</td>
<td></td>
<td>Scaling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBEP2</td>
<td>0.78</td>
<td></td>
<td>3.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBEP4</td>
<td>0.75</td>
<td></td>
<td>3.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Scaling means value indicator of standardised factor loadings set to 1 to enable latent factor identification.

As shown in Table 6.26, values for construct reliability among transactional leadership constructs represented by contingent reward, management-by-exception (active) and management-by-exception (passive) were 0.66, 0.73 and 0.74, respectively. All values were above the threshold value of 0.6 as recommended by Bagozzi and Yi (1988). Therefore, these constructs show good measure of reliability and internal consistency. Values of AVE for each construct of transactional leadership were all above 0.4 and therefore convergent validity was demonstrated. Discriminant validity was also demonstrated when the values of ASV for each construct were lower than the values of AVE.
Table 6.27: Table 6.26: A Standardised Factor Loading, T-values, Construct Reliability, Average Variance Extracted Values and Average Shared Variances for the Three-factor Entrepreneurial Orientation Measurement Model

<table>
<thead>
<tr>
<th>Construct</th>
<th>Standardised Factor Loadings</th>
<th>t-value</th>
<th>Construct Reliability (CR)</th>
<th>Average Variance Extracted (AVE)</th>
<th>Average Shared Variance (ASV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovativeness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INN1</td>
<td>0.71</td>
<td>4.58</td>
<td>0.61</td>
<td>0.44</td>
<td>0.14</td>
</tr>
<tr>
<td>INN2</td>
<td>0.61</td>
<td></td>
<td>Scaling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pa3</td>
<td>0.69</td>
<td></td>
<td>0.61</td>
<td>0.44</td>
<td>0.25</td>
</tr>
<tr>
<td>Pa4</td>
<td>0.63</td>
<td></td>
<td>Scaling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk taking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RT1</td>
<td>0.39</td>
<td>3.60</td>
<td>0.69</td>
<td>0.45</td>
<td>0.21</td>
</tr>
<tr>
<td>RT2</td>
<td>0.88</td>
<td></td>
<td>Scaling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RT3*</td>
<td>0.66</td>
<td></td>
<td>5.79</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Scaling means standardized factor loadings value indicator set to 1 to enable latent factor identification. * denotes reversed items

As shown in Table 6.27, values for construct reliability among EO constructs represented by innovativeness, proactiveness and risk taking were 0.61, 0.61 and 0.69, respectively. All values were above the threshold value of 0.6 as recommended by Bagozzi and Yi (1988). Therefore, these constructs show good measure of reliability and internal consistency. Convergent validity was also demonstrated for all construct since the values for AVE were all above 0.4. Discriminant validity was also demonstrated when the values of ASV for each construct were lower than the values of AVE.
As shown in Table 6.28, values for construct reliability among organisational performance constructs represented by growth and profitability were 0.69 and 0.66, respectively. All values were above the threshold value of 0.6 as recommended by Bagozzi and Yi (1988). Therefore, these constructs show good measure of reliability and internal consistency. Values of AVE for each construct of organisational performance were all above 0.4 and therefore convergent validity was demonstrated. Discriminant validity was also demonstrated for growth when the value of ASV for the construct was lower than the value of AVE, but was not demonstrated for the profitability construct.

However, there is a utility in keeping the two constructs separate, as suggested through the EFA, since these measures were borrowed scales that had already been tested for reliability and validity (Matzler et al. 2008). There was also theoretical support for separating these two measures of organisational performance. Covin and Slevin (1991) postulated that growth and profitability represent factors of a firm’s economic performance. Therefore, both were maintained as distinct dependent variables in this study.
6.10 Path Analysis: Hypotheses testing

To test the hypotheses developed in this thesis, path analysis using the maximum likelihood estimation was used to consider the rational and significant relationship between leadership behaviour and EO and organisational performance and also to examine the mediating effect of EO in the relationship between leadership behaviour and organisational performance. Path analysis, which is a subset of SEM, uses bivariate correlations to assess the direct and indirect relationships among these variables. This procedure assesses the strength of each structural relationship in a path diagram (Hair et al. 2010).

One of the benefits of using SEM is that the researcher can modify the model when the hypothesised model does not fit the data well. According to Hoyle (1995), when the outcome from the estimated covariance/variance matrix does not reproduce the sample variance/variance matrix adequately, a hypothesis can be adjusted and the model can be retested. The researcher can either add new paths or remove original paths (deletion of nonsignificant paths) (Kline 2005). Modification can also be done based on the improvement information obtained from Amos 18.0 through modification indices. According to Hair et al. (2010), the modification index is measured for every possible relationship that is not estimated in a model, and the value of a modification index denotes the reduced values of $\chi^2$ if a particular parameter is left unconstrained (free). However, these authors also stressed that making changes to the model based solely on the modification indices is not recommended. Finally, Kline (1998) advised that model re-specification should be consistent with theory and not solely data driven.
6.10.1 Leadership Behaviour and Organisational Performance

To examine the relationship between leadership behaviour and organisational performance and to answer the first three hypotheses proposed in this study, the following path model was developed. The final path of the direct model (Figure 6.13) of the relationship between leadership behaviour and organisational performance fitted the data well and the majority of the indices achieved a satisfactory level of goodness-of-fit statistics. The fit indices of the model are: $\chi^2 = 338.741$, $df = 79$, $\chi^2/df = 4.288$, RMSEA = 0.091, GFI = 0.905, AGFI = 0.855.

![Figure 6.13: Final Path of Direct Model: Leadership Behaviour and Organisational Performance](image)

Note: Dashed arrow denotes nonsignificant relationship

*p<.05. **p<.01. ***p<.001

Goodness of fit statistics: GFI=0.905, AGFI= 0.855, RMSEA= 0.091, CMIN=4.288
Three hypotheses were based on the relationship between leadership behaviour and organisational performance. Based on the results shown in Figure 6.13, transformational leadership has a significant positive relationship to growth ($\beta = 0.45$, $p = 0.000$) and also profitability ($\beta = 0.19$, $p < 0.01$). Hence, these results show full support for H1.

On the other hand, transactional leadership has a significant positive relationship only to growth ($\beta = 0.31$, $p < 0.05$). The path between transactional leadership and profitability is positive but not significant ($\beta = 0.13$, $p > 0.05$). Therefore, these results conclude that H2 is only partially supported.

Based on the outcomes of this direct path model of the relationship between leadership behaviour and organisational performance, it can be concluded that transformational leadership has a greater impact on the organisational performance of SMEs than transactional leadership does. The path coefficients of transformational leadership are found to be higher and more significant than the path coefficients between the relationship of transactional leadership to growth and profitability performance of SMEs. Hence these results show full support for H3. Table 6.29 summarises the results of the path model, standardised coefficients, standard errors and respective $z$-values between leadership behaviour and organisational performance. The next section discusses the results of the final path model of the direct relationship between EO and organisational performance.
Table 6.29: Path Summary of Direct Model of Relationships between Leadership Behaviour and Organisational Performance

<table>
<thead>
<tr>
<th>Relationships</th>
<th>Standardised Coefficients</th>
<th>S.E</th>
<th>z-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership - Growth</td>
<td>0.45</td>
<td>0.07</td>
<td>4.14</td>
</tr>
<tr>
<td>Transformational Leadership - Profitability</td>
<td>0.19</td>
<td>0.07</td>
<td>2.67</td>
</tr>
<tr>
<td>Transactional Leadership - Growth</td>
<td>0.31</td>
<td>0.14</td>
<td>2.47</td>
</tr>
<tr>
<td>Transactional Leadership - Profitability</td>
<td>0.13</td>
<td>0.14</td>
<td>ns</td>
</tr>
</tbody>
</table>

Note: ns means nonsignificant.

6.10.2 Entrepreneurial Orientation and Organisational Performance

To examine the relationship between EO and organisational performance and to answer three of the hypotheses proposed in this study, the following path model was developed. The final path of direct model of the relationship between EO and organisational performance (Figure 6.14) fitted the data well and the majority of the indices achieved a satisfactory level of goodness-of-fit statistics. The fit indices of the model are: $\chi^2 = 103.665$, $df = 28$, $\chi^2/df = 3.702$, RMSEA = 0.083, GFI = 0.956, AGFI = 0.896, CFI = 0.895.
It was hypothesised that each factor of EO would have a significant positive relationship to both organisational performance measures. Based on the results shown in Figure 6.14, innovativeness has a significant positive relationship to growth ($\beta = 0.36$, $p = 0.000$) and profitability ($\beta = 0.36$, $p<0.05$). These results show full support for H4. Proactiveness also has a significant positive relationship to growth ($\beta = 0.70$, $p = 0.000$) and profitability ($\beta = 0.45$, $p = 0.000$). Therefore, H5 is fully supported.

Finally, the risk-taking factor has a significant positive relationship only to growth ($\beta = 0.18$, $p<0.05$). However, the path between risk taking and profitability is positive but not significant ($\beta = 0.04$, $p>0.05$). Therefore, these results show only partial...
support for H6. Table 6.30 summarises the results of the path model, standardised coefficients, standard errors and respective z-values between factors of EO and organisational performance. The next section discusses the results of the final path model examining the mediating effect of EO on the relationship between leadership behaviour and organisational performance.

Table 6.30: Path Summary of Direct Model between Entrepreneurial Orientation and Organisational Performance

<table>
<thead>
<tr>
<th>Relationships</th>
<th>Standardised Coefficients</th>
<th>S.E</th>
<th>z-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovativeness</td>
<td>Growth</td>
<td>0.36</td>
<td>0.19</td>
</tr>
<tr>
<td>Innovativeness</td>
<td>Profitability</td>
<td>0.17</td>
<td>0.16</td>
</tr>
<tr>
<td>Proactiveness</td>
<td>Growth</td>
<td>0.70</td>
<td>0.10</td>
</tr>
<tr>
<td>Proactiveness</td>
<td>Profitability</td>
<td>0.45</td>
<td>0.08</td>
</tr>
<tr>
<td>Risk taking</td>
<td>Growth</td>
<td>0.18</td>
<td>0.14</td>
</tr>
<tr>
<td>Risk taking</td>
<td>Profitability</td>
<td>0.05</td>
<td>0.12</td>
</tr>
</tbody>
</table>

Note: ns means nonsignificant.

6.10.3 Mediating Effects of Entrepreneurial Orientation on the Relationship between Leadership Behaviour and Organisational Performance

To test the mediating effect of EO on the leadership-organisational performance relationship and to answer the remaining four hypotheses proposed in this study, a new path model was developed and examined. In this mediation model, EO is treated as a uni-dimensional construct following the suggestion made by Miller (1983) and Covin and Slevin (1989). Figure 6.15 shows the final path model of the mediating effect of EO on the leadership-organisational performance relationship. The model fitted the data well and the majority of the indices achieved a satisfactory level of
goodness-of-fit statistics. The fit indices of the model are: $\chi^2 = 334.344$, $df = 100$, $\chi^2 / df = 3.343$, RMSEA = 0.077, GFI = 0.914, AGFI = 0.868, CFI = 0.819.

It was proposed that EO would fully mediate the relationship between both transformational and transactional leadership and both measures of organisational performance. To show support for these hypotheses, a suggestion made by Baron and Kenny (1986) in regard to the mediation of a relationship was followed. The first step in establishing a mediating effect is to show that each of the independent variables (transformational and transactional leadership) has a significant relationship with the
dependent variables (growth and profitability). The outcomes of these relationships were presented and discussed in the previous section (see Figure 6.13).

The second step is to establish that the independent variables are correlated significantly with the mediating variable. The third step is to establish that the mediating variable is correlated significantly with the dependent variable(s). Based on the results presented in Figure 6.15, both independent variables – transformational leadership ($\beta = 0.70, p = 0.000$) and transactional leadership ($\beta = 0.23, p<0.01$) – have a significant relationship to EO. EO also has a significant relationship to growth ($\beta = 0.76, p<0.05$) and profitability ($\beta = 0.55, p<0.05$). Thus, both conditions are fulfilled.

Finally, according to Baron and Kenny (1986), a variable mediates a relationship if it reduces the path coefficient of a direct relationship once the mediator is computed into the model. Full mediation occurs when the path between the independent variables (transformational and transactional leadership) and the dependent variables (growth and profitability) becomes insignificant when EO is introduced into the model. Similar conditions were also suggested by Hair et al. (2005, 2010) when they indicated that there is no mediation if the relationship between the independent variable and the dependent variable remains significant and unchanged when the mediation variable is included in the model. Partial mediation occurs if the relationship between independent and dependent variables is reduced but remains significant when the mediation variable is included as an additional predictor. If the relationship between independent and dependent variables is reduced to a point
where it is not significant after the mediation variable is included, full mediation occurs (Hair et al. 2005, 2010).

Based on suggestions made by Baron and Kenny (1986) and also by Hair et al. (2005, 2010), the following paragraphs discuss each of the mediating hypotheses proposed in this study.

The results demonstrated in Figure 6.13 show that, in the direct model, transformational leadership is significantly related to growth (β = 0.45, p = 0.000). Based on the mediation model (Figure 6.15), significant relationships are found between transformational leadership and EO (β = 0.70, p = 0.000) and between EO and growth (β = 0.76, p<0.05). However, the path coefficient between transformational leadership and growth becomes insignificant in the mediation model (β = -0.25, p>0.05). These results indicate that EO fully mediates the effect of transformational leadership on growth performance, and suggest that **H7 is fully supported**.

The results demonstrated in Figure 6.13 show that, in the direct model, transformational leadership is significantly related to profitability (β = 0.19, p<0.01). Based on the mediation model (Figure 6.15), significant relationships are demonstrated between transformational leadership and EO (β = 0.70, p = 0.000) and between EO and profitability (β = 0.55, p<0.05). However, the path coefficient between transformational leadership and profitability becomes not significant in the mediation model (β = -0.26, p>0.05). These results indicate that EO fully mediates
the effect of transformational leadership on profitability performance, and suggest that **H8 is fully supported.**

The results demonstrated in Figure 6.13 show that, in the direct model, transactional leadership is significantly related to growth (β = 0.31, p< 0.05). Based on the mediation model (Figure 6.15), significant relationships are found between transactional leadership and EO (β = 0.23, p<0.05) and between EO and growth (β = 0.76, p<0.05). However, the path coefficient between transactional leadership and growth become insignificant significant in the mediation model (β = -0.19, p>0.05). These results indicate that EO fully mediates the effect of transactional leadership on growth performance, and suggest that **H9 is fully supported.**

The results demonstrated in Figure 6.13 show that, in the direct model, transactional leadership is not significantly related to profitability (β = 0.13, p>0.05). Since this relationship is not significant, no mediation occurs between transactional leadership and profitability through EO. Thus, **H10 is rejected.** However, the results demonstrated in the mediation model (Figure 6.15) confirmed that transactional leadership is significantly related to EO (β = 0.23, p<0.05) and EO is significantly related to profitability (β = 0.55, p<0.05). Therefore, it can only be concluded that transactional leadership has an indirect effect on profitability through EO. Table 6.31 summarises the results of the path model, standardised coefficients, standard errors and respective z-values between leadership behaviour, EO and organisational performance.
Table 6.31: Path Summary of Mediating Model

<table>
<thead>
<tr>
<th>Relationships</th>
<th>Standardised Coefficients</th>
<th>SE</th>
<th>z-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership Growth</td>
<td>-0.25</td>
<td>0.22</td>
<td>ns</td>
</tr>
<tr>
<td>Transformational</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership Profitability</td>
<td>-0.26</td>
<td>0.17</td>
<td>ns</td>
</tr>
<tr>
<td>Transactional Leadership</td>
<td>Growth</td>
<td>-0.49</td>
<td>0.19</td>
</tr>
<tr>
<td>Transactional Leadership</td>
<td>Profitability</td>
<td>-0.18</td>
<td>0.12</td>
</tr>
<tr>
<td>Transformational</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership EO</td>
<td>0.70</td>
<td>0.12</td>
<td>3.620</td>
</tr>
<tr>
<td>Transactional Leadership</td>
<td>EO</td>
<td>0.23</td>
<td>0.06</td>
</tr>
<tr>
<td>EO</td>
<td></td>
<td>0.76</td>
<td>0.61</td>
</tr>
<tr>
<td>EO</td>
<td></td>
<td>0.55</td>
<td>0.46</td>
</tr>
</tbody>
</table>

Notes: ns means nonsignificant.

PART B QUALITATIVE FINDINGS

In order to gain a better understanding of the quantitative analyses, qualitative data collection was conducted. The source of data for this stage was semi-structured interviews with some of the respondents who had previously been involved in quantitative data collection. Part B of this chapter presents and discusses findings from the semi-structured interviews. Besides looking for answers to the research question of this study, an objective of conducting qualitative data collection was to confirm and if possible to expand the findings from the quantitative data. Part B begins with Section 6.11 that describes the strategy for recruiting respondents and the response rate. Section 6.12 discusses the demographic characteristics of respondents. Section 6.13 discusses the themes developed for this study. Themes were developed based on the variables adopted in this study as well as the relationships observed in the
quantitative data. Other valuable information obtained from the interview data is presented in Section 6.14. Section 6.15 concludes this chapter.

6.11 Respondents and Response Rate

The strategy employed to obtain respondents for the interviews was a question included in the survey questionnaire distributed during quantitative data collection. The final section of the questionnaire asked the respondents if they would be willing to participate in an interview with the researcher. If they agreed, the respondents were then asked to provide further details about themselves so that they could be easily contacted. From the 405 questionnaires collected, 42 respondents agreed to participate in interviews. For those who agreed, the portion of the questionnaire that contained their details was removed and was kept separately before the researcher began the process of analysing the quantitative data. That was done to ensure the anonymity of the respondents who had agreed to participate in the quantitative part of this study.

Since the main purpose of conducting qualitative data collection was to support the findings from the quantitative data, this study intended to schedule only five to ten interviews. To achieve this target sample, 15 potential respondents from the pool of consenting participants were randomly selected. An invitation was sent to each of them by e-mail explaining the purpose of the interview (including a plain language statement) and asking for an interview appointment. A follow-up telephone call was made to increase the response rate. Of the 15 potential participants, three did not respond to the invitation, two declined and the remaining 10 respondents agreed to participate and to make an appointment for an interview. However, only nine respondents were finally interviewed. The interview with the last respondent had to
be rescheduled several times. Since the researcher found that no new theme had emerged from the nine interviews that had been conducted, it was decided to stop collecting data. In practice, the number of required respondents usually becomes obvious as a study progresses, as new categories, themes or explanations stop emerging from the data (Marshall 1996).

6.12 Demographic Characteristics of Respondents

Table 6.32 presents a summary of the background of the respondents who participated in the interviews. Of the nine interviews conducted, four respondents came from the manufacturing industry (RESP 1, RESP 5, RESP 7 and RESP 9) and five from the service industry (RESP 2, RESP 3, RESP 4, RESP 6 and RESP 8). The ages of the respondents were between 34 and 51. In terms of gender distribution, only one female respondent (RESP 9) participated in this study. Of the nine respondents, two were Chinese (RESP 1 and RESP 8) and the rest were Malays. One respondent (RESP 1) held the position of Sales Manager and the rest were the owners/founders of their companies with the position of either Chief Executive Officer or Managing Director. In regard to their highest education level, two respondents possessed only a secondary school qualification (RESP 1 and RESP 3), one had a Diploma (RESP 6), two had Master’s Degrees (RESP 8 and RESP 9) and the rest had Degrees in various specialisations. In terms of the years of their company’s operation, five respondents (RESP 1, RESP 4, RESP 6, RESP 8 and RESP 9) had at least 10 years experience and the rest had between four and nine years experience. There were four small enterprises (RESP 2, RESP 5, RESP 7 and RESP 9) and the rest were medium-sized enterprises.
<table>
<thead>
<tr>
<th>Participants</th>
<th>Industry</th>
<th>Age</th>
<th>Gender</th>
<th>Race</th>
<th>Position</th>
<th>Educational Background</th>
<th>Years of Operation</th>
<th>Size of Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESP1</td>
<td>Manufacturing</td>
<td>51</td>
<td>M</td>
<td>Chinese</td>
<td>Sales Manager</td>
<td>High School</td>
<td>19</td>
<td>Medium</td>
</tr>
<tr>
<td>RESP2</td>
<td>Services</td>
<td>34</td>
<td>M</td>
<td>Malay</td>
<td>Owner/Managing Director</td>
<td>Degree in Management Information System</td>
<td>5</td>
<td>Small</td>
</tr>
<tr>
<td>RESP3</td>
<td>Services</td>
<td>38</td>
<td>M</td>
<td>Malay</td>
<td>Owner/Managing Director</td>
<td>High School</td>
<td>7</td>
<td>Medium</td>
</tr>
<tr>
<td>RESP4</td>
<td>Services</td>
<td>35</td>
<td>M</td>
<td>Malay</td>
<td>Owner/Managing Director</td>
<td>Diploma in Information Technology</td>
<td>12</td>
<td>Medium</td>
</tr>
<tr>
<td>RESP5</td>
<td>Manufacturing</td>
<td>38</td>
<td>M</td>
<td>Malay</td>
<td>Owner/Managing Director</td>
<td>Degree in Chemical Engineering Director</td>
<td>9</td>
<td>Small</td>
</tr>
<tr>
<td>RESP6</td>
<td>Services</td>
<td>39</td>
<td>M</td>
<td>Malay</td>
<td>Owner/Managing Director</td>
<td>Diploma in Electro-Mechanical Technology</td>
<td>10</td>
<td>Medium</td>
</tr>
<tr>
<td>RESP7</td>
<td>Manufacturing</td>
<td>34</td>
<td>M</td>
<td>Malay</td>
<td>Owner/Managing Director</td>
<td>Degree in Environmental Chemistry</td>
<td>4</td>
<td>Small</td>
</tr>
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<td>RESP8</td>
<td>Services</td>
<td>42</td>
<td>M</td>
<td>Chinese</td>
<td>Owner/Chief Executive Officer</td>
<td>Master in Business Administration</td>
<td>22</td>
<td>Medium</td>
</tr>
<tr>
<td>RESP9</td>
<td>Manufacturing</td>
<td>47</td>
<td>F</td>
<td>Malay</td>
<td>Owner/Managing Director</td>
<td>Master in Business Administration</td>
<td>18</td>
<td>Small</td>
</tr>
</tbody>
</table>
6.13 Themes and Findings Emerging from Interviews

6.13.1 Leadership Behaviour

The two types of leadership behaviour observed in this study are transformational leadership and transactional leadership. At the beginning of each interview, the respondents were asked to describe the way they run and manage their organisation and their relationship with their employees. From their responses, the researcher then tried to identify whether either of these two types of leadership behaviour was being practised by the respondents.

