

A Cross Cultural Study of Entrepreneurial Competencies and Entrepreneurial Success in SMEs in Australia and Malaysia

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DECLARATION

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Noor Hazlina Ahmad

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ABSTRACT

The present study examined the relationship between entrepreneurial competencies and business success in the context of SMEs in Australia and Malaysia. A “mixed-method” approach was adopted whereby two studies were conducted in a sequential fashion (Study 1 and Study 2). In Study 1, a qualitative method was adopted in which individual interviews were conducted with 20 entrepreneurs – 10 from Australia and 10 from Malaysia – who operated SMEs in the manufacturing and service sectors. The aim was to elicit behaviours that delineate competencies, and thus enable the identification of entrepreneurial competencies that are context-specific and of relevance in the current business environment. A content analysis of the interview data identified 12 competency domains: Strategic; Commitment; Conceptual; Opportunity; Organising and Leading; Relationship; Learning; Personal; Technical; Ethical; Social Responsibility; and Familism. Importantly, nine of these categories were well represented in existing models of entrepreneurial competencies, thereby providing evidence that these models offer a reasonable degree of cross-cultural generalisability. However, three new categories emerged, namely, Ethical, Social Responsibility, and Familism (broadly concerned with the role of “family” in building business success). There was evidence for Ethical and Social Responsibility competencies in both the Australian and Malaysian data, whereas Familism was specific to the Malaysian data and may well reflect the collectivist orientation of Malaysian culture. The identification of these additional categories of entrepreneurial competencies suggests that the existing models may need to be revised to further enhance their applicability to the measurement of entrepreneurial competencies in different cultural contexts.

Study 2 Part 1 proceeded with validating the model of entrepreneurial competencies. This involved determining the psychometric rigour of the model and establishing the psychometric properties of all dependent variables (measures of business success) and covariates (i.e., business environment and entrepreneurs’ cultural orientations) using a sample of 391 SME entrepreneurs (179 Australians and 212 Malaysians). The two best fit models of entrepreneurial competencies – the “Comprehensive” model and the “Parsimonious” model – are fully described. The Comprehensive model revealed that all twelve competency areas were perceived as relevant to SME outcomes by entrepreneurs in Australia and Malaysia, even though the behaviours that defined the Organising and Leading competency domain, as well as the Familism competency domain (later renamed “Supporting and Cooperating” for Australia due to the omission of items related to

“family”) were somewhat different. The other 10 competency areas identified in the Comprehensive model appeared to be invariant across countries. On the other hand, the Parsimonious model of entrepreneurial competencies showed that, although some competency areas were universal in nature (i.e., Conceptual, Opportunity, Learning, and Ethical), others were country specific (i.e., Relationship, Social Responsibility, and Familism). It was argued that the differences could be traced to cultural variations between the countries, in particular the extent of Individualism versus Collectivism.

Study 2 Part 2 tested the causal pathway between entrepreneurial competencies and business success and the possible influence of covariates using a structural equation modeling (SEM) procedure. The results showed that entrepreneurial competencies were strong predictors of business success in SMEs for both Australia and Malaysia. It was also found that both Benign and Stable business environments were significantly related to business success in Australia whereas only a Stable environment was significantly linked with success in Malaysia. Moreover, environmental variables showed a less strong path to success than competencies. When the Parsimonious model of entrepreneurial competencies was used in the model estimation, the association between entrepreneurial competencies and business success was more strongly evident in Hostile and Dynamic environments than in more Benign and Stable environments (for both Australia and Malaysia). The results also showed that cultural orientations (both Collectivism and Tolerance for Ambiguity) have positive effects on entrepreneurial competencies in Malaysia but not in Australia (i.e., Individualism and Tolerance for Ambiguity). The effect of education on entrepreneurial competencies was mixed; significant for only the Comprehensive model for Australia but significant for both Comprehensive and Parsimonious models for Malaysia. The effects of training before and after start up, as well as previous work experience on entrepreneurial competencies appeared to be nonsignificant in both contexts.

On the basis of the results of the thesis, it was concluded that self-reported entrepreneurial competencies are predictive of self-reports of success in both Malaysian and Australian SMEs. The models that describe success in both countries are consistent with existing models of entrepreneurial competency although differences in the behaviours that define a domain are evidenced between countries as are the domains that successfully define a parsimonious model in each country. These results are interpreted as supporting a training agenda that identifies entrepreneurial skills as a critical pre-requisite to business success for SMEs.

Chapter 1

Introduction: A Comparative Study of the Factors Influencing Entrepreneurial Success in SMEs in Australia and Malaysia

1.1 Introduction

Recent developments in research on entrepreneurship have seen increased attention given to small and medium-sized enterprises (SMEs), largely due to the realisation that SMEs play a significant role in a country's economy. The collective impact of SMEs on the economy of both developed and developing countries is considerable. In a developed country like Australia, the entrepreneurial activities of SMEs serve as a means to revitalize stagnating industries (Thomas & Mueller, 2000), while in a developing country like Malaysia, they are seen as a mechanism to improve the distribution of income, to stimulate economic growth, and to reshape an economic structure which has been highly dependent on the activities of large firms (Abdullah, 1999).