6.13.1.1 Transformational Leadership

Bass (1985) and Bass and Riggio (2012) described transformational leadership as a process where leaders broaden and raise the interest of their employees. Transformational leaders generate awareness and acceptance of the purpose and mission of the group when they encourage their employees to focus on the benefits of the group as whole beyond their self-interest. The four factors of transformational leadership are idealised influence, inspirational motivation, intellectual stimulation and individualised consideration.

Based on the interviews, all the respondents demonstrated that they had the characteristics of transformational leaders. Each factor of transformational leadership emerged from the interview data. These characteristics were evident through the participants’ relationships with their employees and the ways they operated and managed their organisations.
Eight respondents gave indications of possessing the idealised influence quality. Some of them talked about how important it was for them to instil trust and gain respect from their employees. They mentioned that when employees believe in the company’s vision and trust their leader, they are willing to do more for the benefit of the organisation. One of the indicative remarks was:

I must pass on the right attitude of work to all level of colleagues and sales staff. Only when people feel that you are truly here to work, in return they will give you their full-hearted support (RESP 1).

The second factor observed was inspirational motivation. Eight respondents seemed to possess this leadership quality. By being able to communicate clearly on the things that need to be done, they keep their employees motivated. The employees are then willing to invest more effort in their tasks, they feel optimistic about the future and believe in their abilities. One notable remark was:

In a setting like mine, we try to make sure that this is not really a job. This is a career for them. When you work, you have to make sure that the company sustain or even excel in its own business. They are responsible to make sure that the company excel. They know that. So I believe that these people in my setting right now are capable and they are willing to spend more time to make sure that company excel (RESP 5).

Remarks by most of the other respondents also indicated that as inspirational motivators, they tried to communicate high expectations to employees, to challenge them to meet high standards and to provide meaning for the task at hand.

The third factor of transformational leadership is intellectual stimulation. Leaders are seen to have this characteristic when they encourage intelligence, rationality and
careful problem solving (Bass 1990). Only three respondents mentioned practising this leadership quality. The following is an example of how one of them demonstrated this behaviour:

I also like to instil a critical thinking value amongst them. Even though they come from the village and do not have much education, they are still capable to solve a problem and make decision when I am not around. I always encourage them to think what they should be doing if there is a work-related problems that need to be solved (RESP 7).

Finally, transformational leaders also tend to provide personal attention and treat each employee individually. Coaching, teaching and providing advice to employees were some of the key themes that emerged from the interview data to represent this characteristic. Five respondents practised this leadership quality. The following was an indicative remarks by one of the respondents:

I will schedule myself to sit and discuss with the sales and marketing team during the first week of the month. In the second week, I will schedule myself to sit with the accounting staffs and the third week usually I will focus on the operational site… I also coach them personally, but most of the coaching involve with the sales team (RESP 6).

6.13.1.2 Transactional Leadership

According to Bass (1990), transactional leadership occurs when leaders explain what is required from employees and what compensation the employees will receive when they meet this expectation. Transactional leaders use reward and punishment to gain compliance from their employees. They tend to accept the existing goals and structure of their organisation and tend to be directive and action-oriented. The three
factors of transactional leadership are contingent reward, management-by-exception (active) and management-by-exception (passive).

Besides displaying significant instances of transformational leadership, some of the respondents also provided significant examples of transactional leadership characteristics. One respondent (RESP 6) referred to maintaining a good work system in his organisation when he said that ‘We try to document everything that we do, so that it will be easier in the future’. Respondent 9 said, ‘Every morning, we have our morning assembly at 8.30 a.m. During this assembly, I will highlight to them what need to be accomplished because we are always involved with R&D’. These comments show that some of the respondents focus on maintaining the status quo in the organisation and tend to be directive and action-oriented, which are attributes of transactional leaders.

The first factor of transactional leadership is contingent reward. The comments of four respondents (RESPs 2, 3, 4 and 9) could be associated with this attribute. One respondent mentioned, ‘I always appreciate and give due respect for the efforts provided by my employees’ (RESP 3). Another respondent (RESP 2) said that not only does he recognise the contributions made by his employees but he also always rewards them accordingly.

The second factor of transactional leadership is management-by-exception (active). Five respondents described how they like to closely monitor work progress and take corrective action when standards are not met. Some of their comments are as follows:
When there is a customer complaint, what I will usually practise is that I will call everybody especially those who are related with the complaint to discuss on what is the immediate action that we as a team should be doing in order to overcome and also solve the issue (RESP 6).

I try to closely monitor what is going on within my organisation and I have to keep a close relationship with my employees (RESP 9).

Finally, two respondents (RESP 2 and RESP 3) described the practice of management-by-exception (passive) in regard to their leadership behaviour. They intervene only when procedures and standards are not met. Perhaps they think that by waiting to see whether or not they should interfere when a problem arises, there would be more opportunity for their employees to learn how to make decisions. One of them said:

Sometimes I like to observe when they are dealing with problems or issues. I will look at how they handle the situation. Even when they are making the wrong decision, I let it be as long as it does not really affect us significantly. If I see that they still can’t handle the situation, I will interfere and show them what they did wrong and show them the right way to handle the situation (RESP 3).

6.13.2 Entrepreneurial Orientation

During the interviews, all respondents were asked several questions relating to their EO. Their responses provided a general picture and understanding of the level of EO in their organisation. Basically, the same factors of EO were observed throughout the interviews, namely, innovativeness, proactiveness and risk taking.
The first factor of EO is innovativeness. Remarks made by the respondents such as ‘introduce many new products’, ‘invest in R&D’ and ‘new ways of doing things’ were significant indications that there was innovativeness in their organisation. Basically, all respondents indicated innovativeness during their interviews. Examples of their remarks are:

I used to have only one main product, but now we have 36 products, ranging from traditional medicine to energy drink, to cosmetic products and now we start to introduce facial and hair products (RESP 3).

We do favour a strong emphasis on R&D (RESP 2).

The second factor of EO is proactiveness. Comments such as ‘the first to introduce product/service’, ‘competitors respond to our actions’ and ‘ability of the firm to anticipate and act on future wants and needs in the market’ were indicative remarks made during the interviews. Six respondents (except RESP 1, 5 and 9) mentioned in some way that they are proactive in their organisational actions. Examples are:

As an entrepreneur, not only I have to be innovative, I have to anticipate demand for this kind of product in the future and assess whether or not we have the in-house expertise to produce it (RESP 7).

Right now I believe that we are still the market leader… I would say that they [the competitors] normally respond to us rather than we respond directly to them. I also believe that my vast experience in this line of business, we are mostly the pioneers in this field in Malaysia (RESP 8).

As mentioned earlier, not everybody indicated proactive behaviour in making strategic decisions. The following response is from the respondent who did not
promote proactive behaviour in his organisation. When asked about the competitive environment in his industry, his response was:

Basically, the trend in the engine oil market is being set by this one society which is known as American Petroleum Institute. They set the trend in the open market. So when we want to market our product, we have to make sure that our product is at par with what they are offering in the market. If, in every three months they come up with a new product, we have to come up with a new product as well to make sure that our product is competitive in the market (RESP 5).

The final factor of EO being observed was risk taking. There were mixed outcomes in regard to participants’ willingness to take the risk of investing a large amount of capital in their businesses. Maybe due to limited capital and resources, most of the respondents were quite selective about the type of risk they would venture for their business. Only five respondents (RESPs 1, 3, 7, 8 and 9) mentioned a willingness to take a high risk with a chance of a very high return. As one of the five put it:

Like I said earlier, I am not an engineer, therefore I need to identify our strengths and focus on them. This line of business is dominated by Chinese and men. It is a very big challenge for me to hold and stay in the business. Because of these reasons as well, I have decided to take on higher risks business like oil and gas, weaponry, aerospace and automotive (RESP 9).

The rest of the respondents were only willing to take a moderate amount of risk that might result in the return of their investment. Examples of their remarks are:

I am not willing to take a very high risk at the moment. I can say that we are willing to take a moderate kind of risk, whereby we have really
explored those kinds of risks that are manageable and calculated risks with calculated returns (RESP 4).

We have to be realistic since we do not have much fund to spend on something that is really big. We cannot pump in more money if the business is not successful. There is always a chance that if you are making a business, your business will collapse. Therefore in regards to risk taking, we always need to have awareness to the risks that we take and we will only be taking and considering calculated and manageable risks (RESP 6).

6.13.3 Organisational Performance

The final element being observed during the interviews was organisational performance. Respondents were asked to describe their perception of their organisation’s performance and to consider whether or not leadership behaviour and entrepreneurial orientation would have any effect on organisational performance. The respondents were also asked to identify factors other than those two that they felt might also influence the performance of their organisation. The respondents were keen and interested to provide information in regard to this theme since organisational performance is an importance subject for all of them.

There were mixed responses regarding how the respondents perceived their organisational performance. Some respondents (RESPs 2, 5 and 8) believed that their organisation was performing much better than their competitors in respect to the ability to control market share, provide consistent growth and earn a steady profit. Others felt that there was room for improvement. They believed that it was important to focus on the growth of the company because as the company grows, business will become more profitable. One of these respondents said:
I am still not satisfied with our performance. My long-term target for this company is to be able to get it out of the SME category. I want to become large corporation. In order to get yourself out of the SME category, you will need to generate RM25 million…. and we still have a long way to go (RESP 6).

One respondent (RESP 9) expressed concern that the lack of support and trust from financial institutions for the industry she is in has affected her company’s performance.

6.13.4 Leadership Behaviour and Organisational Performance

Interview data revealed that almost all respondents (except RESP 1 and RESP 6) agreed that their leadership behaviour has an effect on organisational performance. They agreed that having the right kind of leadership behaviour, especially when relating to their employees, would translate into better organisational performance. Since they are categorised as small and medium enterprises, they acknowledged the importance of a leader showing a strong vision for the organisation and being able to provide supervision, guidance and direction to their employees. One of the indicative remarks was:

To keep employees motivated, it is important to have the right leadership style. In a way, by having the right leadership style, meaning that when you are able to provide good directions, good plans to them, you know how to motivate them and at the same time help to reduce their stress level, then only my employees can really perform and improve the organisational performance (RESP 4).
Having the opportunity to work directly with the leader of the organisation would also provide an opportunity for success. Employees seem to be motivated to perform at their best when their leaders are directly involved with their tasks. This can lead to improved organisational outcomes.

My leadership style has an effect on my organisational performance. When they work directly with the owner of the company rather than with a manager (….because sometimes on a smaller project, I do have managers that will handle the project), I could definitely see the difference between the passion of my employees… I also would like to say that when I involved with key employees, they will be directly inspired by my management style and leadership and this would make them more motivated…. I think that makes a difference in the outcomes of the company (RESP 8).

A respondent who specifically disagreed that leadership behaviour has an effect on organisational performance was Respondent 6. When asked whether or not his leadership behaviour has any effect on his organisational performance, he said:

I personally do not think so. I personally think that in order for a business to have a sustainable performance, the most important aspect for it to have is a very strong foundation. From this strong foundation, you must be able to build up a good system that runs throughout the organisation (RESP 6).

Respondent 1, on the other hand, said that factors such as good management and teamwork would contribute more to good organisational performance than leadership would.
These data indicate that some of these leaders perceived that other factors contribute to organisational success besides their leadership. Given the complexity of business environments for some of them, factors such as a good management culture, teamwork and a strong foundation emerged from the interview data.

6.13.5 Entrepreneurial Orientation and Organisational Performance

It was also anticipated that EO would affect the performance of SMEs. Based on the interview data, almost all respondents (except for RESP 5) agreed that by becoming entrepreneurially orientated, they perform much better. Most of them also understand that in today’s competitive environment, consumers do not simply consume whatever is available like they used to. Consumers expect more and anticipate better products and services from time to time. Therefore, SMEs have to be proactive and innovative in their product or service offerings and willing to take considerable risks. The following was a revealing response from one of the respondents:

I do believe that my entrepreneurial orientation affects my organisational performance. When we are more innovative, it shows that our services are much superior to our competitors. This will also give you more advantage with the customer whereby they will be keener to deal with you. When you are innovative, proactive and able to keep your company one step ahead of your competitors, your team’s motivation will be better... For example, for the sales team who are being paid based on their performance, they will have higher chances of making more money and bring in more sales when they work with a company that always move one step ahead from the competitors. Therefore, a good level of entrepreneurial orientation helps to motivate the team and this means better organisational performance (RESP 6).
The respondents who believed they possessed these three attributes also believed that these attributes have positive effects on their entrepreneurial success. This is demonstrated in the following quote:

Ninety per cent of my entrepreneurial orientation influences my organisational performance. If we are being more innovative and proactive and willing to take risks, there will be positive effects towards our organisational performance… the more entrepreneurially orientated you are, the better performance you are going to achieve (RESP 7).

However, one respondent (RESP 5) had a different view of the relationship between EO and organisational performance. When asked whether his EO had any influence on organisational performance, he said: ‘In our market segmentation, which is a close-locked system, we only supply to the government side and the government is only obliged to buy certain products from certain companies. Therefore, this will not really affect my level of entrepreneurial orientation’.

His remarks indicated that when an organisation operates in a stable environment or in a system where demand and supply are fixed and are therefore not important economic factors that influence competition, being entrepreneurially orientated is not important.

6.13.6 Leadership Behaviour and Entrepreneurial Orientation

As described in Section 6.10.3, to explain the mediating effect of EO on the relationship between leadership behaviour and organisational performance, it is important to establish that leadership behaviour also affects EO. Interview data indicate that almost all respondents (except RESP 1) agreed that their leadership
behaviour has some influence on the level of EO in their organisation. Most of them indicated that their leadership behaviour helps to foster the entrepreneurial spirit and eventually enhances their organisation’s performance. Some of their quotes are:

I do believe that my leadership style does influence my entrepreneurial orientation. Because, when we are making a particular decision, this decision is a reflection from my direction or leadership. In terms of the strategy that involved, the risk that we calculated for that particular decision and the rest of other decisions that we have been making so far is really depended upon the input that I have been given (RESP 4).

I really feel that the leadership behaviour that I practise helps to foster the entrepreneurial level within my organisation. As an entrepreneur, we always strive to find new things and as a leader in my organisation, I will always share and lead them towards development of new ideas, new methodology and technology that can help us to be more entrepreneurially orientated… I also encourage them to come out with a new idea once in every three months, let it be in the form of new product, new technology or new method of doing thing that can be more profitable or minimise our costs of doing business. They accept this as a challenge (RESP 7).

However, Respondent 1 preferred to associate other factors such as organisational strategy rather than his leadership with the influences on EO.

6.14 Other Findings from the Qualitative Data

Through the interviews, valuable additional data were gathered. These data were important in providing a better understanding of the variables in this study. The data also revealed some other factors that might affect leadership and EO, as well as other factors that might affect organisational performance. This information was utilised
when a proposed new framework was developed on the entrepreneurial success of SMEs in Malaysia.

6.14.1 Factors Affecting Leadership Behaviour

During the interview, the respondents were asked to describe the factors that might influence their leadership behaviour. Since they were from different industries and managed organisations of different sizes, it was interesting to see if there would be similarities in the factors that influence their leadership behaviour.

Based on their responses, two distinctive factors emerged frequently from the interview data. These factors are the experience of owners and top managers and the organisational structure/culture. Five respondents mentioned that their organisational structure and the culture in their organisation dictate their leadership behaviour. For example, due to the limited number of full-time employees that they employ, most of them practise an open-door policy. They prefer to be close to their employees and be attentive to their needs and issues. By doing so, they can develop a sense of mutual trust and respect which will later be translated into improve performance by the employees. Remarks that support this behaviour are:

Based from the open communication that we are having as I mentioned earlier, it gives me the opportunity to foresee in terms of the activities at the operational level and also all activities within every single department within my organisation. This would really affect the way that I motivate them and the way I provide direction (RESP 5).

As business owner… you must always recognise the importance of having a quality of life in all aspect. This is important and I always remind my staffs about the importance of having this in their life as well.
You must have a good balance in your work as well as your family life. I want my employee to achieve something in everyday work that they do, but at the same time to give the same focus and attention towards their family life. I think this could help them to get more satisfaction from working here and also gives them more motivation to perform at their very best. (RESP 6)

Secondly, four respondents mentioned that their past experience helped to shape the way they lead their organisation. As two of them said:

My experience and learning from others [having a good mentor] influence my leadership style. I don’t have a high level of education for me to really learn about different type of leadership styles. Therefore, the key point that I think would influence might leadership styles would be from my mentors. I learn from others and also my experience of doing things (RESP 4).

Life experience also is a platform for me to form a more effective leadership style (RESP 3).

Other factors that emerged from the interview data were the level of maturity of employees and education. Two respondents said that having to work with new employees requires them to play a more directive and monitoring role. They have to constantly monitor the work by new employees to minimise losses or mistakes. The factor of education was mentioned in terms of having the opportunity to obtain an overseas education, which had exposed them to the practices of the Western styles of leadership and management.
6.14.2 Other Factors Affecting Entrepreneurial Orientation

Besides seeking confirmation of the assumption that leadership behaviour affects EO, this study also identified other factors that could affect EO at the organisational level. Previous research has suggested that factors such as strategy, competition and environment might play a role in the cultivation of EO in an organisation (Rauch et al. 2004). It was therefore interesting to see whether these factors would emerge from the interview data and whether there would be new factors relevant to the context of Malaysian SMEs. Based on the analysis of the interview data, two factors conformed to the suggestions in the literature of competition and strategy. A new factor that emerged from the data was the influence of employees on EO.

Five respondents (RESPs 3, 4, 5, 7 and 9) identified that competition might influence their EO. As competition increases, the organisation is under more pressure to stay ahead of the competitors. As two respondents said:

In my opinion, a healthy competition would really influence your entrepreneurial orientation. We can feel that healthy competition always forces us to keep up the pace and be one step ahead of our competitors. (RESP 3).

I also think that the competition plays a role in influencing the level of entrepreneurial orientation within my company… When competition arises, what you need to do is to find out what is your niche that others do not have and focus on this element. Competition will keep you on your feet and will not make your complacent with what you are offering in the market (RESP 7).
In addition to competition, another factor that emerged from the interviews was the importance of strategy, which was mentioned by five respondents (RESPs 1, 2, 3, 5 and 8). Having the right strategy might influence how innovative and proactive you are as well as your willingness to take risks. Two of the indicative remarks were:

I don’t wait and see what my competitors are offering, but usually I will set the benchmark for them. I used to have one main product but now I have adopted a diversification strategy within our company and we are able to offer 36 different products. If you know what the competition is offering and based from your research you are able to diversify and offer better products to the customer, this can also change you level of innovativeness and proactiveness in the industry (RESP 3).

I would say that in my line of business, the strategy that we take is the most important factor that would influence my entrepreneurial attitude. Right now we run about 10 different events. I would say that more than five are something new than the last five years. I think a lot of satisfaction comes up in building a new brand in a new show. I think it is more of that rather than a competition (RESP 8).

Four out of the nine respondents (RESPs 3, 4, 6 and 7) gave due recognition to their employees as a factor that would influence the EO of their organisation. The contributions made by their employees helped to improve the level of EO. Having skilled and experienced employees also assists the organisation to keep up the pace in their operating environment. Comments included:

I think one of the most important factors for SMEs is the employees because we are small in numbers. Let say that we have 10 employees in our company, each one of them is actually representing 10% of your company. Therefore, we need to get competent and trustworthy
employees. This factor could help to foster the entrepreneurial spirit within our company (RESP 6).

If you can continuously improve and provide guidance to your employees, they also can contribute to your level of entrepreneurship (RESP 3).

6.14.3 Other Factors Affecting Organisational Performance

This section discusses some of the other factors affecting organisational performance that emerged from the interview data. This information contributes to the development of a proposed new framework in this study. Based on the interview data, there were five factors other than leadership and EO that seemed relevant and important. The responses are tabulated in Table 6.33.

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<thead>
<tr>
<th>Table 6.33: Other Factors Affecting Organisational Performance</th>
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<td><strong>Factors</strong></td>
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<td>1. Employees/Teamwork</td>
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<td>2. Strategy</td>
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<td>3. Financial Resources</td>
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<tr>
<td>4. Quality of Process/Product</td>
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<td>5. Government Policy</td>
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6.14.3.1 Employees and Teamwork

All respondents somehow mentioned the importance of having the right type of employees or teamwork as a very significant factor for their organisational performance. Due to the size of their organisations and the number of employees
they have, this factor would play a major role in achieving, maintaining, enhancing and sustaining superior organisational performance. Some of the quotes were:

Also, having the right people in the company is important. You have to get the right person to run things. It is very obvious that, if you do not get the right people, the work will not be completed (RESP 5).

Our employees also are another important element towards better performance. If I do not have their support, it will be very difficult for me. If I do not have competent employees that I can trust, I will have to stay and monitor them all the time and I will not be able to go out and see people. But now, I have confidence in them and I can leave the company to them without my supervision (RESP 7).

**6.14.3.2 Strategy**

The second new factor affecting organisational performance was mentioned by seven of the respondents (RESPs 1, 2, 3, 5, 6, 7 and 8). It is having an effective organisational strategy. Strategies for the activities of diversification, customer orientation, price orientation and publicity were all mentioned as affecting organisational performance. Two respondents said:

Our product is highly competitive in the market. We have changed from price strategy to quality and image strategy… Our sales are in double digit growth from 2007 to 2011 except in 2009 which recorded only 8% growth… We managed to create new item, new sales area and new sales staff and employed the correct strategy for the right product. Marketeer responded to us that from market survey, we are the hottest and the most expose brand in the industry and of course the most sellable in the market (RESP 1).
Always makes your customer happy. Their satisfaction comes first and monetary will follow through. Happy customers will promote your product or services or even engage the company back on another project (RESP 2).

To support the point he was making, this respondent also said:

We developed the systems and installed and operated for six months without any offer letter or payment from the customer. We try to portray our willingness of doing things differently, with customer orientation as our priority. We suffered badly at first, but at the end, they started to offer us contract and from that moment, we keep on receiving jobs from them (RESP 2).

6.14.3.3 Financial Resources

The third new factor that emerged from the interview data was having sufficient financial resources. Having sufficient finance definitely helps owners and top managers to make a decision on whether to invest, expand or take on bigger projects. All of these would definitely have an impact on organisational performance. In regard to this factor, one respondent said:

When we talk about small companies in Malaysia, getting loans or grants from the government side or the private sector is very difficult. So we have to rely on our own sources of money in order for us to sustain in the market. Having said that, we can’t go big instantly. Even though we have orders coming-in in big quantity, we won’t go for that (RESP 5).

6.14.3.4 Quality of Product or Process

The fourth new factor that was identified from the interview data related to the quality of the product or process in the organisation. Some of the respondents
commented that the good quality of either their products or their organisational processes enhances their organisation’s performance. Some of their remarks were:

In my organisation, we try to be matured and delicately handle our business risks and always stress on the quality in order to improve high performance (RESP 3).

People implement so many systems like the ISO and 5S by the Japanese and there are so many systems implemented in certain companies. These are very good system to be followed…. So our approach in our market is through the quality, the implementation of the quality system. They can actually see the quality in our product. In fact Sirim or even Petronas come to our company to have product testing (RESP 5).

6.14.3.5 Government Policy

The final new factor that was identified from the interview data was the role of the government or government policy. Even though only one respondent (RESP 6) mentioned this, it seems relevant to consider this factor, especially within the context of Malaysian SMEs. Some of the main business for these SMEs came from the government. The procurement system and rotation methods used by government agencies in awarding contracts seem to discourage the ability of some of SMEs to generate more income. As this respondent put it:

I deal a lot with the government and also GLCs and I don’t agree with few of the rotation methods that they implemented in awarding contracts. It means that if you get the contract this time, there is a huge possibility that you will not be getting any during the next round. If the government keeps on using this rotation concept, this whole process will become a welfare services to the suppliers because the intention is to make sure that everybody will get a piece of the cake. This type of policy will deter
people to put effort in innovation and this will have an effect towards your organisational performance… our government also awarded a lot of contracts through direct negotiations and central contract and a lot of these go to those less competent companies in this field of business… If there is no such thing as direct negotiations and central contracts practised by the government, I believe I could double or maybe triple the sales of my company.

6.15 Summary

Part A of this chapter explained and discussed the findings from the quantitative data, the main data collected. The early sections of that part presented the response rate, data cleaning procedures, evaluation of each construct, the reliability and validity of the data and the descriptive statistics. This was followed by the initial analysis of the full model and theoretical constructs. Then the results from the EFA, CFA and path analyses were presented. Three models were developed to test the hypotheses in this study. It was concluded that the measurement scales used in this study were reliable and valid for testing the hypotheses.

Of the ten hypotheses that had been developed, seven were fully supported, two were partially supported and one was rejected. In regard to the direct relationship between the two types of leadership behaviour and organisational performance, the results showed that transformational leadership has a positive and significant relationship to both factors of organisational performance, whereas transactional leadership has a positive significant relationship only to growth. The relationship between transactional leadership and profitability is positive but not significant. The relationship between transformational leadership and organisational performance was
found to be higher and stronger than the relationship between transactional leadership and organisational performance.

Through examination of the direct relationship between each factor of EO and organisational performance, it was found that innovativeness and proactiveness have a positive and significant relationship to both measures of organisational performance. Risk taking has a positive and significant relationship only to growth and its relationship to profitability is not significant.

Examining the mediating effect of EO, it was found that EO fully mediates the relationship between transformational leadership and growth and profitability. EO was also found to fully mediate the relationship between transactional leadership and growth. However, the results did not support a full mediating effect of EO on the relationship between transactional leadership and profitability. It can only be concluded that EO has an indirect effect on the relationship between transactional leadership and profitability.

Part B of this chapter presented and discussed findings from the qualitative data collected in interviews. The interview data were organised according to the themes that were developed based on variables and observed relationships in this study. The qualitative findings have definitely added value to the qualitative findings. They are also useful in the development of the proposed new framework for future research. In the next chapter, this thesis discusses both sets of findings in relation to the research questions and research objectives of this study.
CHAPTER 7
DISCUSSION

7.1 Introduction

The main objective of this chapter is to discuss the findings presented in Chapter 6 in relation to the research questions and hypotheses developed for this study. The first section of this chapter provides a key descriptive summary of this study. This includes a discussion on several demographic results that are palpably suitable for further elaboration. It also includes the significant results of the t-tests conducted on the main variables of this study against the size of enterprises, the type of industry, and the gender and position of the respondents. The second section provides justification for the removal of the factor of individualised consideration from the transformational leadership construct. The final section discusses the findings from the quantitative and qualitative data according to the main themes of this study by relating them to the relevant literature on the relationships between leadership behaviour, EO and organisational performance.

7.2 Discussion of Key Demographic Results

Several demographic characteristics are worth further elaboration in this study. They are discussed in the following sections.

7.2.1 Race of Respondents

The demographic results as presented in Table 6.4 show that the majority of the respondents in this study were Malays, followed by Chinese and Indians. However, the proportion of Malay compared to Chinese respondents does not match the
percentage of business equity in the country, the majority of which is owned by the Chinese at 42.4% compared to *Bumiputera* at only 19.4% ownership (Economic Planning Unit 2008).

There are several possible explanations for there being mostly Malay respondents in this study. It might be attributed to the sources of data collection. Besides using an online survey to collect data, this study also relied on self-administered questionnaires distributed through several agencies that conduct training and development programs for entrepreneurs. One of these agencies, Majlis Amanah Rakyat (MARA), organises programs only for *Bumiputera* since it was established to support them in the fields of entrepreneurship, education and investment. Therefore, data collected through this agency were mostly from Malays or some indigenous people.

Secondly, by not being present when the training and development programs were conducted by those agencies, the researcher was unable to personally encourage more direct participation from non-Malays. Groves et al. (1992) suggested that the experience of researchers tends to affect the levels of cooperation from participants. Perhaps, by being there during the programs, the researcher would have been able to approach more non-Malays to participate in this study.

Cultural biases perhaps also influence the lack of participation from non-Malay entrepreneurs in this survey. Cialdini (1988) and Groves et al. (1992) proposed that several factors might influence a respondent’s decision to participate. One of them is ‘liking’. Factors that enhance liking might include a similarity of attitude (Byrne
1971) and a similarity of background (Stotland & Patchen 1961). They concluded that a researcher who possesses one or both of these features in a survey request situation would be able to influence potential respondents and obtain more willing compliance from them. In addition, several socio-demographic characteristics of the researcher, such as race, age and gender, are believed to affect a respondent’s perception of the intent of the researcher (Groves Cialdini & Couper 1992). This suggesting that the researcher being a Malay would attract participation from Malay respondents. Consequently, having a Malay background may hinder participation by non-Malays. As suggested by Ryen (2003), the cultural biases of the researcher as a Malay may engender distrust in non-Malays and suspicions about the intentions of the survey. This argument was supported by the experience of the researcher while conducting follow-up telephone calls to increase the number of participants in the online survey. Most of the non-Malay potential respondents who were contacted refused to participate in the survey.

Even though Malays were over-represented in this study, a recent study by Yahya et al. (2011) based on 186 small and medium enterprises in the services sector concluded that both Bumiputera and non-Bumiputera are indifferent to the management skills that affect their entrepreneurial success. Interestingly, there were more Chinese respondents (n = 103) than Malay respondents (n = 56) in their study. The key results from their study showed no significant different at all between Malays and non-Malays in the t-tests conducted on 24 variables. Some of the variables included in their study were clear goods and objective-setting skills, the ability to act quickly (responsiveness), management expertise and readiness to delegate responsibility to employees when necessary. Their study indicated that the
factors associated with the organisational success of SMEs in Malaysia are viewed similarly by entrepreneurs regardless of their race. Due to Chinese and Malays having similar perceptions of many organisational factors such as leadership and entrepreneurial skills, the over-representation of Malays might not influence the generalisation of the outcomes of this study.

7.2.2 Categories of Enterprises

The second key characteristic is the category of an enterprise. As shown in Table 6.4, more small enterprises (69%) than medium-sized enterprises (31%) participated in this study. Small and medium-sized enterprises are differentiated according to the number of employees and sales turnover. The significantly larger number of small enterprises is consistent with the actual distribution of small and medium enterprises in Malaysia, where there are more small enterprises than medium-sized enterprises. Small enterprises are regarded as the main contributors to economic growth in the country (Jamil & Mohamed 2011).

Research in regard to the size of enterprises and organisational performance has presented mixed outcomes. Moini (1995) and McMahon (2001) suggested that the size of an enterprise is significantly linked to organisational performance when their empirical results found that large companies perform better than small ones. Using data drawn from 102 Wisconsin exporters, Moini (1995) identified that firm characteristics such as size are important determinants for export success.

However, Calof (1993) did not find any significant relationship between firm size and firm performance. He concluded that firm size is not a success factor for
internationalisation. In fact, small firms are just as capable as their larger counterparts of entering the same market. His findings were supported by a more recent empirical study by Ha-Brookshire (2009), which concluded that there is no statistically significance effect of firm size on the relationship between firm entrepreneurship and SMEs’ contribution and profitability outcomes. These arguments suggest that the relationship between the firm and its contribution and profitability is not influenced by the size of the firm.

7.2.3 Gender

The results of this study revealed that more male (62.5%) than female (37.5%) respondents participated in this study. Based on the census conducted in 2005, only about 16% (close to 83,000) of SMEs in Malaysia are owned by women (Ministry of International Trade and Industry [MITI] 2009). This low number of women entrepreneurs indicates that SMEs in Malaysia is a male-dominated industry. Perhaps there might be more female managers than female owners and thus this would have contributed to the higher percentage of women leaders in this study.

The higher percentage of female respondents in the survey could be due to the sampling unit used in this study. Besides having firm owners as the sampling unit, the rest of the respondents were the top managers of SMEs. Perhaps more women than men hold these senior managerial positions. Thus, the sampling approach resulted in a higher percentage of women respondents than the actual percentage of women entrepreneurs in the country.
7.2.4 T-test Results

To further enhance the demographic results obtained in this study, t-test analyses were conducted on the main variables – both forms of leadership behaviour, EO and organisational performance – against the size of enterprises, the type of industry, and the gender and position of respondents.

7.2.4.1 Size of Enterprise

As shown in Table 6.8, there were small significant differences between small and medium-sized enterprises in regard to the transformational leadership and organisational performance measures. These results indicated that, on average, owners or top managers of medium-sized enterprises display transformational leadership behaviour to a greater extent than their counterparts in small enterprises do. On average also, medium-sized enterprises achieve better performance than small enterprises.

Respondents from medium-sized enterprises seem to display transformational leadership more frequently than those who operate small enterprises. This outcome confirmed the view of House et al. (1991), who argued that leaders are more important than ever in an age of complexity, change, large enterprises and nation states. Perhaps the attributes of transformational leadership become more important for leaders as the company becomes bigger. It is understood that medium-sized enterprises are associated with the two core factors of more full-time employees and higher sales turnover than small enterprises. To pool and align these resources, the importance of inspirational motivation, idealised influence, intellectual stimulation and individualised consideration becomes more apparent. At the very least, when the
number of employees increases, leaders need to be inspirational and attentive to the different needs of the employees.

In regard to organisational performance, Peteraf (1993) proposed that different resources used by firms in the production process produce different outcomes. As some resources are superior to others, there will be efficiency differences between resources. Therefore, firms with more resources are able to produce more cost effectively and achieve better outcomes. His views provided support for the significant difference that was found between small and medium enterprises in regard to their organisational performance. Due to medium-sized enterprises having larger resources of manpower and capital, they have more capability than small enterprises to produce a better performance in terms of profitability and growth.

7.2.4.2 Type of Industry

Based on the results presented in Table 6.9, statistically significant differences were found in the mean scores for each form of leadership behaviour, EO and proactiveness.

The results indicated that, on average, leaders in the service industry more frequently display both transformational and transactional leadership behaviour than leaders in the manufacturing industry do. This may perhaps be due to the service industry relying more on a people-oriented business and therefore the leaders need to exercise transformational and transactional leadership to a greater extent than leaders in the manufacturing industry.
The service environment is considered to involve more complex and more interpersonal relationships than the manufacturing environment (Gilmore et al. 2006). Babaita et al. (2010) suggested that the leaders in the service environment are expected to be close to their employees and they must endorse affirmation in their organisation. Perhaps due to the nature of this industry, which focuses on providing services to customers and thus deals a lot with people, organisations in the service industry tend to rely heavily on the performance and effectiveness of the people in their organisation. Therefore, leaders in this sector of the economy perceive themselves as having more significant leadership behaviour that equates with transformational and transactional leadership than their counterparts in the manufacturing industry.

The effect size of the mean scores for transformational leadership was found to be higher than the effect size for transactional leadership in the service industry. Past researchers have argued that the attributes of transformational leadership relate directly to service quality (Parasuraman et al. 1988) and help employees to become more creative and innovative and to create new ideas that allow the service organisation to grow competitively and adapt to the changing business environment (Bushra et al. 2011). These characteristics are also compatible with human services values and principles, especially those of appreciating and empowering individuals (Packard 2009), which are closely aligned with the attributes of transformational leadership.

The results indicated that there is a significant difference in EO between the service and manufacturing industries, with a small effect size reported at $\eta^2 = 0.013$. This
means that, on average, leaders of SMEs in the service industry show slightly more concern for EO than their counterparts in the manufacturing industry do. Even though it might be assumed that the factors of EO might be more relevant to those in the manufacturing industry than in the service industry, Sirilli and Evangelista (1998) argued that the value of EO is as important to those in the service industry as it is to those in the manufacturing industry since the most important objectives of a firm are to improve the quality of products or services, increase market share and minimise production costs. They added that in modern economies, the service industry is the main element of structural change and there has been a progressive shift of employment from the agricultural sector to manufacturing and then from manufacturing to services. The results of this study provide evidence that SMEs in the service industry consider themselves to be slightly more innovative, proactive and willing to take risks than their counterparts in the manufacturing industry.

At the factor level, only proactiveness reported a statistically significant difference in the mean scores between the manufacturing and service industries. This means that leaders in the services industry tend to be more proactive than leaders in the manufacturing industry. This result is reasoned to be acceptable since services industry is characterised by perishable, heterogeneous and intangible products which are provided to either individuals or businesses to satisfy their needs (Sampson & Froehle 2006). Therefore, it seems that the perception of leaders in the services industry that they are quickly responsive, able to anticipate future needs and wants, and strive to be pioneers in their respective fields aligns with the nature of the industry.
7.2.4.3 Gender

Referring to Table 6.10, no statistically significant difference was found in the leadership behaviour of male and female leaders of SMEs. The researcher then analysed the data to find whether there was any statistically significant difference at the factor level for each form of leadership behaviour. In the four attributes of transformational leadership, no statistical significance was found between male and female leaders. However, in the three attributes of transactional leadership, contingent reward was found to have a statistically significant different in the mean scores between male and female leaders, with a very small effect size.

The results displayed in Table 6.10 indicate that there is no significant difference in the mean scores of EO and organisational performance between male and female leaders. But at the factor level of EO, proactiveness has a significant difference in the mean scores between male and female leaders. This means that male leaders rated themselves as more proactive than female leaders did.

The literature review produced mixed results regarding gender and leadership. Some studies have indicated that women leaders adopt a different leadership behaviour from men (Eagly & Carli 2003; Kim & Shim 2003; Grant 1988). This is an area that is highly contestable in this study. At one end, arguments have been made that female leaders are transformational, considerative, participative and people-oriented, whereas male leaders are associated with transactional, structural, autocratic and business-oriented leadership behaviour (Appelbaum et al. 2003). Another study by Druskat (1994) also found that female leaders are rated to possess significantly higher transformational qualities than male leaders, and male leaders are rated to
display significantly more transactional behaviour than female leaders. However, the outcomes of Druskat’s study might be attributed to the context of the study. This study was conducted among 6359 subordinates in all-female and all-male religious orders of the Roman Catholic Church in the US. It can be argued that in an all-female context, where women hold power and control all resources, they might display more transformational behaviour than male leaders do in an all-male context. Therefore, the outcomes of Druskat’s study need to be treated with caution.

One study worth mention is a meta-analysis of 45 studies comparing male and female managers. This study found that female leaders are more transformational (significant on all factors except for one subscale, attributed of idealised influence) and demonstrate more significant contingent reward behaviour than male leaders (Eagly & Carli 2003). In contrast, male leaders are more likely than female leaders to exhibit management-by-exception (a factor of transactional leadership) and laissez-faire leadership.

Researchers have also suggested that female leaders might have a slight advantage in performance over male leaders since they outscore men on all the components of leadership that are associated with leadership efficacy and positive workplace outcomes (Smith & Smits 1994; Eagly & Carli 2003). These studies suggested that women may, in fact, be better suited than men to managerial roles.

The findings of this study seem to agree with the findings at the opposite end of the spectrum of gender and leadership studies in which there is no difference in the self-reported outcomes of men and women leaders, and therefore the findings seem to
disagree with the studies discussed above. The findings of this research suggested that there is little or no difference in the outcomes produced by men and women leaders and a range of outcomes from previous studies support this finding. For example, Anderson et al. (2006) and Morgan (2004) specified that firms’ outcomes have little to do with the gender of the leaders. In Germany, Kent et al. (2010) conducted a study among 337 respondents who evaluated the frequency of transformational leadership behaviour between their male and female leaders. The outcomes indicated that male and female leaders behave in the same way as leaders. Similar to the outcomes of this study, they reported that for each attribute of transformational leadership, there was no difference between male and female leaders’ behaviour.

Regarding EO, Bertoncelj and Kovac (2009) investigated whether there is any gender difference in the EO of managers in Slovenia. Of the 183 Slovene top and middle managers analysed, the results indicated that there are no gender differences in the variables of capturing opportunities, taking risks and innovating. In regard to firm performance, Watson’s (2003) summary of Australian research comparing the performances of male- and female-controlled SMEs indicated that there is no significant difference in the performances between genders. This stream of studies has indicated that male and female leaders do not differ from one another when it comes to promoting entrepreneurial orientation and that gender is not related to the success of the organisation.

In the context of SMEs in Malaysia, this study found that male and female leaders are perceived to act similarly. There is no difference between male and female
entrepreneurs in their leadership behaviour, in their level of promoting EO or in their perception of organisational performance. Perhaps male and female leaders expressed similar perceptions to the main variables in this study because women are now in more top managerial positions. The mean scores for each of the attributes were also found to be similar for men and women in this study.

7.2.4.4 Position

The results in Table 6.11 show that, except for organisational performance, statistical significance was found in the mean scores between owners and top managers for each form of leadership behaviour, EO and every factor of EO.

The results indicated that, on average, the owners of SMEs in Malaysia use transformational leadership and transactional leadership to a greater extent than the managers of SMEs. Judge et al. (2006) concurred that the relationship between leadership and firm performance is stronger when the CEO is the firm owner rather than the manager. This means that owners display much more significant leadership behaviour in relation to the performance of their organisation than people appointed to manage a company do. As owners always want to maximise their returns (Czarnitzki & Kraft 2004), this significant difference may be due to the reason that, as owners, they value their ownership and know that they have a lot at stake in the survivability and sustainability of their enterprises. A recent study of 41 top managers and 110 owners/founders of SME in the US by Langowitz and Allen (2010) suggested that leaders who are also the founders of their firms are more action-oriented by nature, with a heightened interest in looking for opportunities and a greater willingness to take on problem solving. Therefore, in order to maximise
their profits, they tend to practise transformational and transactional leadership behaviour to a greater extent than the top managers of such establishments.

When it comes to EO, this study found contradictory results to what was suggested by Langowits and Allen (2010), who found no significance difference in overall EO between founders and top managers of SMEs. The results of this study presented in Table 6.11 show a significant mean difference between owners and top managers in the EO they display.