Given that increasing the chances of success among SMEs would have huge implications for the growth and socio-economic wellbeing of a country (Asia-Pacific Economic Cooperation, 2004), understanding predictors of success in SMEs is critical. The creation of more successful SMEs could potentially create new jobs, increase trade, and consequently GDP in the region. Unfortunately, literature on SMEs shows a lack of consistency with regard to the key factors that determine SME success (O'Regan & Ghobadian, 2004). Contrasting views exist, with some scholars attributing success to the influence of the individual (i.e., the entrepreneur) and others highlighting the importance of external/environmental factors (such as the state of the economy, government policy, availability of financial support, and the nature and supportiveness of the infrastructure). Despite evidence suggesting that entrepreneurs, as the owner-managers, play a crucial role in determining business success (Baum & Locke, 2004; Che Rose, Kumar, & Yen, 2006; Man & Lau, 2005), attempts to examine the unique contribution of the entrepreneur to success is still limited (Gibb, 2005).

It is noteworthy that, among the limited number of studies that investigate the influence of the individual characteristics of the entrepreneur on business performance, most adopt a personality traits approach (Frese, Brantjes, & Hoorn, 2002; Lee & Tsang, 2001; Pearson & Chatterjee, 2001) or include a focus on selected demographic variables (Bates, 1995; Boden & Nucci, 2000). This approach has been criticised because of the mixed results generated in replication studies (Entrialgo, Fernandez, & Vazquez, 2000; Johnson, 1990). Given that the results of efforts to develop a model of business success in SMEs are far from conclusive, there is clearly a need for more research in this area.

Researchers are in general agreement about the numerous difficulties experienced by SMEs. In particular, smaller firms have higher failure rates than larger firms (Storey, 1994). They are also more likely than larger firms to be affected by changes in their internal and external environments (Man & Lau, 2005). According to Stokes (2006): "...the lack of market power and the dependency on a relatively small customer base make their environments more uncontrollable and more uncertain than that of larger organisations" (p. 325). As such, an important question concerns "how these firms can best cope in an uncertain and dynamic environment?". In attempting to answer this question, the present study adopts Gibb's (2005) view that, in SMEs, "the entrepreneur is the core competence of the firm" (p. 2).

A central thesis of this study is that entrepreneurial competencies, which are defined as "underlying characteristics such as generic and specific knowledge, motives, traits, self-images, social roles, and skills which result in venture birth, survival, and/or growth" (Bird, 1995, p. 51), may be the key to improving a firm's performance. As mentioned by Brophy and Kiely (2002, p. 165), the competency approach (which examines the competencies of key players in organisations) is "an approach whose time has come" due to its potential to identify behaviours that could be associated with effective performance. Although it has been difficult to ascertain why, in similar situations, some entrepreneurs fail while others succeed, it is thought that the focus on "entrepreneurial competencies" offers a practical means of addressing this phenomenon. Further discussion of the usefulness and practicality of the competency approach is provided in Section 2.4.2.

The principal aim of the present study is therefore, to examine the relationship between entrepreneurial competencies and business success in SMEs. In accordance with Bird's (1995) theory of entrepreneurial competencies, the study views entrepreneurial competencies as a mechanism whereby the likelihood of achieving business success can be improved. As indicated, the few existing studies that have adopted a similar approach are largely sector-specific (i.e., Man, 2001; McGee & Peterson, 2000; Salomo, Gemuenden, & Brinckmann, 2005), with theoretical foundations that reflect a western bias (i.e., Chandler & Jansen, 1992; Martin & Staines, 1994). These studies do, however, provide a basis for the conceptualisation of entrepreneurial competencies. The present study also attempts to answer the call for an international comparative study in this area (Man, 2001) by investigating the relationship between entrepreneurial competencies and firm success in Australian and Malaysian SMEs operating in both manufacturing and service sectors.

1.2 Research Background

Developing relevant competencies among the managing entrepreneur is considered to be a crucial step in providing an SME with a sustainable competitive advantage, primarily because this sort of business is critically dependent on the owners' capabilities (Gibb, 2005; Sadler-Smith, Hampson, Chaston, & Badger, 2003). According to McGregor and Tweed (2001), the competencies of owner-managers in smaller firms can be seen as "individually specific" and not "organisationally-indexed" as they are with large firms. This implies that, in smaller firms, owners' competencies can be equated with firms' competencies, thereby allowing researcher to focus on individual entrepreneurs as the unit of analysis. In larger firms however, firm's competencies are dependent upon the competencies of various business units within the firms, therefore competencies for these firms should be measured at a firm level.

Following Kiggundu's (2002) suggestion that entrepreneurial competencies could offer a realistic view of the know how of running a business, the present study attempts to develop and extend Man's (2001) model of entrepreneurial competencies, using a behavioural approach that focuses on what individual entrepreneurs actually do to sustain their ventures. The utilisation of the behavioural approach is consistent with Gartner's (1988) suggestion that by understanding what entrepreneurs actually do – how they behave in real situations, and how they respond to challenging situations – one may better understand the role of entrepreneurs in ensuring the viability of their business.