Langowitz and Allen also made several important remarks relevant to the results of this study. First, even though they found no significant difference between founders and top managers in overall EO, their results indicated that there is a significant difference in the proactiveness factor of EO. Firms led by founders show a significantly more aggressive response to competitors than those led by non-founders. Second, they also reported that founders are more focused on product innovation than non-founders are. The results from this study show somewhat strong support for a difference between owners and top managers. However, they were based on an assumption that the owners were also the founders of these SMEs. The results indicate that, on average, owners exercise every factor of EO to a greater extent than top managers of SMEs. The effect size is higher for proactiveness than for innovativeness or risk taking. This indicates that owners of SMEs expect and try to promote strong entrepreneurial attitudes in their firms to ensure better organisational performance.
The results from Zahra’s (2005) study indicated that firms that are controlled by active generations of the same family tend to have a high focus on innovation. This shows that owners might have a stronger inclination than managers to nurture and promote EO in the organisation. As suggested, owners always want to get the maximum return on their investments (Czarnitzki & Kraft 2004), and they understand that their position influences the level of EO in their companies. Owners therefore tend to show that they are concerned about whether their firm is innovative and proactive enough and they tend to take considerable risks to guarantee the success of their organisation.

The next section discusses the results of the analysis of each of the main variables of this study. The section that follows after that discusses the justifications for excluding individualised consideration from this study.

### 7.3 Discussion of Main Variables

#### 7.3.1 Leadership Behaviour

Based on the means distribution between the two types of leadership behaviour and their respective attributes presented in Table 6.5 (see also Section 6.6.2), transformational leadership has a higher mean (M=2.90) than transactional leadership (M=2.33). These findings are similar to the findings of most of the previous studies and confirm the propositions by Bass and Avolio (1995, 2004) and Bass et al. (2003) that the mean for transformational leadership (M = 2.85) is higher than the mean for transactional leadership (M = 2.27). Bass and Avolio’s (1995, 2004) study was based on 27,285 respondents in the US. In a study of Taiwanese SMEs, data from 406
respondents also reported a higher mean for transformational leadership (M = 3.00) than the mean for transactional leadership (M = 2.68) (Yang 2008).

The results of this study indicate that leaders of SMEs in Malaysia perceive themselves as practising both transformational and transactional leadership, but incline more to the practice of transformational leadership. This shows that the leaders of SMEs in Malaysia see themselves more as transformational leaders than transactional leaders. Leaders of SMEs in Malaysia seem to consider themselves to be transformational when they deal with organisational problems or issues with employees. They believe that, to lead an organisation, they do not necessarily have to focus on finding employees’ mistakes or providing contingent rewards for good performance and punishing poor performance. They see themselves more frequently as focusing on developing the trust of employees to earn respect from them, providing assistance in dealing with problems or issues, giving individual attention and communicating high expectations. These are the attributes of transformational leaders.

Several previous studies also reported that leaders usually rate themselves as favouring transformational rather than transactional leadership, perhaps due to the self-assessment (Muenjohn 2011, Church & Waclawski 1998; Carless et al. 1996). The results of this study indicated that owners and top managers of SMEs in Malaysia believe they display higher transformational leadership characteristics than transactional leadership characteristics. One possible explanation for this is that transformational leadership is regarded by the respondents to be more effective in increasing followers’ satisfaction. It is also becoming the ideal leadership behaviour
regardless of country and culture (Muenjohn & Armstrong 2007). Therefore, leaders of SMEs in Malaysia rate themselves as transformational leaders.

Results from the interview data supported this finding, as more transformational themes were mentioned by the respondents during the interviews. The interview data revealed that every attribute of transformational and transactional leadership was reported throughout the interviews. More of the responses reflected transformational leadership qualities than transactional leadership qualities (see Section 6.13.1).

At the factor level of transformational leadership, this study found something different from what has been reported in Western countries. This study found that inspirational motivation has the highest mean of the four transformational leadership attributes at M = 3.13, followed by idealised influence, intellectual stimulation and individualised consideration. This is quite an interesting finding of this study. Most Western research (Tosi et al. 2004; Waldman et al. 2001) has found that idealised or charismatic influence is considered to be the key element of transformational leadership. But in the context of SMEs in Malaysia, inspirational motivation is perceived to be the key attribute of transformational leadership. A similar finding was reported in another non-Western context study in Iran by Jandaghi et al. (2009). Based on data gathered from personnel in private manufacturing companies in Qom, successful companies scored the highest mean for inspirational motivation, followed by idealised influence, intellectual stimulation and individualised consideration.

This evidence of inspirational motivation having the highest mean of all the attributes of transformational leadership suggests that leaders of SMEs in Malaysia believe that
steering the organisation to success, communicating high expectations to employees and using the simplest way to convey purposes to employees are the most important qualities of a leader. They believe that creating trust for mutual respect comes second. They also believe that encouraging critical thinking by their employees is more important than providing individual attention to employees. Perhaps it is due to the size of their organisation (which in this study consisted of more small than medium-sized organisations) that the attribute of inspirational motivation is considered to be important for ensuring good organisational performance. Leaders are expected to understand how to communicate high expectations and to show how to achieve good outcomes. Several respondents admitted that because of having employees with minimum or no qualifications, they need to be motivational leaders. They believe that leaders who can to do this will motivate employees to perform beyond what is normally expected from them.

On a different note, the low mean score of individualised consideration indicates that leaders of SMEs in Malaysia need to practise more of this behaviour. Transformational leadership is concerned with developing employees' capabilities and capacities (Jandaghi et al. 2009). Therefore, paying close attention to the different needs of individual employees and spending time in teaching and coaching could develop the skills and capabilities of their employees to enhance organisational performance.

Possibly, Malaysia being characterised as having a collectivist culture influences the perception of leaders in Malaysia of the importance of providing individual attention. A collectivist society, as described by Hofstede (1986), gives priority to group goals
over individual goals. In his book *Culture’s Consequences*, Hofstede said that a collectivist society fosters strong relationships where every member of a group takes responsibility for fellow members. Employer–employee relationships are perceived in moral terms (like a family link), and employment and promotion take account of the employee’s in-group (Hostede 2001). This is quite the opposite to the individualist culture of Western countries. The people in an individualist society give primary importance to their own interests and their immediate family.

Therefore, in the context of SMEs in Malaysia, leaders do not see the need to address employees’ needs individually. They see their employees as being the entire team and workforce in their organisation. Employee growth and development are addressed in groups to ensure that the goals of the organisation are communicated to all members of the organisation.

At the factor level of transactional leadership, contingent reward scored a higher mean at \( M = 2.94 \) than the other transactional leadership attributes, management-by-exception (active) at \( M = 2.78 \) and management-by-exception (passive) at \( M = 1.26 \). These results show that in regard to transactional leadership, leaders of SMEs in Malaysia perceive that providing rewards for good performance and punishment for poor performance is an effective exchange process between leaders and followers. They also reported that they intervene when procedures or standards are not met only ‘once in a while’. This shows that these leaders do not believe in intervening in what has been assigned to their employees if it can be avoided, because interference can cause employees to become unsettled and uncomfortable, which could affect their whole performance.
This research has found that the owners and top managers of SMEs are prone to be more transformational than transactional in their leadership behaviour. The results from the interviews support this proposition. This means that the leaders of SMEs in Malaysia perceive themselves as displaying the attributes of transformational leadership more often than the attributes of transactional leadership. They also believe they exercise transactional leadership behaviour but to a lesser extent than they practice transformational leadership.

7.3.2 Entrepreneurial Orientation

Based on the results of the means distribution of EO and factors of EO presented in Table 6.6, the higher the score, the greater the degree to which a firm is entrepreneurially orientated (Covin & Slevin 1989). The respondents’ scores on total EO (M = 2.60) indicated that owners and top managers of manufacturing and service SMEs in Malaysia perceive themselves as being reasonably entrepreneurially orientated. Almost all the respondents in this study agreed that, in general, EO is an important element to be encouraged in their establishments. They seemed to agree that the attributes of EO that consist of innovativeness, proactiveness and risk taking should be nurtured and practised in their firms. The interview data also indicated that those respondents acknowledge the importance of EO. They seemed to react positively to promoting EO and the factors of EO. Their positive actions in regard to EO were shown when everybody interviewed repeatedly mentioned behaviour categorised as factors of EO.

At the factor level, innovativeness scored the highest mean score, followed by proactiveness and risk taking (see Table 6.6). These results were similar to those
reported by Yang (2008) and Yoo (2001). Even though Yang (2008) used a different scale (1 to 7) to compare the means of EO variables between low and high business performance in his study, he also found that in both categories (low and high business performance), innovativeness scored the highest mean, followed by proactiveness and risk taking.

Owners and top managers of SMEs in Malaysia seem to understand the benefits and advantages of becoming the market leader and producing and promoting new products or services. This influences their perception of the greater importance of innovativeness than the other factors. Innovativeness is also thought to be critical for SMEs in Malaysia to remain competitive, and it is considered a key to sustain organisational performance (Mahmod et al. 2013). Hilmi and Ramayah (2008) also suggested that owners and managers of SMEs in Malaysia should focus on developing and designing an organisational strategy that embraces innovative culture to continuously evolve and be relevant to market needs.

These results indicate that of the three variables of EO, innovativeness is perceived to be a more important factor for SMEs in Malaysia than proactiveness and risk taking. This finding is similar to the results of a study on technology-based SMEs, where innovativeness was recognised to be the most important factor when compared with proactiveness and risk taking (Yoo 2001). The respondents in this study seemed to agree that for their firm to be entrepreneurially orientated, it is important for them to engage in innovative behaviour. They need to create new products and services and get involved in experiments and R&D. Engaging in these activities distinguishes them from their competitors. Interview data also revealed strong support for EO
behaviour, most frequently for innovative behaviour, followed by proactiveness and risk taking.

7.3.3 Organisational Performance

The overall mean of organisational performance was $M = 2.60$. Of the two organisational performance measures adopted in this study, growth scored a higher mean than profitability (see Table 6.7). These results indicate that the owners and top managers of SMEs in Malaysia perceive organisational growth as a more desirable goal than the firm’s profitability. Perhaps due to the relatively small size of their firms, the respondents view the most important organisational outcomes as expanding their market share, stabilising their operation and improving the economies of scale. They believe that profits will materialise once all of these are achieved.

The importance of growth over profitability has been acknowledged by researchers in the past (Wiklund 1999; Fitzsimmons et al. 2005; Davidsson et al. 2002). Wiklund (1999) suggested that growth is the most important performance measure for small firms and is superior to indicators of financial performance. Markman (2002) indicated that the use of growth as a performance measure is generally based on the belief that growth is a prerequisite to the attainment of sustainable competitive advantage and profitability.

These findings also support the researcher’s argument that since more small firms than middle-sized firms participated in this study, the owners and top managers of small firms are more concerned with ensuring the survival of their firms than with
making a profit and maintaining the operational stability of their businesses. Owners tend to be interested in long-term growth because they want their business to be sustainable. Zahra (2005) seems to support this. In her study she mentioned that owners/founders are mostly concerned about the sustainability of their business to protect the legacy for future generations. Perhaps top managers are more interested in short-term performance than owners are because that is what they are being paid for.

7.4 The Removal of Individualised Consideration

As presented in Chapter 6, due to items for individualised consideration of the transformational leadership construct being cross-loaded into different factors, this factor was removed from the final analysis. There are several possible reasons for this factor being removed from this study and they are discussed further later in this section. Even though this factor was removed from transformational leadership in the final analysis, the factors that remain are deemed significant representatives of the transformational leadership construct.

Several studies have included only one or a few transformational leadership factors in their study. For example, Tosi et al. (2004) and Waldman et al. (2001) both used only the charismatic attribute (idealised influence) to represent transformational leadership. They argued that this factor is the key attribute of transformational leadership.

Lee et al. (2011) conducted a study to examine the impact of transformational leadership, team performance and service quality in retail banks. Of all the attributes of transformational leadership, only intellectual stimulation was left in the final path
model, and it contributed a significant relationship to service quality. Elenkov (2002) also used only three attributes of transformational leadership – idealised influence, intellectual stimulation and individualised consideration – when he observed the effects of leadership on organisational performance in 350 small Russian companies. Similar to this study, the study of Ozaralli (2003), who studied the effects of transformational leadership on empowerment and team effectiveness in Turkey, also removed individualised consideration from his final analysis.

The first possible reason for this removal could be the influence of culture in the Malaysian business environment. Possibly influenced by a collectivist culture, where emphasis is placed on the group and gives priority to group goals (Triandis 2001; Hofstede 1986, 2001), behaviour that focuses on providing individual attention does not seem pertinent. The results of the mean distribution for the four factors of transformational leadership support this argument, as individualised consideration scored the lowest mean (see Table 6.5). This is consistent with the discussion in Section 7.3.1, which concluded that, being embedded in a collectivist society, leaders of SMEs in Malaysia tend to focus on group goals rather than individual goals. These results indicate that Malaysia is still influenced by a strong collectivist culture even 40 years after the cultural studies initiated by Geert Hofstede.

Rosinski (2003) also argued that, in a collectivist culture, coaching and providing individual attention are less important when employees may readily reach consensus. This means that employees in a collectivist society may willingly focus on their team’s accomplishments rather than on their own needs.
Bass (1996) stated that there might be some aspects of individualised consideration or contingent reward which are explicit in the American culture but are implicit in others. Even though the concepts of transactional and transformational leadership travel across languages, countries and cultures, he proposed that the specific forms of behaviour related to these forms of leadership behaviour may change to some extent, especially when in non-Western cultures. As in this study, it is proposed to remove individualised consideration from the transformational leadership construct.

Secondly, the majority of the sample in this study were leaders of small enterprises. Thus, it can be argued that their main concern is focused on ensuring the effectiveness and efficiency of organisational performance as a whole. Team synergy and team spirit are more relevant than focusing on the development of individuals. Thus, the respondents in this study perceive that individualised consideration is not particularly significant.

Thirdly, by having more experienced employees, such as those who have been with the organisation since its inception, less individual attention is needed. Experienced employees understand their roles and the motivation and direction of the organisation. A couple of the interview respondents also acknowledged that individualised consideration is less important when they have experienced employees. As one leader put it:

By having more experience employees, closer supervision is not needed thus less time and attention is given to them (RESP 8).
Bass (1997) mentioned that transformational leadership is universal and should be applicable across cultures. But he also argued that the specific behaviour related to each leadership factor might vary to some extent, particularly from one country to another. Thus the outcome of this study provides support for this proposition. The removal of individualised consideration from this study suggests that transformational leadership is influenced by culture and/or the business environment. The other three transformational leadership factors remain significant representatives of the transformational leadership construct, as they do in the other studies mentioned above that used only one or a few factors of transformational leadership.

7.5 Discussion on Main Findings

7.5.1 Relationships between Leadership Behaviour and Organisational Performance

The first final path model was developed to examine the relationship between the leadership behaviour and the organisational performance of SMEs. To examine these relationships, two research questions were addressed:

- **Research Question 1**: To what extent do transformational and transactional leadership have an impact on organisational performance?

- **Research Question 2**: Does transformational leadership have a stronger effect on organisational performance than transactional leadership does?

To provide answers to these first two research questions, three hypotheses were proposed and tested. The first two hypotheses suggest that both transformational and
Transactional leadership exert positive significant effects on organisational performance and the third hypothesis suggests that the effects of these relationships are stronger for transformational leadership than for transactional leadership. The findings as presented in Figure 6.13 show that Hypothesis 1 is fully supported when transformational leadership has significant relationships with both measures of organisational performance. H2 is only partially supported when transactional leadership has a significant relationship only to growth, and the path to profitability is found to be insignificant.

Based on the results presented in the direct model of the relationship between leadership behaviour and organisational performance (see Figure 6.13), it can be concluded that the finding confirms the third proposed hypothesis that transformational leadership has a stronger impact on organisational performance than transactional leadership does, due to displaying higher path coefficients with growth and profitability. Hence, the results show full support for H3.

The significant positive relationship reported between the transformational leadership and organisational performance measures of this study are consistent with the results of studies conducted by Matzler et al. (2008), Pedraja-Rejas et al. (2006), Yang (2008) and Abdul Aziz et al. (2013). For example, drawing from a sample of 97 CEOs of innovative SMEs in Austria, Matzler et al. (2008) found that the transformational leadership displayed by the leaders of SMEs has a significant direct impact on innovation, growth and profitability. They argued that the effect of transformational leadership displayed by the leader applies not only to staff in product development but is spread and applied throughout the organisation.
Transformational leadership enables employees to identify and take advantage of business opportunities for the firm. For instance, employees may be prepared to develop more efficient work routines, which reduce costs, in turn increasing profitability. At the same time, there might be business opportunities that are not related to product innovations. Employees may benefit from these opportunities and gain new customers in established markets, which in turn will increase sales.

The results from analysing the interview data also show support for this proposition. One interviewed respondent said that instilling trust and confidence among employees results in employees putting effort into improving their performances.

Investigating the relationship between transactional leadership and both measures of organisational performance used in this study, Ensley et al. (2006) and Yang (2008) found a significant relationship between transactional leadership and growth. Based on 168 respondents from the 66 fastest growing private firms in the US, Ensley and colleagues found that transactional leadership is significantly related to sales growth and sales volume. They argued that transactional leadership assists coordination by setting performance expectations and clarifying reward contingencies. Over time, transactional behaviour can be used to leverage performance monitoring and send signals that allow continuing coordination and adjustment of individual behaviour to achieve better growth for the organisation.

The insignificant relationship between transactional leadership and profitability found in this study is similar to the finding of a study conducted by Waldman et al. (2001), who also found that transactional leadership is not significantly related to
profitability. Perhaps this maintenance form of leadership behaviour (Ensley et al. 2006) does not encourage the organisation to make a huge investment. As Bass (1990a) said, transactional leaders are risk averse and they perform well in a stable and predictable situation (Bass 1990a; Ensley et al. 2006). Therefore, the finding of a partial relationship between transactional leadership and organisational performance in this study indicates that transactional leadership does not significantly affect both measures of organisational performance. It means that the leaders of SMEs in Malaysia perceive that their transactional leadership behaviour is effective in enhancing the growth of their organisation but does not affect their profitability.

One of the important findings of this study is that transformational leadership has a stronger effect on organisational performance than transactional leadership does. This outcome supports the findings of Lowe et al. (1996), Gardner and Stough (2002) and Abdul Aziz et al. (2013) and it is consistent with other studies in Western countries (Elenkov 2002; Howell & Avolio 1993; Bass 1997). Most importantly, this outcome is consistent with Bass’s Full Range Leadership model (Bass & Avolio 1997, 2004; Bass 1996, 1999). All these studies concluded that transformational leadership has a stronger correlation with the productivity and performance of a firm than transactional leadership does and hence it is a more effective form of leadership behaviour.

In Russia, Elenkov (2002) found that transformational leadership directly and positively impacts on the organisational performance of Russian companies far beyond the impact of transactional leadership. In Canada, Howell and Avolio (1993) measured 78 senior managers’ leadership behaviour in a large Canadian financial
institution and concluded that leaders who display more attributes of transformational leadership than transactional leadership positively contribute to the achievement of business unit goals. Bass (1997) also suggested that transformational leaders are more effective than leaders who practise transactional or laissez-faire leadership behaviour, regardless of culture, organisation or country.

In the context of SMEs in Malaysia, similar results were reported recently by Abdul Aziz et al. (2013) when they studied 375 SMEs in the services industry. They found that both transformational and transactional leadership have significant effects on business performance. They suggested that the stronger the behaviour of both forms of leadership, the better the performance outcomes of the firm. Their results also strongly suggested that transformational leadership is more effective than transactional leadership and passive avoidant leadership.

However, recent studies by Obiwuru et al. (2011) and Rao (2012) have suggested the opposite. Obiwuru and colleagues examined the effect of leadership behaviour on the performance of small organisations in Nigeria. The models of OLS multiple regression were employed, estimated and evaluated. Their results indicated that performance is highly positively affected by transactional leadership behaviour and insignificantly affected by transformational leadership behaviour. Therefore, they concluded that transactional leadership behaviour is recommended for small enterprises. Perhaps it is due to the different culture and economic development in Nigeria that transactional leadership is considered to be more effective than transformational leadership. On the other hand, Rao (2012) tested the relationship between transformational and transactional leadership and business performance
among managers and entrepreneurs of micro, small and medium enterprises in India and concluded that transactional leadership is more correlated to business performance than transformational leadership is.

Contrary to what those researchers found, the results from this study indicate that when leaders exert transformational leadership behaviour, they induce higher performance in their firms than transactional leadership does. Leaders of SMEs in Malaysia recognise that their ability to exercise the attributes of transformational leadership can motivate employees and encourage higher performance outcomes. Each attribute of transformational leadership is believed to engage employees and encourage positive outcomes from them, and positively affect the growth and profitability of the firm. Gillespie and Mann (2004) suggested that for a firm to gain support from employees, which contributes to the success of the firm, leaders need to encourage employees to grow and develop, to challenge them by setting high targets for them, to show emotional support and provide direction, to recognise individual needs and team requirements, and to develop employees’ skills and capabilities.

Even though Malaysia is categorised as a developing country and possesses a different set of cultures from Western countries, entrepreneurs of SMEs in Malaysia tend to display similar leadership behaviour when it comes to transformational and transactional leadership. As discussed by Kennedy (2002) and Mansor and Kennedy (2000) in regard to the GLOBE study by House et al. (1999), Malaysian ratings for charismatic/transformational leadership are close to average when compared to 60 other countries. The findings of this study also confirm that transformational
leadership is a universally endorsed leadership behaviour, as suggested by Bass (1997) and Den Hartog et al. (1999).

The study finding of a positive relationship between transformational leadership and both measures of organisational performance indicates the vast transformation that the country has undergone since the mid-1980s. Factors such as the growth of the knowledge economy, the transformation of the workforce, the adoption of emerging democratic management ideas, a better education system, a vastly increased exposure to information, joint ventures, the adoption of technology and the country’s focus on a high level of industrialisation and economic development have all been linked with the adoption of many Western management theories and have led to the practice of particular leadership behaviours among business leaders in the country (Abdul Rani et al. 2008; Jayasingam & Cheng 2009; Abdul Rani 2006; Mansor & Kennedy 2000).

It seems that transactional leadership is unable to affect an organisation’s return on investment. In today’s globalised competitive environment, an organisation needs to act strategically and to formulate corporate strategies that transcend borders and earn a worthwhile return on investment by outperforming the rivals (Baloch & Inam 2008). These authors argued that leaders who can respond to the new realities and embrace change can take control of the future to realise its objectives. This strategic thinking can enable an organisation to maximise its financial returns and also its return on people. Therefore, leaders who focus on maintaining operational stability (Ensley et al. 2006) or those who emphasise the end result and focus on work tasks and outcomes, rewards and punishment (Mullins 2002) are not capable of affecting the profitability of Malaysian SMEs. Many earlier findings also seemed to suggest
that a total dependence on this form of leadership may have undesirable effects on performance and satisfaction (Bass 1985; Bryman 1992; Burns 1978).

However, this study still wants to acknowledge the importance of leaders providing rewards and taking corrective actions, which are integral elements of transactional leadership behaviour. It is suggested that employees may perform better when leaders do not monitor their performance too closely and provide room for growth and involvement. The creation of positive attitudes among employees through the transactional leadership behaviour of leaders can result in better growth of the employees and, hopefully, this will contribute to better profitability outcomes for their organisation.

Therefore, in the context of SMEs in Malaysia, this study suggests that first, the leaders of SMEs in Malaysia need to practise both forms of leadership behaviour. A similar recommendation was made by Abdul Aziz et al. (2013). Ismail et al. (2010) also promoted that the ability of leaders to display both transformational and transactional leadership behaviour effectively can lead to an increase in positive individual outcomes and trust in leaders which in turn produces better outcomes for the organisation. Transformational leadership increases employees’ awareness of collective interest and helps them to achieve their collective goals. In contrast, transactional leadership promotes the individual interests of the leaders and their followers and achieves the satisfaction of both on meeting contractual obligations by establishing objectives and monitoring and controlling the results (Bass & Avolio 2000).
The interview data also supported this argument. The majority of respondents agreed that their leadership behaviour has a significant influence on the performance of their organisations. They agreed that having appropriate leadership behaviour, especially towards employees, would result in better organisational performance. Since these leaders are in enterprises categorised as small and medium-sized, they acknowledged the importance of a leader to show a strong vision and the mission of the organisation, to communicate high expectations, and to provide supervision, guidance and direction to their employees.

Secondly, leaders are recommended to embrace, display and practise more transformational leadership behaviour. Md Noor (2010) suggested that an organisation must have a transformational leader to be able to respond strategically and forge ahead for transformational change. He also proposed that to raise the country of Malaysia to a great nation, conventional ways of leadership would not be sufficient. Abdul Aziz et al. (2013) also suggested that transformational leadership is the best predictor for SMEs’ business performance. Hence, leaders need to be visionary enough to inspire greatness and bring about sustainable transformational changes in their organisation. In steering the direction of the organisation in a globalised competitive environment, transformational leadership is thought to be the best form of leadership behaviour for producing excellent performance.
7.5.2 Relationship between Entrepreneurial Orientation and Organisational Performance

The second final path model focused on the relationship between EO and organisational performance. In order to address this relationship, the following research questioned was proposed:

**Research Question 3**: To what extent does entrepreneurial orientation influence organisational performance?

To answer the research question and taking into consideration that the three factors of EO may vary independently (Krauss et al. 2005; Lumpkin & Dess 1996), three hypotheses were posed and tested. This study has suggested that each factor of EO – innovativeness, proactiveness and risk taking – has a positive effect on organisational performance. The findings as indicated in Figure 6.14 showed that both innovativeness and proactiveness have significant and positive relationships with both measures of organisational performance. Thus, these results support H4 and H5 of this study. However, it was found that risk taking has a significant and positive relationship only with growth and not with profitability, providing only partial support for H6.

There were mixed outcomes in regard to the direct relationships between the factors of EO and organisational performance. A recent study by Kraus et al. (2012) found that of the three factors of EO, only proactiveness has a direct and significant impact on SME business performance in the Netherlands. In 164 Dutch SMEs, innovativeness and risk taking were not significantly associated with the business performance measure. These two factors showed a direct significant relationship with
performance measure only when accounting for their interaction with the operating environment.

Nevertheless, previous research has also suggested that a high level of innovativeness and proactiveness improves organisational performance (Zahra & Bogner 2000; Lumpkin & Dess, 2001; Awang et al. 2010). Innovativeness is regarded as a firm’s readiness to be involved in creativity and experimentation through the introduction of new products or services as well as technological leadership through R&D in new processes (Rauch et al. 2009), and therefore innovativeness is regarded as critical to the survival of a firm (Zahra 1996). She further argued that, to achieve superior performance, the success of a firm depends on how well the firm pursues technology strategies in developing a plan to utilise its technological resources (Zahra 1996).

Venkatraman (1989) posited that proactiveness is an important element of entrepreneurship. This factor of EO represents a firm’s effort to be ahead of competitors in selling new products or services or in using new technology. Proactive firms are excellent at exploiting opportunities to meet the future needs of consumers and in anticipating changes in demand and identifying emerging issues that might lead to new venture possibilities (Dess & Lumpkin 2005). Proactivity thus enhances organisational performance.

The risk-taking factor refers to the willingness of a firm to invest significant resources in opportunities in the presence of uncertainty. Mixed outcomes were produced in regard to the relationship between risk taking and organisational performance. A study by John et al. (2008) based on firms from 39 countries found a
positive and significant relationship between risk taking and growth. Awang et al. (2010a), on the other hand, found that risk taking is not related to the profitability of the 125 agricultural-based SMEs they studied. Others have found that risk taking has a U-shaped or curvilinear relationship with sales level and growth (Kreiser et al. 2002; Miller & Friesen 1982).

The results of this study indicate that factors of EO are important for organisational success. This is consistent with the findings of several other studies (Zahra & Bogner 2000; Lumpkin & Dess 2001; Awang et al. 2010; Litov & Yueng 2008; Venkatraman 1989; Kraus et al. 2012). Innovative SMEs in Malaysia which are willing to be involved in the generation of new ideas and in experimentation to create new products and services have an opportunity to become the market/industry leader and ensure the success of the firm. Firms of this type have more chance of generating high growth and profitability.

The significant relationships between innovativeness and measures of organisational performance were also supported by the qualitative data in this study. Leaders of SMEs in Malaysia acknowledged that innovativeness is an important factor for organisational success. All the respondents quoted one and usually more of the innovative themes during their interviews, such as ‘introduce many new products’, ‘invest in R&D’ and ‘new ways of doing things’. Few of the respondents mentioned introducing new products and services or their involvement in R&D.

Second, the results also indicated that firms which seek to capitalise on every opportunity and establish the first-mover advantage by anticipating and acting on
future needs and wants also have a high chance of success. This proactive behaviour and pioneering action allows a firm to achieve a higher market share and exploit their competitive advantage. As Kraus et al. (2005) indicated, proactiveness is a critical behaviour of a firm. It is important not only for start-up organisations but for SMEs in general. Organisations benefit by being proactive in their strategic decision making regardless of their business. The ability of these entrepreneurs to anticipate future needs and wants places them one step ahead of their competitors.

Data from the interviews on proactiveness supported the quantitative findings. Most of the respondents said they are proactive in strategic action. The majority of them said that when it comes to competition, their competitors respond to them, perhaps due to the fact that they have extensive experience in their particular line of business.

Third, in regard to risk taking, the results indicate only a partial relationship to organisational performance measures. Leaders of SMEs in Malaysia believe that their risk-taking attitude has a significant effect on the growth of their firm but not on profitability. These results suggest that entrepreneurs in Malaysia recognise risk taking as an opportunity that is necessary for business sustainability. They perceive that taking risks support innovative and proactive actions which would help to expand their business. Without a willingness to take risk, it is unlikely a firm would invest heavily in R&D and become a pioneer in the marketplace.

Interview data showed mixed outcomes regarding respondents’ views on their risk-taking propensity. Most of them perceived themselves as risk takers, willing to
venture into unknown territory, taking on high-risk projects in the hope of expanding their market share and obtaining more profit.

However, not all the respondents thought that taking more risks would provide more profit. Some of them recognised that they do not have enough capital to take on big projects that involve a huge amount of capital. They also acknowledged the possibility that such projects might not turn out well and would be very costly for the organisation. As one of them put it:

We have to be realistic since we do not have much fund to spend on something that is really big. We cannot pump in more money if the business is not successful… We always need to have awareness to the risks that we take and will only be considering calculated and manageable risks (RESP 6).

The insignificant relationship between risk taking and profitability is in line with an earlier finding by Awang et al. (2010a). In this study, this result might be due to these entrepreneurs recognising that the benefits of taking higher risks might take years to be realised. Given the size of their firms and their limited amount of capital, they perceive that taking risks would not guarantee an immediate profit to their organisation. They just do not have the capital to invest in a high risk venture while staying in business to wait for the profits of their investment to be realised. Zahra (2005) contended that entrepreneurship centres on identifying and exploiting opportunities by redeveloping existing and new resources in ways that create an advantage. Going for these opportunities is risky because their duration and the payoff from them are uncertain. Therefore, the leaders of SMEs tend to be very calculative and limit themselves to manageable risks.
The findings in this study support the notions that the factors of EO vary independently in their influence on organisational performance and that entrepreneurs who are willing to exploit each of these factors have a high possibility of success. SMEs in Malaysia need to be efficient and brave enough to nurture each factor of EO in order to achieve success for their organisations in the environment of globalisation, legislation, reduction of trade barriers and market expansion due to the advances in technology and innovations (Smit & Watkins 2012). If they intend to go beyond the local market and compete globally, they need to be entrepreneurially orientated since EO contributes to the organisation’s ability to internationalise (Knight & Cavusgil 2004).

A recent study by Fauzul et al. (2010) found that EO has a positive relationship to firm performance among Sri Lankan SMEs. Tajeddini (2010) established the effect between EO and business performance of the hotel industry in Switzerland. Tzokas et al. (2001) recognised that EO increases the operational competencies of small-scale manufacturing firms in Greece. In line with this stream of literature that supports the effect of EO on SMEs’ performance (Tajeddini 2010; Fauzul et al. 2010; Tzokas et al. 2001), this study concludes that EO is perceived to influence organisational performance and is important for the success of SMEs in Malaysia. As one of the respondents said:

If we are being more innovative and proactive, and willing to take risks, there will be positive effects towards our organisational performance… The more entrepreneurially orientated you are, the better performance you are going to achieve (RESP 7).
7.5.3 Mediation Effect of Entrepreneurial Orientation on the Relationship between Leadership and Organisational Performance

The final path model developed in this study examined the role of EO as a mediator in the relationship between leadership behaviour and organisational performance. To examine this relationship, the following research question was proposed:

**Research Question 4:** To what extent does entrepreneurial orientation mediate the relationship between leadership behaviour and organisational performance?

Four hypotheses were posed and tested to answer this final research question. It was hypothesised that EO would fully mediate the relationship between transformational and transactional leadership and the growth and profitability of SMEs. To answer this research question, suggestions made by Baron and Kenny (1986) in regard to the mediation relationship were followed and two final path models were examined. The first model was the final path of direct relationship between leadership behaviour and organisational performance. The second model was the final path of the mediating effect of EO on the relationship between leadership and organisational performance. The results of these relationships are shown in Figures 6.13 and 6.15.

The first two hypotheses proposed in this model focus on the mediating role of EO in the relationship between transformational leadership and growth (H7) and in the relationship between transformational leadership and profitability (H8). Based on the results as discussed in Section 6.10.3, EO fully mediates the relationship between transformational leadership and growth (H7) and profitability (H8) of SMEs. Hence, both hypotheses were fully supported. The results of this study indicated that, in a direct relationship, transformational leadership positively influences organisational
growth and profitability performance. However, with the presence of EO, that direct relationship becomes insignificant, which indicates that EO plays a full mediating role that increases that positive relationship. In the mediation model, transformational leadership is found to significantly affect EO, and EO to significantly affect growth and profitability. Thus, these findings demonstrate that EO is not only an independent strategic orientation but also an integral mechanism that leverages transformational leadership on the organisational performance of SMEs.

The final two hypotheses proposed in this study focus on the role of EO as a mediator in the relationship between transactional leadership and growth (H9) and in the relationship between transactional leadership and profitability (H10). As proposed by Baron and Kenny (1986), the first step in establishing the existence of mediation is to show that the independent variable has a significant relationship with the dependent variables (growth and profitability). The results presented in Figure 6.13 show that there is no significant relationship between transactional leadership and profitability; therefore H10 is spontaneously rejected. This means that no mediation occurs between transactional leadership and profitability. But the results still find full support for H9. Based on the mediation model as presented in Section 6.10.3, it was found that transactional leadership has a significant relationship to EO, and EO has a significant relationship to growth. Therefore, these results indicate that EO fully mediates the relationship between transactional leadership and the growth of SMEs (H9). In a direct model, transactional leadership positively influences organisational growth. However, with the presence of EO, this direct relationship becomes insignificant, which indicates a full mediation effect of EO on this relationship. Thus it is demonstrated that EO is not only an independent strategic
orientation but also an integral mechanism that leverages transactional leadership on
the growth performance of SMEs.

Even though there is no mediation of EO in the relationship between transactional
leadership and profitability, the results presented in the final path model can still
conclude that EO has an indirect impact on the relationship between transactional
leadership and profitability. As discussed earlier, leaders who display transactional
leadership behaviour are perceived as not having a positive effect on profitability.
But the outcomes from this final path model indicate that transactional leaders can
affect profitability but only when they exercise EO behaviour. This means that
profitability can be improved by transactional leaders if they are also innovative,
proactive and willing to take risks.

To prove that mediation occurs, it is important to establish that the independent
variables representing both forms of leadership behaviour have significant
relationships with the mediating variable of EO. As required, significant positive
relationships were shown between both transformational and transactional leadership
and EO. The results upheld the relationship between these two concepts (leadership
behaviour and EO), and so it can be postulated that leadership behaviour enhances
EO.

The literature has also shown strong support for these relationships. For example,
Yang (2008) found significant relationships between transformational and
transactional leadership and EO among Taiwanese SMEs. Tarabishy et al. (2005)
suggested that the leader and their type of leadership style influence both their
subordinates and the organisation’s entrepreneurial strategic orientation. The results of their study based on the CEOs and senior managers of companies in Washington DC in the US showed that there is a significant relationship between a CEO’s leadership style for both transformational and transactional types and their organisation’s entrepreneurial strategic orientation represented by proactiveness, innovation and risk taking. However, Eyal and Kark (2004) found a significant relationship only between transformational leadership and EO. They reported no significant relationship between transactional leadership and EO.

Another significant finding related to the relationship between leadership behaviour and EO was that transformational leadership has a stronger impact on EO than transactional leadership does. The path coefficient between transformational leadership and EO was much stronger than the path coefficient between transactional leadership and EO (see Figure 6.15). This outcome is in line with the views of Morris et al. (2007), Yang (2008), Roomi and Harrison (2011) and Öncer (2013), who all agreed that transformational leadership is a more appropriate form of leadership behaviour and contributes the most to the entrepreneurial environment. Leaders in entrepreneurial organisations demonstrate skills at nurturing the entrepreneurial capabilities of employees, guarding innovative ideas that threaten the current business model, making opportunities that benefit the organisation, questioning the dominant logic in the industry, and linking entrepreneurship and business strategy (Covin & Slevin 2002). Gupta et al. (2004) suggested that entrepreneurial leaders are those who endorse the challenges of communicating a vision and influence others to help them realise it. These qualities are more associated with transformational leadership than with transactional leadership.
These results show that transformational leaders are perceived to have a more significant effect on the implementation of EO than transactional leaders have. Perhaps leaders with the attribute of intellectual stimulation challenge existing ways of doing things and provide employees with new approaches to problem solving (Eisnbeiss et al. 2008). This would encourage employees’ creativity and experimentation (Podsakoff et al. 1990), which is integral to fostering EO in the organisation. Inspirational leaders also challenge employees to reach high standards, communicate optimism about future goals attainment, and provide meaning for the task at hand (Judge & Piccolo 2004). The full potential of EO can be achieved only when the workforce develops innovations that are ahead of the competition in terms of quality and speed to market (Lumpkin & Dess 1996). To achieve this, an organisation needs employees who strive for best-in-class outcomes in product development and product modification (Gumusluoglu & Ilsev 2009). Therefore, when leaders stress the importance of communicating and collaborating for high expectations, this in turn improves communication between employees from various departments in the organisation, which is necessary for the effective development of EO. As Covin and Slevin (1991) suggested, a smooth conversion of EO into superior performance requires input and activities from all functional groups in the organisation. Finally, a leader with the attribute of idealised influence provides vision and a sense of mission, instils pride, and generates respect and trust among employees (Bass 1990a). Employees who feel that their leaders gauge their interest and engage in entrepreneurial activities such as favouring innovations and being proactive are likely to increase their trust in these processes. This also assists in an effective development of EO in their organisation.
Another important element in proving that mediation occurs is that there must be a positive significant relationship between the mediator (EO) and the dependent variables (growth and profitability). The results as presented in Figure 6.15 meet this condition. Similar results were also discussed in the literature. For example, based on a sample of 166 firms in Northern China, Tang et al. (2007) reported that EO has a positive influence on business performance. Zainol and Ayadurai (2011) suggested that one of the most important factors for an organisation’s growth and profitability is the development of EO, which is associated with organisational innovativeness, a risk-taking propensity and being proactive. Based on a sample of 162 leaders of SMEs in Malaysia, they found that EO has a significant positive effect on the performance of organisations. In the US, Davis et al. (2010) explored the relationship between the three entrepreneurial characteristics of 69 top managers and their impacts on organisational performance. Their findings were consistent with a significant amount of other research (Rauch et al. 2009), in which EO is positively related to organisational performance. These investigators confirmed that top managers with a high tolerance of risk, those who favour innovation and those who possess a high level of proactiveness positively influence organisational performance.

In another study, Gurbuz and Aykol (2009) investigated the impact of EO on firm growth and endorsed that EO affects firm growth. Their study was based on data gathered from 221 owners or managers of small Turkish enterprises. The relationship between EO and profitability is also well established. Chow (2006) tested the relationship between EO and firm performance in China and concluded that EO affects profitability, especially for non-state firms.
All of these studies suggest that leadership behaviour affects EO and EO affects organisational performance. These findings support the argument in this study that EO could mediate the relationship between leadership and organisational performance. Jung et al. (2008) also contended that leaders of an organisation have a direct influence on organisational performance directly through their characteristics and behaviour and indirectly through the strategic choices they make. This means that leadership behaviour might have both direct and indirect impacts on organisational performance. The indirect impact of leadership on organisational performance might occur through the strategic orientation of the organisation. In line with this view, EO can be seen as an organisation’s strategic choice that captures the entrepreneurial aspects of decision-making styles, practices and methods (Wiklund & Shepherd 2005) and can be the key to enhance organisational performance (Covin & Slevin 1989; Lumpkin & Dess 1996).

Likewise, Morris et al. (2007) suggested that leadership affects the level of entrepreneurship in a firm. Leadership is not only a reflection of a leader’s behaviour, but is also a process that concentrates on activities that are important for a leader to fulfil his or her responsibilities, which include motivating others to understand and work towards common goals and shared values, and at the same time, fulfilling collective and individual goals (Yukl 2010). Therefore, the implementation of EO assists an organisation to translate and achieve these aspects of leadership in a better performance of the organisation.

It appears that organisations benefit from the leadership behaviour of their leaders if they also focus on developing EO in their organisation. The significant influence of
leadership behaviour on EO indicates that in examining the model of strategic orientation and organisational performance, leadership is an important antecedent that can improve the outcomes of the organisation. This argument is in line with that of Covin and Slevin (1989), who suggested that internal variables (which in this study refer to leadership behaviour) affect the EO of a firm. Tarabishy et al. (2005) also proposed that leaders and their leadership behaviour influence both their subordinates and their organisation’s entrepreneurial strategic orientation. The integration between leadership and EO is perceived to provide a positive effect on organisational performance.

This study also found that transformational leadership is perceived to have a stronger impact on EO than transactional leadership has. Perhaps the attribute of transformational leaders that questions the status quo and the usual ways of doing things increases the likelihood of employees finding increasingly effective and efficient ways of implementing EO (Engelen et al. 2012), thus improving the relationship between transformational leadership and organisational performance. This outcome is in line with the findings by Yang (2008), who suggested that transformational leaders with high EO contribute to higher business performance. This means that EO is more effective with transformational leadership characteristics. Therefore, leaders who encourage the development of EO and display transformational leadership characteristics could exploit their leadership behaviour to significantly improve the performance of their organisation.