Interestingly, the concept of competencies and its application, particularly in the field of entrepreneurship, is relatively new. It started to gain popularity in the late 1980's following the wide acceptance of Boyatzis's (1982) "The Competent Manager: A Model for Effective Performance". The approach shares similarities with conceptualisations of strategic management that advocated a resource-based view of competitive advantage. This approach highlights the impact of managerial "knowledge, skills, and abilities" (known as KSA) (Schuler & Jackson, 1987). Because KSA denotes the possession of the knowledge, skills, and abilities required to perform tasks viewed as critical to firm success, it shares many of the features of competency models of entrepreneurship. At the same time, however, Kierstead (1998) argues that KSA reflects "task-based areas of competence" whereas competencies, on the other hand, are "person-related"; they are the attributes of the individual that underlie observable behaviours (McClelland, 1973). In terms of application, Kierstead (1998) adds that competencies differ from KSA in that a competency-based approach shifts the level of analysis from the job and its related tasks to the individual carrying out the tasks and his or her capabilities. He further states:

The shift is extremely important in the context of the modern workplace, where the environment demands that organizations structure around the project and the work to be done rather than around clearly delineated and narrowly defined jobs (p. 5).

In view of these arguments, competencies can be described as representing another level of analysis that sits above the KSA. The utilisation of a competency approach suits the present research because the environment in which entrepreneurs in SMEs currently operate – characterised by an increasing rate of change and increasingly challenging work tasks – is, as Kierstead noted, very different from the business environment of the past.

1.3 Problem Statement

Without denying that environmental variables are influential on SME success, there is a need to more closely examine the internal factors that may contribute to a firm's success. This is because, despite the considerable government support and assistance that are available to SMEs, and boom conditions in the economies of both Malaysia and Australia recently, many small businesses still fail. Research shows that a large number of SMEs enter and exit most markets every year; it was found that the turnover rate for these firms was approximately 20% per year (Organisation for Economic Co-operation and Development, 2001). Thus, even though billions of dollars have been allocated to the support of SMEs via government funding, training, grants, and the provision of consultative services, the failure rate remains high. It is possible that excessive dependence on government support, especially monetary, may weaken, rather than strengthen, the entrepreneur's ability to manage his/her business and reduce the firm's competitiveness by locating responsibility for success on external, contextual factors rather than internal, competence variables.

Some researchers have argued that a focus on the internal factors – especially those related to “people issues” (Dulewicz & Higgs, 2000) – may improve business success (Naffziger, 1995). Consistent with this argument, results from an early study involving 74 small firms operating in Montreal by Ibrahim and Goodwin (1986) indicated that the factors that contributed most to firm success were related to the skills and abilities of the entrepreneurs themselves, while external factors such as government policy and economic conditions were the least important factors. More recently, scholars have argued that many small businesses have failed because of a lack of entrepreneurial competencies among business owners (Kiggundu, 2002), as well as a lack of skills and abilities among those who hold key positions in the organisation (Longenecker, Simonetti, & Sharkey, 1999). Similar arguments have been made about organisational failure more generally. For example, Longenecker et al. (1999) argue that when an organisation fails to achieve the desired outcome, this is often attributed to the actions or inactions of the top management –

in particular, management's failure to create a clear vision and direction for the organisation, failure to adapt to changes, inability to develop effective strategies, poor business forecasting and planning, poor decision making, and failure to have a clear understanding of the business, the sector, and the specific industry. Another research conducted by Beaver and Jennings (2005), which utilised a case study approach involving small business owners in the UK, found that small businesses failed because of the owners' "ineffective" behaviours such as inability to manage spending, a lack of professional management action, a failure of control systems, as well as the absence of a clear vision. The above arguments about the centrality of the entrepreneur to SME success are consistent with the recent proposal by APEC ministers to introduce a program known as "Human Capacity Building" which is designed to nurture entrepreneurial skills in SMEs (Asia-Pacific Economic Cooperation, 2003). The imperative to redirect attention to the entrepreneur is also embedded in Wasilczuk's (2000) argument that the only way to minimise the negative impact of external factors on businesses is for entrepreneurs to equip themselves with the relevant skills and abilities.

As argued earlier, examining the competencies of the entrepreneurs in order to understand the key success factors in SMEs is a promising approach. In the effort to link competencies and success in SMEs, the present study attempts to draw conclusions about the similarities and/or differences in the entrepreneurial competencies required to operate in different national settings (Australia and Malaysia). Specifically, it compares entrepreneurs in Australia and Malaysia in terms of the competencies they require to successfully manage their business. This is an attempt to develop a model that departs from the influence of the traditional western perspective. As suggested by Thomas and Mueller (2000), the application of entrepreneurship theory internationally (in particular, the model of entrepreneurial competencies) is problematic given the lack of research in diverse contexts. Some scholars have assumed that models developed in the West are transferable to other cultural contexts, while other scholars regard this as inappropriate and likely to result in misleading findings (Curran & Blackburn, 2000; Ramayah & Jantan, 2004; Saffu, 2003). Dodd and Patra (2002) have also cautioned that, in the effort to develop a unified theory of entrepreneurship (in this case, the model of entrepreneurial competencies), research should avoid the temptation to force the data to fit an inappropriately "universalistic ideology".

Since this study investigates the similarities and differences in the model of entrepreneurial competencies in two culturally heterogeneous countries (one Western and one Eastern), the influence of individual cultural orientations in defining the model of

entrepreneurial competencies is also seen as worthy of investigation. This is because, according to Hofstede (1991), culture shapes behaviours, motives, and beliefs of individuals. There is evidence that individual behaviour is mainly influenced by the individual's dominant cultural values (Singelis & Brown, 1995). For entrepreneurs, their preferences, actions, and attitudes are likely to be influenced by their cultural background, which may in turn affect their approach to handling their business. In a study conducted by Berrell, Wright, and Hoa (1999), it was found that Australian entrepreneurs were prone to discard the relationship network – consistent with their individualism orientation – whereas a study by Che Rose, Kumar, and Yen (2006) found that SME entrepreneurs from Malaysia considered that establishing good relationships and networking were paramount in their business dealings (reflecting collectivism orientation). Consistent with the assumption that cultural orientation may have a significant influence on behaviour, the present study therefore seeks to understand the impact of culture on an entrepreneur's behaviour that delineates competencies.

In estimating the variance in SME success accounted for by entrepreneurial competencies, other covariates must be taken into consideration. Accordingly, this study looks at the direct and moderating effects of the business environment. While the present study argues that entrepreneurial competencies are a more powerful and modifiable influence on business success than environmental factors, it is nevertheless important to include measurement of the effect of business environment on business success given its well-documented effect (Covin & Slevin, 1989; Covin, Slevin, & Heeley, 1999; Naman & Slevin, 1993; Zahra, 1993). In the current study, business environment is operationalised on two dimensions; the extent to which it can be characterised as Benign versus Hostile and Stable versus Dynamic.

Finally, the present study seeks to understand the influence of the antecedents of entrepreneurial competencies that have received attention in the entrepreneurship literature. In her proposition towards a "Theory of Entrepreneurial Competencies", Bird (1995) suggests that it is worth looking at education, prior work experience, and industry experience as factors that could influence the development of entrepreneurial competencies. A number of studies support this view. For example, Chandler and Jansen (1992) found that education, to some extent, contributes to the development of the competencies of business founders. Krueger and Brazeal (1994) indicate that prior work experience could potentially improve one's skills and abilities, particularly in recognising business opportunities. Maxwell and Westerfield (2002) argue that an entrepreneur's innovativeness, which is an aspect of his/her competencies, depends largely on the level of

his/her formal education as well as prior managerial experience. In their study of 187 small firms in the US, they found that the higher the educational level and the managerial experience, the higher the level of the entrepreneur's innovation. Building on these arguments, the present study also tests for the influence of education, training before and after business start up, and prior work experience on entrepreneurial competencies.

1.4 Research Objectives

In view of the preceding discussion, this research aims to develop a broadly-based entrepreneurial competencies model that incorporates a cross-national perspective – in this case, based on a comparison of Australian and Malaysian business contexts – and that permits multi-sectoral application (i.e., manufacturing and service sectors). In particular, the present study is designed to address the following objectives:

1. To identify the set of competencies perceived to be important by entrepreneurs in Australia and Malaysia, and to ascertain which of these competencies are included in existing models and which are new competencies.
2. To identify differences and similarities in the entrepreneurial competencies required by entrepreneurs in both countries.
3. To examine the extent to which entrepreneurial competencies may influence business success in SMEs.
4. To examine the direct and moderating effects of business environment in predicting business success in SMEs.
5. To examine the effects of individual cultural orientations on entrepreneurial competencies.
6. To examine the effects of education, training before and after start up, and prior work experience on the development of entrepreneurial competencies.

1.5 Research Questions

In a broader sense, the present study is motivated by the question “What does it take for entrepreneurs operating in the context of SMEs in Australia and Malaysia to be successful?” The research argues that by integrating the constructs of entrepreneurial competencies, business environment, and individual cultural orientations into the development of the theoretical framework, improved insights into the factors that may impact upon business success in Australian and Malaysian SMEs may be generated. Accordingly, the following key research questions are designed for further investigation:

1. What are the competencies perceived to be important by entrepreneurs in SMEs in Australia and Malaysia? Are there competencies which are perceived to be

important by entrepreneurs operating in these contexts that are not included in existing models?

2. Are there cross-cultural differences in the competencies identified by Australian and Malaysian entrepreneurs?
3. To what extent does the competency model developed in the present study predict SME business success in Australia and Malaysia?
4. To what extent does the business environment directly or indirectly influence business success in SMEs?
5. To what extent do the individual cultural orientations of entrepreneurs influence the behaviours reflecting entrepreneurial competencies?
6. To what extent do education, training before and after start up, and prior work experiences influence the development of entrepreneurial competencies?

1.6 Significance of the Study

It is anticipated that this research will contribute to the literature in several ways. Firstly, the present study suggests that a central focus of any assessment of the critical success factors contributing to SEM success should be the competencies of the key players. The study therefore advocates a competency approach to understanding SME success.

Secondly, the study aims to develop a viable multi-dimensional entrepreneurial competencies construct, through a systematic process of empirical validation and testing using data from entrepreneurs operating in Australian and Malaysian SMEs. Thirdly, the resulting entrepreneurial competencies construct will be integrated into a model testing framework that will enable the examination of what affects entrepreneurial success with results that may be generalisable across cultures.