The results of this study are contrary to the findings that suggest there is no significant relationship between transactional leadership and EO (Eyal & Kark 2004;
Morris et al. (2007). Morris et al. (2007) used data gathered from 145 CEOs from NPOs and found that transactional leadership is not significantly related to EO. Based on their result, it can be argued that leaders who exercise strict control and emphasise managing workers or volunteers (in the context of their study) according to strict rules and regulations will definitely be ineffective in fostering the development of EO or even enhancing the performance of the organisation. The significant relationship between transactional leadership and EO found in this study is in line with the argument by Öncer (2013) that leaders need to engage in entrepreneurial activities regardless of their leadership behaviour. Thus, the transactional leadership behaviour practised by some leaders of SMEs in Malaysia can still advantageously affect entrepreneurial activities in their organisations.

Therefore, it is suggested that leaders who focus on work tasks and outcomes, rewards and punishment (Mullins 2002) and maintain a tight logistical control by monitoring the performance of employees can still benefit from EO. This monitoring behaviour of transactional leaders is the control of employees in an effort to make the existing strategic processes more effective and to achieve a significant growth for the organisation. Due to a shortage of resources and a limited amount of capital, leaders of this type feel they need to be concerned about every decision made about introducing new products, being the market leader and even the amount of risk they should take. They feel they cannot allow any mistake that might jeopardise the money they have invested to favour EO in their organisation.

To summarise, this study strongly advocates that EO is an important mediator between leadership behaviour and organisational performance. The right integration
between leadership behaviour and EO is perceived to have a significant effect on the
growth and profitability of the organisation. The results of this study show that
leaders’ transformational and transactional leadership behaviour is positively related
to EO, and EO is positively related to growth and profitability. The findings from the
final path model extend the research in the field by suggesting that transformational
and transactional types of leadership behaviour are ‘latent’ constructs that influence
leaders’ EO. It is also suggested that by focusing on EO in their organisation, leaders
demonstrate their ability to develop their level of innovativeness, proactiveness and
risk-taking behaviour and hence influence growth and profitability. Therefore it is
proposed that SMEs in Malaysia could perform above their expectation by adopting
these forms of leadership and entrepreneurial behaviour.

Second, the mediation effect of EO between transformational leadership and
organisational performance was found to be stronger than the mediation effect of EO
between transactional leadership and organisational performance. Hence, it can be
concluded that leaders with transformational leadership that favour elements of EO
would have a strong positive effect on organisational performance.

Finally, leaders of SMEs in Malaysia should be encouraged to effectively foster the
elements of EO. They should be able to exploit their leadership behaviour in
effective performance when they favour innovativeness, being proactive and willing
to take risks. In moving Malaysia towards a developed country status, leaders of
SMEs must take the initiative to develop innovative ideas, creativity and
experimentation in their organisations. Instead of responding to competitors, they
must strive to stay clearly ahead of the competition and be bold enough to venture
into an unknown market. The ability of their organisation to exercise all elements of EO would transform the behaviour of their leaders into significant performance. As one of the interview respondent said:

One thing that I believe in business is not about what the product or services, but who are the people behind it… Syed Mokhtar, Donald Trump, Eric Chia are all men with steel heart. They fail a lot of times but they managed to fight back. Business and entrepreneurship is for the brave and bold. Only fighters will survive. It is about conquering our mind, our fear and our rage. It is about channelling our negative energy and our anger into stream of forces for conquering our enemies and channelling our positive energies for making our customers, friends and family happy… I walk the talk and my staffs have some sense of respect on me… Thus, entrepreneurial attitudes rest on the person’s quality of conquering oneself, and conquering negative habits and therefore can create a wave of forces that can influence others, co-workers, families, friends, customers and clients (RESP 2).

7.6 Summary

Several issues were discussed in this chapter. First, several notable demographic characteristics and the results from the t-test analyses were discussed. It was acknowledged that Malays and women are over-represented in this study. The most significant effect size was detected when comparing the means of transformational leadership and EO between the owners and top managers of SMEs in Malaysia. Justifications were presented and discussed.

The second part of this chapter presented the descriptive results obtained on the main variables of this study: both forms of leadership behaviour, EO and organisational
performance. For transformational leadership, inspirational motivation scored the highest mean. For transactional leadership, contingent reward scored the highest mean. For EO, innovativeness was regarded as the most important element and growth was perceived as the most important performance indicator in the context of SMEs in Malaysia.

The third part discussed reasons for the removal of individualised consideration from the transformational leadership construct. The factors that remained were deemed sufficient representatives of transformational leadership.

Finally, discussion centred on the main findings of this study. It was concluded that, besides having a direct significant relationship to measures of organisational performance, the relationships between transformational and transactional leadership and organisational performance are also mediated by the presence of EO. Both the direct relationship and the mediating relationship were found to be stronger for transformational leadership than for transactional leadership. Therefore, leaders of SMEs in Malaysia are encouraged to display transformational leadership qualities and to focus on developing elements of EO to improve the performance of their organisations. The following chapter discusses the conclusions, implications and limitations of this study and recommendations for future research.
CHAPTER 8
CONCLUSIONS, IMPLICATIONS AND
FUTURE RESEARCH

8.1 Introduction

This is the final chapter of this thesis. After presented an introduction and the background of the study, this thesis reviewed the literature on all the main variables. Then a description of SMEs in Malaysia was presented. After that, this thesis discussed the development of the theoretical framework and the choice of research methodology. Next, analysis and findings were presented, followed by a discussion of the findings. This final chapter consolidates the key findings of this study. Thus, the objectives of this chapter are to summarise the conclusions from research findings, to highlight possibly valuable theoretical, managerial and practical implications of the study and to propose a new framework on entrepreneurial success in the context of SMEs in Malaysia.

After a brief introduction in Section 8.1, Section 8.2 presents the conclusions drawn from the research framework, research questions and methodological approach. This section also deliberates on other significant findings of the study. Section 8.3 presents the contributions and implications of this research and Section 8.4 highlights the limitations of the study. Section 8.5 proposes directions for future research and Section 8.6 provides an overall summary to concludes this thesis.
8.2 Conclusions from Research Findings

8.2.1 Conclusions Based on Research Framework

Prior to the development of the research framework for this study, a comprehensive review of potential theories and theoretical literature was carried out in Chapters 2 and 3. The research framework developed in this study was influenced by the transformational leadership theory and the RBV. Based on these theories, the framework suggests that leadership behaviour, namely, transformational and transactional leadership, and EO are both important predictors for the performance of SMEs. In addition, this framework explored the role of EO as a mediator in the relationship between leadership behaviour and organisational performance. Figure 8.1 displays the final research framework of this study.

![Figure 8.1: Final Research Framework](image-url)
Three stages of analysis were performed, based on the research framework. The first stage was an empirical investigation of the effects of transformational and transactional leadership on the organisational performance of SMEs. The second stage was an empirical investigation of the effects of each factor of EO on organisational performance. The third stage examined the extent of the effect of EO as a mediator in the relationship between leadership behaviour and organisational performance. The results from these analyses are summarised in the following section.

Besides contributing empirical results on the hypotheses proposed, the most significant contribution from the research framework relates to the transformational leadership construct. Initially, this construct was represented by four first-order constructs (see Figure 4.1). But through the analysis obtained from the EFA, one first-order construct, individualised consideration, was removed from further analysis due to low factor loadings and items loaded into different factors. The three remaining first-order constructs were validated as multi-dimensional constructs and the results from CFA produced acceptable goodness-of-fit statistics.

Thus, the final framework consists of the three second-order exogenous constructs of transformational leadership, transactional leadership and EO, and the endogenous construct of organisational performance. All these constructs were validated as multi-dimensional and produced acceptable goodness-of-fit statistics. The detailed results of these analyses were discussed in Chapter 6.
8.2.2 Conclusion from Research Questions

Four research questions were established at the beginning of this study. This section summarises each of them.

**Research Question 1:** To what extent do transformational and transactional leadership have an impact on organisational performance?

To answer Question 1, the study undertook an empirical examination of the impacts of both forms of leadership behaviour on organisational performance measures. Two hypotheses (H1 and H2) were proposed to answer this question. The results generated from the findings (discussed in Chapter 6) indicate that transformational leadership has a significant positive relationship with both measures of organisational performance. The results showed that the practice of transformational leadership behaviour by owners and top managers of SMEs in Malaysia has a positive effect on growth and profitability. However, the results found support for only a partial relationship between transactional leadership and organisational performance measures when the path between transactional leadership and profitability was found to be insignificant. This showed that transactional leadership has a positive effect on growth but no significant effect on profitability. The conclusion is that leaders who emphasise an exchange process between leaders and followers and who have a maintenance form of leadership do not significantly affect their organisation’s return on its investment.

**Research Question 2:** Does transformational leadership have a stronger effect on organisational performance than transactional leadership does?
Question 2 generated another hypothesis (H3). Both the question and the hypothesis were developed to examine the extent and the magnitude of the relationships between both forms of leadership behaviour and organisational performance measures. This question was posed due to inconsistent findings in the relevant literature about the effects of these forms of leadership behaviour on organisational performance. The applicability of the findings in studies in Western countries to organisations in developing countries was also examined. The results from the hypothesis testing showed support for and were consistent with the results of research in Western countries (Bass et al. 2003). Leaders who display and practise the characteristics of transformational leadership have a greater effect on organisational outcomes than those who favour transactional leadership behaviour do.

**Research Question 3**: To what extent does entrepreneurial orientation influence organisational performance?

Question 3 addresses the impacts of each factor of EO on the measures of organisational performance. Three hypotheses (H4, H5 and H5) were developed and tested to answer this question. The findings concluded that innovativeness and proactiveness factors of EO are significantly and positively related to both measures of organisational performance. Organisations that increase their level of innovativeness and proactiveness increase their growth and profitability. On the other hand, risk taking has a significant and positive relationship only to growth and not to profitability. Leaders of SMEs acknowledged that taking risks would be likely to expand their business and improve their market share to ensure that they could sustain their businesses. They also recognised that this factor is an important element
in being innovative and proactive. But they also thought that taking more risks would not guarantee additional profit. As Zahra (2005) discussed, exploiting opportunities is risky because both their duration and the payoff from them are uncertain and many risk-taking businesses fail. Therefore, the leaders of these SMEs understood that due to their limited capital they could not undertake high-risk businesses because they might run out of money to sustain business operation and there would be a possibility that the business might fail. Interview data also showed strong support for these outcomes and indicated that most of the respondents would consider taking calculated risks only when the outputs seem certain.

**Research Question 4:** To what extent does entrepreneurial orientation mediate the relationship between leadership behaviour and organisational performance?

Question 4 is the central question of this study, requiring an empirical examination of the role of EO as mediator in the relationship between leadership behaviour and organisational performance. Four hypotheses (H7, H8, H9 and H10) were presented to answer this question. Two structural models were developed as reported in Chapter 6 to indicate the direct model (Figure 6.13) and the mediating model (Figure 6.15) to allow for a demonstration of these hypotheses.

It was concluded that EO fully mediates the relationships between transformational leadership and both measures of organisational performance. Transformational leadership was found to significantly affect the level of EO practised in an organisation. In turn, EO significantly affects growth and profitability. EO also fully mediates the relationship between transactional leadership and growth. But no
mediation occurs between transactional leadership and profitability. An insignificant relationship was found between these two in the direct model.

These results show that the degree of EO being practised, developed and nurtured in an organisation is affected by leadership behaviour, particularly transformational leadership. In turn, growth and profitability are affected by EO. The results indicate that both forms of leadership behaviour have a positive effect on the entrepreneurial strategy of a firm. At the same time, this entrepreneurial strategy has a positive effect on performance. Thus, this study concludes that EO is a good mediator in leadership and organisational performance and suggests that leaders need to focus on transformational leadership and to develop an appropriate level of entrepreneurial strategy to have a positive effect on organisational outcomes. The factors of transformational leadership such as creating a clear vision and mission, inspiring and guiding employees towards realising organisational goals and stimulating creative thinking seem to be relevant to the entrepreneurial strategies of being innovative, proactive and willing to take high risks. The right levels of all of these elements would translate into better performance for the organisation. Table 8.1 summarises the testing of hypotheses in this study.
Table 8.1: Summary of Hypotheses Testing

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: TF → OP</td>
<td>Fully supported</td>
</tr>
<tr>
<td>H2: TA → OP</td>
<td>Partially supported</td>
</tr>
<tr>
<td>H3: TF → OP &gt; TA → OP</td>
<td>Fully supported</td>
</tr>
<tr>
<td>H4: Innovativeness → OP</td>
<td>Fully supported</td>
</tr>
<tr>
<td>H5: Proactiveness → OP</td>
<td>Fully supported</td>
</tr>
<tr>
<td>H6: Risk taking → OP</td>
<td>Partially supported</td>
</tr>
<tr>
<td>H7: TF → EO → Growth</td>
<td>Fully supported</td>
</tr>
<tr>
<td>H8: TF → EO → Profitability</td>
<td>Fully supported</td>
</tr>
<tr>
<td>H9: TA → EO → Growth</td>
<td>Fully supported</td>
</tr>
<tr>
<td>H10: TA → EO → Profitability</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Notes: TF = transformational leadership; TA = transactional leadership; OP = organisational performance; EO = entrepreneurial orientation.

8.2.3 Methodological Conclusion

Methodologically, the use of mixed method research has added value to the existing literature, especially in the context of SMEs in Malaysia. This study might be the first one to examine the issues of leadership behaviour and EO by using both quantitative and qualitative data. The quantitative data, the main type of data in this study, quantified and measured the extent of relationships between variables and tested proposed hypotheses. The qualitative data was used to provide support, contradiction or further elucidation of the quantitative findings. For both methods, data were gathered from the manufacturing and service industries to provide some generalisability to the population of SMEs in Malaysia. Previous studies in Malaysia
on leadership behaviour and EO have mainly been quantitative, focusing on transformational leadership and/or with only a single-industry perspective (Abdulllah et al. 2012; Abdul Aziz et al. 2012; Lo et al. 2009).

Using the qualitative method not only strengthened the methodological approach of this study but also provided several advantages to the findings. First, the qualitative data confirmed the findings derived from the quantitative data. Second, they provided a detailed and deeper understanding of the essence or meaning of a particular phenomenon from the perspectives of the respondents, who had an opportunity to explain their attitudes, behaviour and feelings related to a particular phenomenon (Patton 2002). Third, in the semi-structured interviews, respondents were encouraged to expand on their responses and this led to the discovery of new topics or themes which had not initially been included in this study. For example, factors such as competition and strategy emerged as factors that influence EO. Finally, these detailed responses influenced the development of a new proposed framework of entrepreneurial success in the context of SMEs in Malaysia.

8.2.4 Other Important Outcomes

Several other elements of this study need to be highlighted. The first one is the high representation of female respondents compared to the actual percentage of women entrepreneurs in Malaysia. Perhaps there are more female managers than female owners and this has influenced this outcome. The high representation of female respondents also indicates that female entrepreneurs want their opinions to be heard. It is a strong indication that they acknowledge and understand their important roles and that they contribute to the development of entrepreneurship in the country.
Further analysis to examine whether there is any significance different between female and male leaders in their leadership behaviour, EO and organisational performance showed no significant different between them. The governing body of entrepreneurial development in the country should acknowledge this outcome and monitor the development of women entrepreneurs in the country. They are a force that will contribute a great deal to the performance of SMEs in the years to come. Their active participation in the economy is increasing and therefore they should be given the same amount of access and assistance financially and physically as men receive.

Second, leaders who are the owners of SMEs rate themselves higher in both forms of leadership behaviour and EO than top managers do. The difference in the mean scores between these two was found to be significant. This indicates that owners perceive that they have more responsibility than managers for ensuring the long-term success of their organisation. An important reason for this disparity is that their business means everything to the owners of small and medium-sized enterprises. They have put everything they have into the business – their savings, experience and passion. They cannot afford to lose their business and therefore they perceive that they need to be both transformational and transactional in their leadership behaviour and also to be concerned about the levels of innovation, proactivity and risk taking in their business. Managers who are paid a salary are perhaps more concerned with the short-term performance of the organisation.

While examining the mean scores of factors for both forms of leadership behaviour, an interesting finding emerged when empirical data indicated that inspirational
motivation is the most important factor of transformational leadership rather than idealised influence, as found in Western countries. Leaders of SMEs in Malaysia acknowledged that for them to be effective transformational leaders, they need to display more inspirational motivation than any of the other transformational leadership factors of idealised influence, intellectual stimulation and individualised consideration. Sidani (2007) described leaders with this quality as motivating followers to commit to the vision of the organisation and encouraging team spirit to reach the organisational goals of increased profitability and market growth. This factor being perceived as the most important is perhaps also influenced by the collectivist culture of Malaysia, where strong emphasis is placed on group goals as well as the wellbeing of group members (Hofstede 2001, 1986).

Triandis (2001) and Engin and McKeown (2012) also suggested that in a collectivist culture, people are likely to describe themselves as aspects of a group and to focus more on group achievements for the benefit of the common good. This means that employees see themselves as a function of a group rather than as just individuals. In contrast, people in an individualist culture are motivated by personal goals. Malaysia is described as having a highly collectivist culture, so it follows that the leaders of SMEs in Malaysia would perceive being inspirational as a more critical element of transformational leadership than the other three elements. The characteristics of inspirational leadership as defined in the literature are inspiring and encouraging employees to achieve shared goals and to have a shared vision of the organisation (Bass & Avolio 1994; Bass & Riggio 2012) and encouraging team spirit (Sidani 2007). It is therefore plausible that inspirational motivation is the priority for transformational leaders of SMEs in Malaysia.
8.3 Contributions and Implications of Research Findings

The outcomes of this study generate theoretical contributions and managerial implications. These contributions and implications are drawn from the conclusions as discussed in the previous sections.

8.3.1 Theoretical Contributions

The first theoretical contribution of this study comes from the framework based on the transformational leadership theory and the RBV. This framework augments the body of knowledge in existing literature in the area of leadership and entrepreneurship in confirming the applicability of these Western-developed concepts to a developing country such as Malaysia. In addition, the assessment of leadership behaviour and EO as resources and capabilities from the RBV perspective enables a conclusive examination of whether transformational leadership, transactional leadership and each factor of EO impact on the organisational performance of SMEs in Malaysia. It can be concluded that both leadership behaviour and EO are important resources and capabilities that enhance and sustain organisational performance.

A major theoretical contribution of this study relates to the modified version of the MLQ for the transformational leadership construct. The results as presented in Chapter 6 indicated that the factor structure for the transformational leadership construct of the MLQ cannot be maintained. In the EFA some items were dropped due to low factor loadings, and cross-loading resulting in the removal of the individualised consideration factor. Ozaralli (2003) also had to remove this factor from his final analysis, but found that the other three factors loaded into one factor.
However, in this study, the remaining three factors were found to be distinct from each other, validated and producing acceptable goodness-of-fit statistics in the CFA. Similar to the outcomes of the study by Geyer and Steyrer (1998), many of the eliminated items can be viewed as redundant, as there are other items which can relate to the same behavioural aspect. For example, the eliminated item of ‘I instil pride in others for being associated with me’ can be covered by ‘I act in ways that build others’ respect for me’. Thus, the remaining three factors of transformational leadership maintain the basic distinction of the transformational leadership construct.

It was empirically proved that transformational leadership and transactional leadership have significant positive relationships with measures of organisational performance. The theoretical and hypotheses testing provided evidence that leaders of SMEs in Malaysia perceive themselves as practising transformational and transactional leadership behaviour, and both were found to have significant positive effects on performance.

This study also makes a significant contribution to the field of entrepreneurship in the context of a developing country. The results of this study provide evidence that EO is an important strategic orientation for small and medium-sized enterprises, and the effect of each factor of EO varies independently. Quantitative and qualitative data provided significant evidence that leaders of SMEs in Malaysia believe that they are practising and developing this strategic orientation in their organisation. Empirical findings demonstrated positive effects between each factor of EO and growth. But only innovativeness and proactiveness were found to have significant positive effects on profitability. The data from the interviews repeatedly recorded themes that reflect
the factors of EO. Thus, the development of this strategic orientation improves organisational growth and profitability.

The central finding of this study arose from the intention to study EO as a mediating mechanism to enrich existing theoretical models of the direct relationship between leadership behaviour and organisational performance. Despite the independent links established between leadership and performance (As-Sadeq & Khoury 2006; Ling et al. 2008; Lo et al. 2010) and between EO and performance (Moreno & Casillas 2008; Rauch et al. 2009; Wiklund 1999), very few studies have examined the relationships between these three variables simultaneously (Todorovic & Schlosser 2007; Yang 2008). Therefore, a further understanding of the relationships between these variables (transformational and transactional leadership, EO and organisational performance) adds new knowledge to leadership and entrepreneurship literature in the context of SMEs in Malaysia.

It was found that EO is a mediator between leadership behaviour and organisational outcomes. The final theoretical models, besides confirming the direct relationships between transformational leadership and growth and profitability and between transactional leadership and growth, also indicate that the presence of EO fully mediates these direct relationships. This signifies that an organisation’s strategies to expand the business and to earn more profits may be realised not only from leadership behaviour but also through the development of EO. A strong emphasis on EO may effectively enhance the ability of leadership behaviour to affect performance. This also indicates that the factors of EO are effectively compatible
with both transformational and transactional leadership, while being more effective for transformational leadership.

It was demonstrated that transformational leadership has a stronger and more significant relationship to EO than transactional leadership has, and EO is significantly related to both measures of organisational performance. This means that transformational leadership is able to foster effective utilisation of the strategic orientation of a firm and this orientation exerts positive outcomes. Theoretically, leaders with a transformational leadership behaviour who embrace the development of EO would have a significantly strong effect on organisational performance.