From a theoretical perspective, the study has the potential to add new knowledge to the field of entrepreneurship. It specifically seeks to understand and identify the important entrepreneurial competencies, as perceived by Australian and Malaysian entrepreneurs, rather than simply assuming the transferability of “foreign” models into other cultural contexts. The study may therefore provide more culturally sensitive insights into the competencies important for entrepreneurial success. This would provide a clearer picture of the nature of entrepreneurial competencies; whether they are universal or context-specific.

From a practical perspective, the findings of the study may be useful to entrepreneurs in SMEs by highlighting the focus on training that may be necessary to improve effectiveness. Moreover, understanding cross-cultural differences in entrepreneurial competencies may facilitate the development and implementation of government and

educational policy designed to assist entrepreneurs to internationalise their business beyond local boundaries (Thomas & Mueller, 2000).

1.7 Organisation of Chapters

This thesis is organised into seven chapters. This chapter has presented the research background and the problem statement for the study. Six research questions and research objectives have been advanced and the significance of conducting the research has been outlined. Chapter 2 provides a comprehensive review of the literature relating to SME development in Australia and Malaysia, the concept of entrepreneurship and its linkage to SME, the concept of competency, business environment and individual cultural orientations, as well the concept of business success in SMEs. Chapter 3 draws attention to the gaps in the existing literature on entrepreneurship and entrepreneurial competencies and develops the theoretical framework for the present study. This chapter also articulates the hypotheses for empirical testing. Chapter 4 discusses the rationale for undertaking the qualitative study (Study 1), and describes its methods, data analysis, and main findings. Chapter 5 (Study 2, Part 1) proceeds with the validation of a model of entrepreneurial competencies that incorporates additional competencies identified in Study 1; this chapter also establishes the psychometric properties of all of the variables included in the main model testing. Chapter 6 (Study 2, Part 2) continues with the model testing, employing a structural equation modeling (SEM) procedure to estimate the direct, indirect, and moderating effects of the variables in the model. Finally, Chapter 7 concludes the thesis with a discussion of the findings in the context of the available literature, a consideration of the implications of the findings, and suggestions regarding directions for future research.

1.8 Conclusion

In summary, this study focuses on entrepreneurial competencies and their relationship to business success in SMEs. It involves a cross-cultural comparison of the competencies of entrepreneurs in Australia and Malaysia, and how these competencies differentially influence success in each context. Acknowledging the influence of business environment on SME success, the study also investigates the direct and moderating effects of business environment on business success. The influence of individual cultural orientations on entrepreneurial competencies is also examined. By integrating these constructs – individual factors, environmental factors, and organisational outcomes – the present study aims to provide a better understanding of the predictors of SME success. With respect to its practical implications, the study offers a promising avenue to assist entrepreneurs to understand what is required of them for the successful management of their businesses.

Chapter 2

Understanding the Linkage of Entrepreneurial Competencies, Business Environment, and Cultural Orientations with Entrepreneurial Success: Review of the Literature

2.1 Introduction

This study is an evaluation of the variables associated with business success in small and medium sized enterprises (SMEs). The study is a response to Gartner, Shaver, Gatewood, and Katz's (1994, p. 7-8) call to re-orientate entrepreneurship research to identify "a better theoretical framework, clearer descriptions, and measures of the types of knowledge, skills, and abilities that affect entrepreneurial performance and success". It uses a "competency" model to describe the link between the behaviours and attributes of the business owner and business success (Bird, 1995; Man, 2001), arguing that those who hold key positions in the organisation have a significant influence on the organisation's success or failure (c.f., "the strategic choice paradigm", Child, 1972, 1997). Essentially, the strategic choice paradigm proposed by Child draws attention to the power-holder in an organisation (in the case of this study, the business owner himself/herself) to influence the organisational outcome.

This study also examines the influence of a number of other variables on business success, such as perceptions of the business environment. While there has been some research which has explored the relationship between environment and a firm's business processes and success in the context of SMEs, the results of this research have been mixed. Some studies show that environment has a significant direct effect or a moderating effect (Chandler & Hanks, 1994; J. Covin & Slevin, 1989; Entrialgo, Fernandez, & Vazquez, 2001), while others have found weak or no impact whatsoever (J. R. Baum, Locke, & Smith, 2001; Jogaratnam, 2002). In the present study, it was considered important to incorporate a measure of business environment in order to capture the potential variation in business success accounted for by this factor. The inclusion of this variable also allowed for an exploration of the extent to which the internal factor (entrepreneurial competencies) and the external factor (business environment) interact to influence business success.

Data was collected in two countries in order to examine how different countries, cultures and values might impact upon the proposed "Entrepreneurial Competency Model" of business performance. As suggested by previous research, Australians and Malaysians have contrasting cultural orientations (Hofstede & Bond, 1988). The differences are clearly demonstrated by the constructs Individualism versus Collectivism and Uncertainty Avoidance versus Tolerance for Ambiguity. Specifically, Hofstede and Bond found that

Australians score high in individualism and moderate uncertainty avoidance whereas Malaysians score high in collectivism and also moderate in uncertainty avoidance (but to a lesser degree compared to Australians). Singelis and Brown (1995) argue that culture shapes cognitive structures, which in turn guides individual choices and behaviours. Similarly, Adler (1997) propose that cultural values play an important part in shaping people's behaviours and actions, along with their beliefs about what constitutes best practice (Hofstede & Bond, 1988). Consistent with these observations, it was expected that culture would also, to some extent at least, influence the competencies of entrepreneurs because competencies are thought to underlie an individual's behaviour (Bird, 1995).