Another significant finding in this study is that transformational leadership is perceived to have a stronger effect on growth and profitability than transactional leadership does. Even though most studies in the scope of small businesses in developing countries have indicated the opposite (Obiwuru et al. 2011; Rao 2012, Paracha et al. 2012), the outcomes of this study are similar to those in the majority of Western research (Boerner et al. 2007; Elenkov 2002; Howell & Avolio 1993; Bass 1997; Bass et al. 2003). The leaders of SMEs in Malaysia perceive that the performance of their firms will significantly improve when they practise the behaviour of transformational leaders. Thus, this result contributes significantly to the field of leadership research, especially in the context of SMEs in Malaysia.

8.3.2 Managerial Implications

The core objective of conducting this study is to present outcomes which might be beneficial to and practical for SMEs in the manufacturing and service industries. The
findings of this study conclude that the leadership behaviour of owners and top managers and EO are important variables that affect a firm’s growth and profitability. The effective display and practice of transformational leadership, transactional leadership and each factor of EO are perceived to positively affect the outcomes of the firm. More importantly, leaders of SME establishments in these industries are encouraged to understand the complex interaction between their leadership behaviour and the level of EO practised in their organisation since these factors are acknowledged as important elements for organisational success.

It is hoped that the outcomes of this study will help to fill the gap in the understanding of the leadership behaviour of Malaysian business leaders, particularly in the context of SMEs. The study concludes that leaders of SMEs in Malaysia are practising and displaying transformational and transactional leadership. These two types of leadership behaviour were empirically tested and showed significant positive effects on growth and profitability. The results from the interview data confirmed the practice of each factor of transformational and transactional leadership by leaders of SMEs in Malaysia. Thus, leaders are encouraged to further develop their understanding of transformational and transactional leadership. Personal initiatives to learn and develop skills and knowledge in regard to these forms of leadership behaviour may benefit them and their organisations.

The results obtained from both set of data established the form of leadership behaviour that would contribute most to the success of SMEs. This study suggests that, of the two types of leadership behaviour, transformational leadership is a more efficient form of leadership behaviour than transactional leadership. Thus, leaders of
SMEs in Malaysia need to display, practise and nurture the qualities of transformational leadership to improve the performance of their organisation. The qualities associated with transformational leadership elevate the level of motivation of employees and encourage them to reach their full potential. In return, entrepreneurs who practise transformational leadership seem to generate and achieve better organisational growth associated with a high market share, business expansion and high profitability.

The quantitative findings also have significant implications for the development of strategic orientation in a firm. The empirical findings indicate that the ability of SMEs to innovate, be proactive in their strategic action and willing to take a considerable amount of risk can significantly affect the success of the firm. Thus, the implementation and development of factors of EO requires organisations to persevere, and to be consistent and creative in their efforts and the allocation of the resources to be invested into their products and services. These entrepreneurial attitudes must be the practice and policy not only for leaders. They must be transferred to every member of the organisation to maximise results for the organisation.

Significantly, this study contributes to the literature on the relationship between leadership behaviour and organisational performance by providing evidence that EO mediates that relationship. The managerial implications are that, for small and medium-sized organisations, the challenges for displaying and practising good leadership behaviour are threefold:
1. The practice of leadership behaviour must be aligned with the level of innovativeness and proactiveness in the firm.

2. Understanding which leadership behaviour favours change may help organisations to champion an entrepreneurial spirit to streamline business, promote the delegation of power and decision-making and develop individuals’ creative ability. These measures stimulate an entrepreneurial culture and spirit among all members of the organisation.

3. Taking higher risks requires organisations to take bold actions. Transformational leadership is more consistent with risk taking due to its characteristics of forward thinking, vision and willingness to tap into new ideas. Transactional leadership is associated with risk-averse behaviour (Bass 1990a). Thus, organisations must develop and improve transformational leadership to be more entrepreneurially orientated.

Practically, the outcomes from this study have significant implications for the development of entrepreneurs in Malaysia. SME Corp. Malaysia, which is the governing body that oversees entrepreneurial development in Malaysia, should provide more leadership training and development programs for entrepreneurs. The training should focus on developing and nurturing the transformational and transactional leadership qualities of entrepreneurs. A specific leadership training course based on transformational and transactional leadership should be mandated for all new entrepreneurs who received assistance from any entrepreneurial development agencies in the country.
To further improve the performance of SMEs, they need to develop their EO. Continuing support and assistance from the government and financial institutions would definitely help these enterprises to fully engage in innovation and other proactive activities and thus allow them to venture into risky territory with a high potential for profits.

Another practical implication for Malaysian entrepreneurs is that the results of this study provide a clear indication that their perceptions are not much different from those of their counterparts in Western countries. These results should be taken as an eye-opener for Malaysian entrepreneurs to believe that they can compete locally and globally, on par with competitors from the other side of the world. The results from this study are consistent with those of previous studies conducted in Western countries, namely that: (1) transformational leadership is more effective than transactional leadership and (2) EO is an important attribute for an entrepreneurial firm. In order to achieve success as outlined by the government, SMEs in Malaysia need to have high ambition and be confident to expand their business and compete internationally.

The final practical implication of this study pertains to the relevance of this study to other Asian countries. Due to having similar culture and values to Malaysia, neighbouring countries such as Thailand, Indonesia, Brunei and Vietnam could definitely benefit from the outcomes of this study.

To summarise, this study makes concrete contributions by providing an empirical framework and findings for understanding leadership and entrepreneurial practices in
the context of SMEs in Malaysia. The integration of leadership behaviour and EO as resources and capabilities is found to provide positive increases in organisational outcomes. These clearly proved results may help these organisations to focus on what really matters to improve their performance.

8.3.3 Unique Contribution to Leadership/Entrepreneurship Theory and Practice

The development of Figure 8.2 (please refer to page 340) was derived from the outcomes from both sources of data collection and analysis in this study. This figure pertains to the factors that are important for entrepreneurial success for Malaysian SMEs. The details of each factor are elaborated below.

Based on this framework, there are three main variables that could have significant direct or indirect impacts on the performance of organisation. The first variable is the people in an organisation. Through interview data, it was found that besides leaders’ performance, the behaviour of employees is an important factor for entrepreneurial success. Due to SMEs having a limited number of employees, the effectiveness and efficiency of every member of the organisation contributes to the organisational outcomes. The ability of the leaders to develop good teamwork among employees can also affect the development of entrepreneurial ideas and strategy.

Besides having direct impacts on EO and organisational performance, leadership behaviour is suggested to have a direct impact on the selection of strategy and structure in the organisation. For example, according to Miles and Snow’s (1978) strategy types, transformational leaders might adopt a prospector strategy, which involves finding and exploiting new products and market opportunities, whereas
Transactional leaders might prefer a defender strategy, which seeks stability by producing a limited set of products directed at a narrow segment of the total potential market. Those who favour transformational leadership might promote an open-door policy and the delegation of power in their organisation to ensure a fast decision-making process and to promote employees’ development. Transactional leaders might have a more rigid structure to maintain control and stability in the organisation. These attitudes were observed and supported through interview data gathered from respondents.

**Figure 8.2: New Proposed Framework for Organisational Success of SMEs in Malaysia**
The second variable is EO, which is characterised by innovativeness, proactiveness and moderate risk taking. Even though the majority of interview respondents said that they were willing to take high risks with the possibility of high returns, most of them were actually calculative or moderate risk-takers. The possibility of not having enough financial resources to cover operational costs deters these leaders from taking high risks. But, given that they have the resources and sufficient financial support, they stated that they were willing to take more risks than they were at the time this study was undertaken.

The third variable is the environmental factors that are internal factors such as organisational strategy and structure and external factors such as competition. These factors emerged through the interview data. They are aligned with the findings of other research and are important for an organisation’s performance and entrepreneurial strategy. For example, research has indicated a positive impact of EO on performance, but supplementary analysis has shown that the relationship between EO and performance is mediated or moderated by a diverse set of variables (Messersmith & Wales 2013; Rauch et al. 2009; Yu 2012). Competitive strategy and competitive environment are variables that have been identified and tested in literature (Yu 2012; Awang et al. 2010; Lechner & Gudmundsson 2012). Yu (2012) found that competition intensity is negatively related to firm performance but it also has a significant moderating role on the relationship between EO and performance. Interview data in this study also indicated that, when entrepreneurs are operating in a stable environment where there is not much competition, they are not very concerned about being proactive and tend to be conservative about the amount of risk they take. Organisational strategies such as product diversification and customer orientation
also emerged as factors that could influence performance. Thus, in the model illustrated in Figure 8.2, it is suggested that internal and external environmental factors could serve as factors that mediate, moderate or even have direct impacts on EO as well as on organisational performance.

The measures of organisational performance should be extended to include objective and strategic performance measures. The simplest approach to measure strategic performance is to include a diverse set of financial measures (returns on assets, cost reduction, annual earnings) and non-financial measures (customer satisfaction, employee satisfaction) (Ittner et al. 2003). Firms that measure strategic performance can provide information for identifying the strategies that offer the highest potential for achieving the firm’s objectives and aligning its management processes (Gates 1999).

Finally, within this framework, there are elements of knowledge and experience that could serve as moderating factors that might influence the approach to leadership practice, the effectiveness of the workforce and the level of EO practised in the organisation. The elements of financial support and government policy are also suggested as factors that could moderate organisational performance. These factors all emerged through interview data. The amount of knowledge and experience of the leaders might influence the leadership behaviour and EO practices in the organisation. Some leaders mentioned in interviews that the experience and knowledge they possess have influenced the way they practise leadership. Having a more experienced workforce facilitates employees’ growth and provides support for the development of entrepreneurial strategy in the organisation.
Having sufficient financial support from the government and financial institutions seems to be very important for the organisational performance of SMEs. Without such support, it is very difficult for them to expand their business and develop a sustainable performance. Lastly, even though this factor emerged only once in the interviews, the role of government and its policy seems to be an important factor that needs further attention. It was explained that for some of these enterprises, most of their business comes from government-related agencies. It was stated that the procurement system and rotation methods used by these agencies in awarding contracts seems to deter the ability of the SMEs to become more competitive and innovative and has affected their performance adversely. Perhaps the government and its related agencies should reassess their procurement system to allow for a healthier competitive environment which can improve the performance of these organisations.

8.4 Limitations of Study

All research has its limitations. The ability of a study to acknowledge its limitations is part of the strength of the research undertaking (Dolen et al. 2004). There are several limitations in regard to what has been compiled, analysed, presented and discussed in this study. These limitations are identified in this section.

First, this study relied on self-reported data from single informants. All measures on leadership behaviour, EO and organisational performance were evaluated by either the owners or the top managers of SMEs in Malaysia. The informants in this study may have exaggerated their evaluation of their leadership behaviour, their firm’s EO and also their organisational performance. According to a recent review of literature, self-assessment of leadership behaviour tends to be more inflated than other sources.
Thus, the findings must be interpreted in the light of this limitation, even though the Harman’s one-factor test showed that common method bias was not an issue in this study. The significant positive relationships between transformational leadership and measures of organisational performance and EO, the relationships between transactional leadership and measures of organisational performance and EO, and the relationships between each factor of EO and measures of organisational performance should be discounted accordingly.

Second, this study adopted subjective measures. Moers (2005) argued that the use of subjective performance measures might encourage performance evaluation bias but the results of this study were tested for that bias and there did not seem to be a problem. Zulkiffl and Parera (2011) suggested that in the context of measuring the business performance of SMEs, subjective measures tend to be used since many SMEs refuse to publicly reveal their actual financial performance. Besides, Dess and Robinson (1984) mentioned that objective data may not fully represent an organisation’s actual performance, even if they are available, since the managers may manipulate the data in order to avoid personal or corporate taxes. Song et al. (2005) also suggested that subjective measures could be an effective approach to evaluate business performance as they allow comparisons to be made across firms and contexts, such as industry types and economic conditions.

Third, the cross-sectional design used in this study only provides a snapshot view of the researched phenomena where data on all measures were collected at the same time. Thus, causal inferences could not be drawn from this research. The use of longitudinal data would provide a remedy for this limitation when data on
independent variables and dependent variables are measured at two or more points in time.

Fourth, this study showed that there is a small significant difference in the mean scores for transformational leadership and organisational performance measures between small and medium-sized enterprises. Some of these enterprises are also longer established than others. Thus, this study did not control for firm size and age in the examination of the hypothesised relationships. Firm age is particularly important in the examination of EO in smaller firms as their ability to innovate might be influenced by their longevity as well as the amount of their resources.

Fifth, the language choice chosen for this study posed another limitation. The decision to translate the survey instruments only into Bahasa Melayu had attracted higher participations from Bumiputera entrepreneurs. Thus, this study would have attracted more participation from Chinese leaders if the survey instruments were also available in Chinese. But, this limitation imposes only to SME Chinese leaders who are not efficient in English or Bahasa Melayu.

Finally, this study provides generalisations for both manufacturing and service industries. It does not take into account the categorical difference between the two industries. There are several sub-categories of SMEs in each of these industries. A more detailed study looking at each of the two industries and the differences between the sub-categories within and between industries in respect to their leadership behaviour, EO and organisational performance might provide an avenue for future research.
8.5 Directions for Future Research

The findings of this study provide several opportunities for future research. It is hoped that despite their limitations, the findings of this study will indicate directions for further research. The main suggestion for future research arises from the development of the proposed new framework for the organisational success of SMEs in Malaysia as depicted in Figure 8.1. Other future research possibilities arise from the limitations of this study, as previously discussed.

First, the inclusion of some environmental factors that affect the performance of entrepreneurial ventures might provide useful insights. Kreiser et al. (2002) found that environmental munificence encouraged EO in predicting better organisational performance.

Second, a longitudinal study would enable greater understanding of the leadership and entrepreneurial processes as it could measure leadership effects and the development of entrepreneurial ventures at different points in time. Thus, it would provide valuable information about variations in performance as an organisation moves through different stages.

It is also recommended that future research explore the applicability of the proposed entrepreneurial success framework to a different industry context and country, especially to another developing country. The findings of such research would further test the applicability of the transformational leadership theory and EO to different industries in other non-Western business environments.
Fourth, to improve the model, the element of culture could be incorporated. House et al. (1999) suggested that cultural difference might influence the way people perceive their leaders. Other authors have also concluded that leadership behaviour affects organisational outcomes, culture and practices, and organisational culture and practices also affect what leaders do (House et al. 2002). Ogbanna and Harris (2000) found that organisational culture and leadership are related, and the relationship between leadership and organisational performance is mediated by the organisational culture. Thus, the inclusion of culture could further explain the relationship between leadership behaviour and organisational performance. Perhaps such an investigation could shed some light on the insignificant relationship between transactional leadership and profitability found in this study.

Fifth, as mentioned in the limitations of study, future research might want to consider to provide the survey instruments in Chinese language. This might attract higher participation from Chinese leaders of SMEs in Malaysia.

Sixth, it is also recommended that future research to consider exploring leadership of SME leaders from employees’ perspective. A comparative study of effective leadership between the results obtained from the leaders themselves and employees’ perception might produce a better understanding of how performance of SMEs could be further improved.

Finally, an examination of leadership behaviour at the factor level could enhance and develop a better understanding of the factorial effects of leadership on organisational performance. In this study it was found that some of these factors – inspirational
motivation, idealised influence and contingent reward – were perceived to be practised more than the other factors by the leaders of SMEs in Malaysia. Thus, a detailed study at the factor level could provide empirical findings with implications for specific leadership training to be provided for entrepreneurial development in the country.

8.6 Summary

Even though the transactional and transformational leadership theory is the most recent and commonly used theory by researchers in the current literature (Lo et al. 2009; Kimura 2012), there is still a need to develop empirical evidence on its relationships with the EO and organisational performance of SMEs in Malaysia. The leadership behaviour of top management affects the organisational performance of SMEs (Matzler et al. 2008) and the right leadership behaviour is important in developing EO since it creates the appropriate climate for entrepreneurship and innovation in an organisation (Bhattacharyya 2006). Wang (2008) also posited that EO is important for organisational success. Therefore it is essential to subject the model to theoretical testing to provide a better understanding of the intersection between leadership behaviour and EO and organisational performance.

The findings of this study suggest that leadership behaviour is one of the most important elements for organisational success. The leaders of organisations must first understand that the leadership behaviour they display and practise has significant direct and indirect (through EO) contributions to organisational performance. It is not the intention of this study to suggest that leaders should practise a particular form of leadership behaviour, but empirical findings indicate that when transformational
leadership is practised, it exerts stronger effects on EO and organisational outcomes than transactional leadership does.

The research framework, the research questions and the methodological approach of this study contribute to the existing body of knowledge in leadership and entrepreneurship literature. The theoretical contributions and managerial implications are also significant findings for leaders of SMEs and entrepreneurial development in the country. Some limitations are acknowledged that indicate future research directions.

Finally, the timing of this study is particularly important as Malaysia is moving from being a developing country towards having developed country status, and entrepreneurial developments are considered as one of the engines for the growth of the country’s economy (NSDC 2008). Thus, the outcomes of this study could be useful to entrepreneurial agencies in Malaysia for refining and enhancing their entrepreneurial development, hence effecting a significant improvement in the overall contribution of Malaysian SMEs to the country’s economy.
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APPENDICES

Appendix A: Ethics Approval

Ref: Ethics Appl. 1000235

Wednesday, December 8 2010

Ahmad Arham
152 Taman Dato Shahbandar
Negeri Sen
Ampangan, Seremban
Malaysia

Dear Ahmad

I am pleased to advise that your application for ethics approval for a Research Project has been approved by the Chair of the Business College Human Ethics Advisory Network. Approval has been granted for the period from 7 December 2010 to 1 March 2014.

The RMIT Human Research Ethics Committee (HREC) requires the submission of Annual and Final reports. These reports should be forwarded to the Business College Human Ethics Advisory Network Secretary. Annual Reports are due in December for applications submitted prior to September the year concerned. I have enclosed a copy of the Annual/ Final report form for your convenience. Please note that this form also incorporates a request for extension of approval, if required.

Best wishes for your research.

Yours sincerely

Kristina Tsoullis-Reay
Secretary
Business College Human Ethics Advisory Network

Encl.
RMIT BUSINESS COLLEGE HUMAN ETHICS ADVISORY NETWORK (BCHEN)

Application for Approval of Research Project

SUMMARY & APPROVAL

Project Title: The Relationships between Leadership Behaviours and Entrepreneurial Orientation towards Organisational Performance of SMEs in Malaysia

Principal Investigator: Ahmad Arham
Supervisor: 1) Nuttawut Muenjohn, 2) Carlene Boucher
Project Category: Low Risk
School Name: Management
Degree for which research is undertaken (if applicable): PhD
Contact Telephone Number:
Email Address: ahmad.arham@rmit.edu.au

BUSINESS COLLEGE HUMAN ETHICS ADVISORY NETWORK USE ONLY:

Date Application Received: 3 November 2010

Business College Human Ethics Advisory Network Register No: 1000235

Period of Approval: 7 December 2010 to 1 March 2014

Comments / Provisos: N/A

The Business College Human Ethics Advisory Network assessed the Project as Low Risk

Signature: ___________________________ Data: 8 December 2010

Professor Roslyn Russell, BCHEN Chair
Appendix B: Application to SME Corp Malaysia

Mr. Ahmad Fadly Arham
PhD Candidate
School of Management, RMIT University
Building 108 Level 13
239 Bourke St.
Melbourne, Victoria 3000
AUSTRALIA

Dear Mr. Arham,

RE: REQUEST FOR PERMISSION TO ACCESS FIRMS INFORMATION IN THE SME CORPORATION MALAYSIA WEBSITE AND SME INFOPORTAL

I refer to the above subject matter.

2. I am pleased to inform that SME Corporation Malaysia has no objections in you utilising the information available in the websites http://www.smecorp.gov.my and http://www.smeinfo.com.my for the purpose of your research project on "The Relationships between Leadership Behaviours and Entrepreneurial Orientation towards Organisational Performance of SMEs in Malaysia". As you are aware, the required information is accessible on an open domain for the public.

3. Once your research project has been completed, we would appreciate if a copy of your findings could be extended to SME Corporation Malaysia as the information would be useful in our analysis and policy work.

Wish you all the best in your research.

(KARUNAJOTHI KANDASAMY )
Senior Director
Economics and Policy Planning Division
for Chief Executive Officer
SME Corporation Malaysia
Appendix C: Invitation to Participate in a Research Project

(Quantitative)

PROJECT INFORMATION STATEMENT

Project Title: The Relationship between Leadership Behaviour, Entrepreneurial Orientation and Organisational Performance in Malaysian Small and Medium Enterprises

Investigators:
Mr. Ahmad Fadhly Arham (PhD degree student, ahmad.arham@rmit.edu.au +613 99251689)
Dr. Nuttawuth Muenjohn (Principal Supervisor: RMIT University, nuttawuth.muenjohn@rmit.edu.au +613 99255109)
Associate Professor Carlene Boucher (Second Supervisor: RMIT University, carlene.boucher@rmit.edu.au +613 9925 5914)

Dear potential Participant,
You are invited to participate in a PhD research project being conducted by RMIT University, in Melbourne Australia, which will take approximately 20-30 minutes to complete. These two pages are to provide you with an overview of the proposed research. Please read these pages carefully and be confident that you understand its contents before deciding whether to participate. If you have any questions about the project, please ask one of the investigators identified above.