This literature review chapter covers three main bodies of literature that attempt to describe the variables influencing business success: theories of entrepreneurial competencies; the role of the business environment; and the influence of cultural orientations. It begins with a description of the importance of SMEs. This is followed by a brief overview of two major strands of research that attempt to predict success in SMEs. Next, the chapter describes and critiques previous approaches to understanding entrepreneurs' contributions to business success. It then proceeds with a discussion of the competency approach, the concept of entrepreneurial competencies, existing models of entrepreneurial competencies, and the domains of entrepreneurial competencies. Reviews of the literature on perceived business environment and individual cultural values are also provided to illustrate the linkage of these variables to the model of entrepreneurial competencies. Finally, the chapter includes a review of the literature on business success, which is the outcome variable in this research.

2.2 The importance of SMEs

The socio-economic significance of SMEs, especially in the Asia Pacific region, has not been appreciated until recently. This is reflected in the relative neglect of the problems faced by SMEs by policymakers and academics prior to the 1980s. Indicative of the rising interest in SMEs is the inclusion of the SME's "development agenda" within the Asia Pacific Economic Cooperation (APEC) forum. In 1995, the SME working group was established as an ad hoc policy group and, in 2000, this policy group was upgraded to the SME Working Group and granted permanent status (APEC, 2003), demonstrating the growing appreciation of the contribution of SMEs to the social and economic development of a country.

In Australia, in particular, the government's attention to SMEs was marginal prior to the 1970's. No SME statistics were collected, very few universities offered entrepreneurship courses, and there were no Ministers of Small Business at either the

Federal or State levels (APEC, 2003). The first small business association, the Australian Association of Independent Businesses, was launched in 1977 and, in the same year, the federal Department of Trade and Industry established a Small Business Registrar (APEC, 2003). By 2000, all State and Federal Governments had Ministers of Small Business, SME statistics were produced by the Australian Bureau of Statistics (ABS), and the government had established consultative mechanisms linked to SMEs. In 2001, 97% of all businesses in Australia were SMEs (Australian Bureau of Statistics (ABS), 2002). According to the ABS (2001), SMEs in Australia are best represented in the services sector, specifically: retail and wholesale trade (21.2%); construction (19.4%); property and business services (19.3%); transportation and storage (5.9%); accommodation, cafes, and restaurants (2.8%); and other personal services (7.1%). Today, SMEs are considered to be a major driver of the Australian economy.

Similarly, in Malaysia, little attention was given to SMEs prior to the 1980's. However recently, more attention has been given to assisting SMEs. To ensure a more coordinated approach to SME development, the Malaysian government has established the High-Level National SME Development Council chaired by the Prime Minister (Asia-Pacific Economic Cooperation, 2004). Currently, at least 12 ministries and 40 government agencies are involved in the development of SMEs in Malaysia (SMIDEC, 2004). It has been reported that the contribution of SMEs to the GDP in the year 2002 increased by 2.5% and the productivity of SMEs rose by 2.7% (Business Times, Sept 13, 2003). In 2005, 96% of all manufacturing and service businesses were SMEs and the majority of SMEs (87.5%) were in the services sector (Kamini, 2005). The contribution of SMEs to employment rose to 7.7 % in the same year (Wahari & Raban, 2005). In 2006, The Central Bank of Malaysia reported that SMEs accounted for 99% of all businesses and contributed 38% of total output. In terms of employment, SMEs accounted for 55% of the total workforce (Central Bank of Malaysia, 2005). To further galvanise SMEs in Malaysia, the government has established an SME bank to assist entrepreneurs financially as well as the development of various training programmes, particularly in the areas of entrepreneurship development, marketing and promotion, product development and technology enhancement (Central Bank of Malaysia, 2007). Today, the future of SMEs in Malaysia is seen as optimistic, with considerable potential for further growth over the next few years and beyond.

The significance of SMEs is associated primarily with their role in stimulating economic growth. Abdullah and Beal (2003) highlight several important contributions of SMEs in this regard. Firstly, because they are labour-intensive, SMEs create

employment opportunities. Secondly, SMEs enhance regional development and create more equitable income distribution due to their location and ongoing expansion throughout the broader community. Thirdly, SMEs play a vital complementary role in relation to larger firms. In many cases, large firms depend on SMEs as suppliers and distributors. For example, many SMEs in Malaysia supply component parts, tools, and equipment to larger manufacturing firms. Large firms also rely on SMEs for the distribution of their products to the consumer. Fourthly, SMEs serve as a training ground for developing the skills of workers and entrepreneurs. Finally, the presence of SMEs curbs the monopoly power of larger firms and provides the structure of the economy with greater flexibility. Thus, a country can reduce its vulnerability to financial crises by strengthening its SMEs and ensuring their success.