I am currently a research student in the School of Management at RMIT University in Melbourne, Australia. This project is being conducted as a part of my PhD degree. My principal supervisor for this project is Dr. Nuttawuth Muenjohn and my second supervisor is Associate Professor Carlene Boucher. The project has been approved by the RMIT Business College human Ethics Advisory Network.

The participants in this research have been chosen randomly from a list previously obtained from the SME Corp. Malaysia and SME Info Databases.

This study is designed to explore the relationships between leadership behaviours and entrepreneurial orientation towards organisational performance of SMEs in Malaysia. Up to 2000 people will be invited to complete the questionnaire. In the questionnaire the participants need to answer the questions related to the leadership behaviours and entrepreneurial orientation and their impacts towards organisational performance of SMEs in Malaysia.
There are no perceived risks associated with participation outside of your normal day-to-day activities. If you are unduly concerned about your responses or if you find participation in the project distressing, you should contact my supervisor as soon as convenient. My supervisor will discuss your concerns with you confidentially and suggest appropriate follow-up, if necessary.

Participation in this research is entirely voluntary and anonymous. You may withdraw your participation and any unprocessed data concerning you at any time, without prejudice. There is no direct benefit to the participants as a result of their participation. However, I will be delighted to provide you with a copy of the research report upon request as soon as it is published.

I am asking you to participate in this survey to provide us with an insight into understanding the relationships between leadership behaviours and entrepreneurial orientation towards organisational performance of SMEs in Malaysia. Your privacy and confidentiality will be strictly maintained in such a manner that you will not be identified in the thesis report or any publication. Any information that you provide can be disclosed only if (1) it is to protect you or others from harm, (2) a court order is produced, or (3) you provide the researchers with written permission. The findings of this study will be disseminated in conferences and published in journals.

You should be aware that the World Wide Web is an insecure public network that gives rise to the potential risk that a user’s transactions are being viewed, intercepted or modified by third parties or the data which the user downloads may contain computer viruses or other defects.

This project will use an external site to create, collect and analyse data collected in a survey format. The site we are using is SurveyMonkey.com. If you agree to participate in this survey, the responses you give to the survey will be stored on a host server that is used by the investigators only. No personal information will be collected so none will be stored as data. Once we have completed our data collection and analysis, we will import the data we collect to the RMIT server where it will be stored securely for a period of five (5) years). The data on the SurveyMonkey.com host will then be deleted and expunged. If you are reluctant to use the internet format, you are still able to participate by downloading the questionnaire and mail it to the researcher.

To ensure that data collected is protected, the data will be retained for five (5) years upon completion of the project after which time paper records will be shredded and placed in a security recycle bin and electronic data will be deleted/destroyed in a secure manner. All hard data will be kept in a locked filling cabinet and soft data in a password protected computer in the office of the investigator in the research lab at RMIT University. Data will be saved on the University network system where practicable (as the system provides a high level of manageable security and data integrity, can provide secure remote access, and is backed up on a regular basis). Only the researcher will have access to the data. Data will be kept securely at RMIT University for a period of five years before being destroyed.
You have the right to have any unprocessed data withdrawn and destroyed, provided it can be reliably identified, and it does not increase the risk for the participant. Participants have also the right to have any questions, in relation to the project and their participation, answered at any time. The interview participants have the right to request that audio recording be terminated at any stage during the interview.

I am assuring you that responses will remain confidential and anonymous. The findings of this research could be used by SME Corp. Malaysia and other government related agencies to develop Malaysian leaders of SMEs to improve their performance in the future.

If you have any queries regarding this project please contact me at +61 3 99251689 or +61 425 408620 or email me at ahmad.arham@rmit.edu.au. You may also contact my principle supervisor Dr. Nuttawuth Muenjohn, RMIT University at +613 99255109, nuttawuth.muenjohn@rmit.edu.au or my second supervisor Associate Professor Carlene Boucher, RMIT University at +613 9925 5914, carlene.boucher@rmit.edu.au.

Thank you very much for your contribution to this research.

Yours Sincerely,

AHMAD FADHLY ARHAM
PhD Candidate
Management school
RMIT University, level 13, 239 Bourke Street,
Melbourne, VIC 3000
Appendix D: Invitation to Participate in a Research Project

(Qualitative)

PROJECT INFORMATION STATEMENT

Project Title: The Relationship between Leadership Behaviour, Entrepreneurial Orientation and Organisational Performance in Malaysian Small and Medium Enterprises

Investigators:
Mr. Ahmad Fadhly Arham (PhD degree student, ahmad.arham@rmit.edu.au +613 99251689)
Dr. Nuttawuth Muenjohn (Principal Supervisor: RMIT University, nuttawuth.muenjohn@rmit.edu.au +613 99255109)
Associate Professor Carlene Boucher (Second Supervisor: RMIT University, carlene.boucher@rmit.edu.au +613 9925 5914)

Dear potential Participant,

You are invited to participate in a PhD research project being conducted by RMIT University, which will take approximately 30-45 minutes to complete. These two pages are to provide you with an overview of the proposed research. Please read these pages carefully and be confident that you understand its contents before deciding whether to participate. If you have any questions about the project, please ask one of the investigators identified above.

I am currently a research student in the School of Management at RMIT University in Melbourne, Australia. This project is being conducted as a part of my PhD degree. My principal supervisor for this project is Dr. Nuttawuth Muenjohn and my second supervisor is Associate Professor Carlene Boucher. The project has been approved by the RMIT Business College human Ethics Advisory Network.

The participants in this research have been chosen randomly from those respondents who have participated in the survey questionnaire and agreed to participate in the interview with the researcher.

This study is designed to explore the relationships between leadership behaviours and entrepreneurial orientation towards organisational performance of SMEs in Malaysia. There will be 8 to 12 interviews to be conducted with selected respondents. In the interviews you will be asked to answer the questions which relate to your leadership behaviours and entrepreneurial orientation and their impacts towards organisational performance of SMEs in Malaysia. As a matter of fact, your responses will contribute
to a better understanding of the relationships between leadership behaviours and entrepreneurial orientation towards organisational performance of SMEs in Malaysia.

There are no perceived risks associated with participation outside of your normal day-to-day activities. If you are unduly concerned about your responses or if you find participation in the project distressing, you should contact my supervisor as soon as convenient. My supervisor will discuss your concerns with you confidentially and suggest appropriate follow-up, if necessary.

Participation in this research is entirely voluntary and anonymous. There is no direct benefit to the participants as a result of their participation. However, I will be delighted to provide you with a copy of the research report upon request as soon as it is published.

Your privacy and confidentiality will be strictly maintained in such a manner that you will not be identified in the thesis report or any publication. Any information that you provide can be disclosed only if (1) it is to protect you or others from harm, (2) a court order is produced, or (3) you provide the researchers with written permission. Interview data will be only seen by my supervisor and examiners who will also protect you from risk. The findings of this study will be disseminated in conferences and published in journals.

To ensure that data collected is protected, the data will be retained for five years upon completion of the project after which time paper records will be shredded and placed in a secure recycle bin and electronic data will be deleted/destroyed in a secure manner. All hard data will be kept in a locked filling cabinet and soft data in a password protected computer in the office of the investigator in the research lab at RMIT University. Data will be saved on the University network system where practicable (as the system provides a high level of manageable security and data integrity, can provide secure remote access, and is backed up on a regular basis). Only the researcher will have access to the data. Data will be kept securely at RMIT University for a period of five years before being destroyed.

You have right to withdraw your participation at any time, without prejudice. You have the right to have any unprocessed data withdrawn and destroyed, provided it can be reliably identified, and it does not increase the risk for the participant. Participants have also the right to have any questions, in relation to the project and their participation, answered at any time. The interview participants have the right to request that audio recording be terminated at any stage during the interview.

I am assuring you that responses will remain confidential and anonymous. The findings of this research could be used by SME Corp. Malaysia and other government related agencies to develop Malaysian leaders of SMEs to improve their performance in the future.

If you have any queries regarding this project please contact me at +61 3 99251689 or +61 425 408620 or email me at ahmad.arham@rmit.edu.au. You may also contact my principle supervisor Dr. Nuttawuth Muenjohn, RMIT University at +613
99255109, nuttawuth.muenjohn@rmit.edu.au or my second supervisor Associate Professor Carlene Boucher, RMIT University at +613 9925 5914, carlene.boucher@rmit.edu.au.

Thank you very much for your contribution to this research.

Yours Sincerely,

AHMAD FADHLY ARHAM
PhD Candidate
Management school
RMIT University, level 13, 239 Bourke Street,
Melbourne, VIC 3000
Appendix E: English Version of the Questionnaire

There are five (5) sections in this questionnaire. Please answer ALL questions by checking or selecting numbers that BEST describe your situation. It will approximately take less than 30 minutes to complete.

SECTION 1: LEADERSHIP BEHAVIOURS
This section is to describe your leadership style as you perceive it. Thirty-two descriptive statements are listed below. Judge how frequently each statement fits you. The word “others” may mean your peers, direct subordinates, employees, and/or all of these individuals. Please use the following rating scale:

<table>
<thead>
<tr>
<th>Not At All</th>
<th>Once In A While</th>
<th>Sometimes</th>
<th>Fairly Often</th>
<th>Frequently, If Not Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Due to copyright issue, items used cannot be displayed. Please refer to page 154 for sample items.

SECTION 2: ENTREPRENEURIAL ORIENTATION
There are eleven (11) descriptive statements listed in this section to describe your entrepreneurial orientation. Please indicate the extent to which you agree or disagree in regards to your company situations, based on the following rating scale:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>My company has marketed many new lines of products or services.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>My company has a strong proclivity/tendency for high risk projects (with chances of very high returns).</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>In dealing with competitors, my company typically responds to actions which competitors initiate.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>I believe that changes in the product/service lines in my company have been mostly minor in nature.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>In general, I like to anticipate events occurring related to my job.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
In general I favor a strong emphasis on Research & Development, technological leadership and innovations.

When confronted with decision making involving uncertainty, my company typically adopts a bold strategy in order to maximize the probability of exploiting opportunities.

I am willing to try new ways of doing things and seek unusual, novel solutions.

In dealing with competitors, my company typically initiates actions which competitors then respond to.

When confronted with decision making situations involving uncertainty, my company adopts a cautious “wait-and-see” strategy.

In dealing with competitors, my company is very often the first to introduce new products, and administrative techniques.

SECTION 3: ORGANISATIONAL PERFORMANCE

There are eight (8) descriptive statements in this section to describe your organisational performance. Please evaluate the following performance of your business based on the following rating scale:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 We are satisfied with the return on our investments.</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 The growth of our company is above average</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 We have higher return on investment (than our competitors).</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Our growth is satisfying.</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 We are satisfied with our return on sales.</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Our market shares are increasing faster than those of our competitors.</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 In general, my company has achieved a very positive financial outcome.</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 My company is growing steadily for the past three years.</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION 4: BACKGROUND OF BUSINESS / PARTICIPANT

Please check/select on the most appropriate number that BEST describe your situation.

Which industry that is best to describe your organisation?

- Manufacturing and/or Manufacturing related services 1
- Services and/or Information & Communication Technology (ICT) 2
- Other (please specify) : ________________ 3

I am ........
- The owner of this firm 1
- The top management of this firm 2

What is your sales turnover last year?
- Less than RM50,000 1
- RM50,000 < RM 200,000 2
- RM200,000 < RM 1 million 3
- RM 1 million < RM 5 million 4
- RM 5 million < RM 10 million 5
- RM10 million < RM 25 million 6

How many full time employees do you have?
- Less than 5 1
- 5 to 19 2
- 20 to 50 3
- 51 to 150 4
- More than 150 5

Age
- Below 25 years 1
- 25 – 30 years 2
- 31 – 40 years 3
- 41 - 50 years 4
- Above 51 years 5

Gender
- Male 1
- Female 2

Race
- Malay 1
- Chinese 2
- Indian 3
- Other ____________ 4

Highest education level
- Secondary Education 1
- Certificate/Diploma 2
- Degree/Bachelor 3
- Master 4
- PhD or Doctorate 5
- Other _________________ 6
SECTION 5: WILLINGNESS TO PARTICIPATE IN THE INTERVIEW

Are you willing to participate in an interview with the researcher in the future?

Yes 1 (please fill in the details provided below)
No 2

-------------------------------------------------------------------------------------------------------

Details of potential participant for interview
Name :
Address :
Contact Details
Tel (Office) :
Fax (Office) :
Mobile :
Email address :

- End of Questionnaire -

- Thank you very much for taking the time to complete this questionnaire -
Appendix F: Malay Version of the Questionnaire

Terdapat 5 (lima) bahagian di dalam soal selidik ini. Sila jawab SEMUA soalan dengan memilih nombor yang PALING TEPAT menggambarkan keadaan anda. Soal selidik ini mengambil masa kurang daripada 30 minit untuk disiapkan.

BAHAGIAN 1: TINGKAH LAKU KEPIMPINAN

Bahagian ini menunjukkan gaya kepimpinan anda berdasarkan pendapat anda. Terdapat tiga puluh dua kenyataan diberikan di bawah. Nilai berapa kerap kenyataan di bawah menggambarkan situasi anda. Perkataan “orang lain/mereka” merujuk kepada rakan sekerja, dan/atau para pekerja anda. Sila gunakan skala perbandingan berikut:

<table>
<thead>
<tr>
<th>Tidak Pernah</th>
<th>Sekali-sekala</th>
<th>Kadang-kadang</th>
<th>Agak Kerap</th>
<th>Kerap, jika tidak selalu</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Atas sebab hakcipta, soalan-soalan yang digunakan tidak dapat dipamerkan. Sila rujuk mukasurat 154 untuk sampel soalan.

BAHAGIAN 2: ORIENTASI KEUSAHAWANAN

Terdapat sebelas (11) kenyataan yang menggambarkan orientasi keusahawanan anda/syarikat anda di bawah. Sila nyatakan sejauh mana anda bersetuju atau tidak bersetuju berkenaan dengan situasi syarikat anda, berdasarkan kepada skala perbandingan berikut:

| Sangat setuju tidak setuju Tidak setuju Tidak pasti Setuju Sangat setuju |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 0               | 1               | 2               | 3               | 4               |                 |

1 | Syarikat saya memasarkan banyak keluaran baru produk dan perkhidmatan. |
   | 0 1 2 3 4 |

2 | Syarikat saya mempunyai minat yang kuat terhadap projek berisiko tinggi (dengan pulangan yang amat besar). |
   | 0 1 2 3 4 |
Dalam menghadapi pesaing, syarikat saya lazimnya bertindak balas terhadap tindakan yang dimulakan pesaing.  

<table>
<thead>
<tr>
<th>No.</th>
<th>Perkataan</th>
<th>Skala Perbandingan</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Dalam menghadapi pesaing, syarikat saya lazimnya bertindak balas terhadap tindakan yang dimulakan pesaing.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>4</td>
<td>Saya percaya bahawa perubahan pada keluaran produk/perkhidmatan di dalam syarikat saya kebanyakannya adalah kecil.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>5</td>
<td>Secara umumnya, saya suka memberi menjangkakan perkara yang akan berlaku melibatkan kerja-kerja saya.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>6</td>
<td>Secara umumnya, saya suka memberi penekanan yang kuat ke atas Penyelidikan &amp; Pembangunan, kepimpinan teknologi dan inovasi.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>7</td>
<td>Apabila berhadapan dengan proses membuat keputusan yang melibatkan ketidakpastian, syarikat saya lazimnya mengambil langkah berani untuk memaksimumkan kemungkinan memanfaatkan peluang yang ada.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>8</td>
<td>Saya bersedia untuk mencuba cara baru dalam melakukan sesuatu perkara dan mencari penyelesaian yang baru serta luar biasa.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>9</td>
<td>Dalam menghadapi pesaing, syarikat saya lazimnya memulakan tindakan yang kemudiannya dibalas/diikuti oleh pesaing.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>10</td>
<td>Apabila berhadapan dengan proses membuat keputusan yang melibatkan ketidakpastian, syarikat saya mengambil langkah berhati-hati “tunggu dan lihat”.</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>11</td>
<td>Dalam menghadapi pesaing, biasanya syarikat sayalah yang pertama memperkenalkan produk dan teknik pentadbiran baharu.</td>
<td>0 1 2 3 4</td>
</tr>
</tbody>
</table>

### BAHAGIAN 3: PRESTASI ORGANISASI

Terdapat lapan (8) kenyataan yang menggambarkan prestasi organisasi syarikat anda. Sila nyatakan sejauh mana anda bersetuju atau tidak bersetuju dengan kenyataan di bawah berdasarkan kepad skala perbandingan berikut:

<table>
<thead>
<tr>
<th>Setuju tidak</th>
<th>Tidak setuju</th>
<th>Tidak pasti</th>
<th>Setuju</th>
<th>Sangat setuju</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

1. Kami berpuashati dengan pulangan pelaburan kami. 0 1 2 3 4
2 Pertumbuhan syarikat kami melebihi paras purata. 0 1 2 3 4
3 Kami mempunyai pulangan pelaburan yang lebih tinggi (berbanding pesaing kami). 0 1 2 3 4
4 Pertumbuhan syarikat kami adalah memuaskan. 0 1 2 3 4
5 Kami berpuas hati dengan pulangan jualan kami. 0 1 2 3 4
6 Bahagian pasaran kami meningkat lebih pantas berbanding bahagian pasaran pesaing kami. 0 1 2 3 4
7 Secara umumnya, syarikat ini telah mencapai pulangan kewangan yang sangat positif. 0 1 2 3 4
8 Syarikat ini kekal berkembang dalam jangka masa tiga (3) tahun ini. 0 1 2 3 4

**BAHAGIAN 4: LATARBELAKANG PERNIAGAAN/RESPONDEN**

Sila tanda/pilih nombor yang paling tepat menggambarkan situasi anda.

| Industri manakah yang sesuai untuk menggambarkan syarikat anda? | RM 1 million < RM 5 million | 4 |
| Perkilangan dan/atau perkhidmatan / berkaitan perkilangan | RM 5 million < RM 10 million | 5 |
| Perkhidmatan dan/atau Teknologi | RM10 million < RM 25 million | 6 |
| Maklumat & Komunikasi (ICT) | Berapa jumlah pekerja tetap yang anda ada? |
| Lain-lain (sila nyatakan) :____________________ | | | | |
| Saya adalah…….. | Kurang dari 5 orang | 1 |
| Pemilik syarikat ini | 5 ke 19 orang | 2 |
| Pengurusan atasan syarikat ini | 20 ke 50 orang | 3 |
| | 51 ke 150 | 4 |
| | Melebihi 150 | 5 |
| Berapakah nilai jualan tahunan syarikat anda pada tahun lepas? | Umur |
| Kurang daripada RM50,000 | Bawah 25 tahun | 1 |
| RM50,000 < RM 200,000 | 25 – 30 tahun | 2 |
| RM200,000 < RM 1 million | 31 – 40 tahun | 3 |
| | 41- 50 tahun | 4 |
| | Melebihi 51 tahun | 5 |
Gender

<table>
<thead>
<tr>
<th></th>
<th>Tahap pendidikan tertinggi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lelaki</td>
<td>Pendidikan Menengah 1</td>
</tr>
<tr>
<td></td>
<td>Sijil/Diploma 2</td>
</tr>
<tr>
<td></td>
<td>Ijazah Sarjana Muda 3</td>
</tr>
<tr>
<td>Perempuan</td>
<td>Ijazah Sarjana 4</td>
</tr>
<tr>
<td>Bangsa</td>
<td>Ijazah Sarjana 4</td>
</tr>
<tr>
<td>Melayu</td>
<td>Ijazah Kedoktoran 5</td>
</tr>
<tr>
<td>Cina</td>
<td>Lain-lain _____________ 6</td>
</tr>
<tr>
<td>India</td>
<td>3</td>
</tr>
<tr>
<td>Lain-lain</td>
<td>_____________ 4</td>
</tr>
</tbody>
</table>

BAHAGIAN 5: KESEDIAAAN UNTUK TURUT SERTA DALAM TEMU BUAL

Adakah anda bersedia untuk turut serta dalam temu bual dengan penyelidik pada masa akan datang?

Ya 1  (sila isikan butiran anda di ruangan yang disediakan di bawah)
Tidak 2

Butiran responden untuk ditemu duga:

Nama :
Alamat :
No Tel (Office) :
Fax (Office) :
Mobile :
Email address :

- Soal Selidik Tamat -
- Terima kasih di atas kesudian anda untuk menyiapkan soal selidik ini -
Appendix G: Interview Schedule

DEMOGRAPHIC DATA

Company Name : 
Industry/Nature of Business : 
What is your position in the company: 
How long have you run this company? / How long have you been working with this company?: 
Number of Employees : 
Annual Turnover : 
Age : 
Education Background : 

LEADERSHIP STYLE

How do you describe the working environment within your organisation? 
How would you describe your relationship with your employees? 
What factors would influence your leadership style? 
Do you think that your leadership style has any influence on your organisational performance? 
Do you think your leadership style affect your entrepreneurial attitude? 

ENTREPRENEURIAL ORIENTATION/ATTITUDE

Has your company marketed many new line services in the past five years? 
In your opinion, do your company respond to the competitors or do you think that the competitors respond to your actions? 
In regards to the risk taking, do you think that you are willing to take high risk with a chance of a very high return? 
In your opinion what factors would affect/influence your Entrepreneurial attitude? 
Do you think that your entrepreneurial attitude has any influence on your organisational performance?
ORGANISATIONAL PERFORMANCE

In the last 3 years, do you satisfy with your organisational performance in terms of the profitability and growth?

How do you see your organisational performance as compared to your competitors?

What other factors might influence your organisational performance, besides your leadership and EO?