2.3 Predicting Business Success in SMEs

Irrespective of location, SMEs face common problems that impair their performance and survival. SMEs, by nature, generally have limited resources and this is the single greatest contributing factor to their vulnerability (Chak, 1998). Some statistics suggest that the failure rate of small businesses in their first five years is more than 50% (Reiss, 2006).

In Australia, a failure rate of 23% has been reported (J. Watson, 2003). To remedy this problem, the Australian government has organised various support mechanisms to increase SME success. These mechanisms include the formulation of policy related to innovation, new technology, managerial development, and business improvement and export skills for SMEs and their owners. Other forms of assistance include: access to information on government assistance programs; encouraging firm innovation; encouraging networking amongst SMEs; and providing practical assistance and financial support to SMEs (Organisation for Economic Co-operation and Development, 2002).

In Malaysia, even though there has been no accurate figure published so far, the estimated failure rate for SMEs was 60% (Portal Komuniti KTAK, 2006). In an effort to curb the increasing number of SME failures, the Malaysian government has taken various measures, including the recent establishment of the SME Bank (in October 2005) to cater for the financial needs of SMEs. Other support programmes include: promoting and increasing production efficiency; enhancing quality and productivity through automation and modernisation of machinery; encouraging SMEs to undertake R&D, product development, and designing activities; and creating a more conducive business environment for SMEs (Central Bank of Malaysia, 2006).

Despite various forms of assistance offered by governments, the failure rate remains high with serious repercussions for the individual, the community, and the wider economy.

At a macro level, SME failure has major effects on employment rate and national income. Ripsas (1998) asserts that, despite their potential to add jobs faster than bigger firms, smaller firms also eliminate them faster because of their high failure rate. In an analysis of the multiplicative effect of business failure on the national economy, Naples (1997, p. 521) argues:

Business failures are not just blips on the screen of economic activity that are instantaneously counteracted by business formation. They destroy jobs, and this independently contributes to economic decline. When a drop in autonomous spending leads to business failures, the appropriate expenditure multiplier is substantially larger than standard models suggest. Consequently, national income falls further, and unemployment increases more drastically.

At a firm level, the experience of business failure may hamper the entrepreneur from subsequently obtaining financial assistance. At an individual level, business failure can be harmful to the psychological and physical health of entrepreneurs and their families (Blackman, 2003).

Studies of business success in SMEs can generally be categorised into two broad groups. The first highlights the role of external factors in determining success, whereas the second emphasises the internal aspects of SMEs, specifically, the characteristics of the entrepreneur. The studies that focus on external factors typically examine the role of government in creating an environment that is conducive to smaller business success. The main conclusion of these studies is that the major impediment to success among SMEs is the unavailability of various forms of support, such as financial and training support. Because small businesses generally lack financial and managerial capabilities, governments world-wide are urged to formulate policies designed to help reduce the vulnerability of these firms in the market. Areas that have been researched include: government funding policy and the provision of basic infrastructure and protection against competition from big business (Yusuf, 1995); education and training programmes (Robertson, Collins, Medeira, & Slater, 2003); and the provision of soft loans (loans with a flexible repayment policy) and government export assistance (Mahajar & Mohd Yunus, 2006). Yusuf (1995), for instance, found that a higher volume of bank lending reduced the rate of small business failure, thus urging financial institutions to be more flexible in granting loans.

It has been argued that the focus on business context, and in particular the role of the government, as the primary determinant of SME success, negates the important contribution of the business owner as the key decision maker influencing business outcomes (J. R. Baum & Locke, 2004; J. R. Baum et al., 2001; Shaver & Scott, 1991). While it is undeniable that external influences are relevant to the discussion of SME

development, this factor alone does not explain why SMEs succeed or fail. For example, although recognising a number of external barriers to small business success in the US (for example, the nature of the competitive environment), Gaskill, Van Auken, and Manning (1993) conclude that it is internal factors (i.e., managerial and planning skills) that more often inhibit, or enable, business success. Consistent with this, it has been argued that government assistance, although important, should not be seen as the sole remedy for reducing the rate of business failure (Chak, 1998). There are other important factors that an SME must attend to in order to ensure continued prosperity. Accordingly, scholars such as Stokes and Blackburn (2002) suggest focusing on the business owner as the unit of analysis in predicting business success in SMEs.

The second group of studies concerned with predictors of SME success have focused on the internal factors including organisational variables and individual variables. As suggested by Covin and Slevin (1991), the organisational variables that could affect a firm's performance include the organisation's resources and competencies, the organisation's culture, and the way in which the organisation is structured. They argue that the availability of organisational resources and competencies such as "monetary resources, plant and equipment, personnel, functional-level capabilities (e.g., manufacturing flexibility), organisational-level capabilities (e.g., ability to get a new product to the market in a timely fashion), and organisational system (e.g., marketing research systems)" (p.15) can all enhance the likelihood of a firm succeeding. Covin and Slevin (1991) also argue that a firm with an organisational culture that values new ideas, practises empowerment and teamwork, and is open to change and innovation has a better chance of succeeding. Finally, the authors also propose that a firm with an organisational structure that is less formal, low in centralisation, and less complex is more likely to perform better than a formal, centralised, and complex organisation.

Although organisational variables may be vital to firm performance, it is important to acknowledge that the entrepreneur acts as a gatekeeper, enabling the internal resources of the organisation to be utilised in order to achieve organisational success. The critical nature of this gate-keeping role highlights the importance of examining the knowledge, skills, attitudes and behaviours of the entrepreneur, and how these impact upon firm performance.

Research that has focused on the importance of the characteristics of the entrepreneur builds upon strategic management research that has a strong tradition in relating top management behaviours to an organisation's performance (Longenecker et al., 1999). Taking this as a building block, Yu (2001) argues that due to the lack of separation between ownership and control in SMEs, business owners are responsible for

the direction and development of their firms. This approach to understanding SME success generally begins with the exploration of various demographic variables, such as the sex, age, race, educational level, and ethnicity of the business owner. For example, in an analysis of survival rates among franchise and small independent firms in the US (between 1984 and 1987), Bates (1995) identified a positive association between higher education and the likelihood of a firm's success. In another study which is based upon analyses of the survey data on a sample of white male and female sole proprietors in the US for the year 1982 and 1987 (a sample comprised of 1,802 male and 2,174 female business owners for the 1982 reference year and 454 male and 451 female owners for the 1987), Boden and Nucci (2000) found that male-owned businesses have a higher tendency to survive than female-owned businesses. Recently, Watson (2003) showed that male-owned businesses have a lower discontinuance rate compared to female-owned businesses in Australia. With respect to the latter, it is interesting that other studies that have attempted to confirm this gender profile have produced mixed results. For example, a study by Kallerberg and Leicht (1991) found that business success was independent of the sex of the business owner.

Other research has focused on the personality traits of the entrepreneur. Traits that have often been associated with successful entrepreneurship are a high need for achievement, an internal locus of control, and a propensity for risk-taking (Begley & Boyd, 1987; Brandstaetter, 1997; D. C. McClelland, 1987; Miner, 1997). Although providing some useful insights, these studies, when replicated, often produce conflicting findings (see for example, J. R. Baum, 1995; Duchesneau & Gartner, 1990). As a result, researchers have concluded that it is a mistake to examine "who a successful entrepreneur is", arguing that entrepreneurs are seen as different, not because they share similar traits, but because of their "entrepreneurial acts" (Gartner, 1989).

The present study acknowledges that both the internal characteristics of the SME, in particular, the behaviour of the entrepreneur, and the external environment, have a strong influence on SME success. At the same time, however, based on the contention that a skilled entrepreneur is one who can manage environmental challenges (Beaver & Jennings, 2005), the thesis attempts to test a model that places prime responsibility for business success on the competencies of the entrepreneur. Lado, Boyd, and Wright (1992) have argued that entrepreneurs are strategic leaders who, through their actions, influence business success. They start their own business, formulate strategy, recognise opportunities, and translate these opportunities into business activity (Beaver & Jennings, 2005; Shook, Priem, & McGee, 2003). Brush and Chaganti (1998)

argue that due to a lack of resources, especially skilled workers and sophisticated technologies, SMEs are forced to depend for their success on the competencies of the business owner.

2.4 Linking Entrepreneurs and Business Success

An entrepreneur is an individual who creates a new organisation or founds a new venture (Gartner, 1985; Low & MacMillan, 1988). Bygrave and Hofer (1991) expand this definition to “someone who perceives an opportunity and creates an organisation to pursue it” (p. 14). Johnson (2001, p. 137) offers the following more comprehensive definition of the role of an entrepreneur:

(An individual who) assumes responsibility and ownership in making things happen; is open to and able to create novelty; who manages the risks attached to the process; and who has the persistence to see through to some identified end-point, even when faced with obstacles and difficulties.

Entrepreneurs are also portrayed as individuals who are passionate about what they are doing (Shefsky, 1994) and who, because of this passion, are prompted to take risks in order to transform their dreams into realities. Baron (1998) regards an entrepreneur as someone who is capable of making changes, undertaking new ways of doing things, searching for and exploiting opportunities, as well as converting ideas into reality.

Clearly, the definitions of entrepreneurs range from those that emphasise broad criteria (e.g., venture creation) to those that emphasise more specific criteria (e.g., novelty creation, management of risks, and persistence in goal attainments). The most common criterion attached to entrepreneurship is venture creation (see, for example, Bygrave & Hofer, 1991). However, according to Carland, Hoy, Boulton, and Carland (1984), entrepreneurship is more than just venture creation. These authors argue that entrepreneurs are innovative individuals who employ strategic management practices for the purpose of growth. Similarly, Dollinger (1999, p. 4) conceptualises entrepreneurs as innovative individuals who create an “innovative economic organisation for the purpose of gain or growth under conditions of risk and uncertainty.”

Although the conceptualisation of entrepreneurs as “innovative” has some appeal, operationalising this concept is problematic. As Rauch and Frese (2000) point out, if entrepreneurs are only those individuals who demonstrate innovative behaviours, a clear definition of innovation is required. However, because innovation is a vague concept, these authors claim that it is difficult to identify an entrepreneur using this definition. Accordingly, this creates difficulties for understanding the whole concept of entrepreneurship. By way of a more practical approach, Gartner et al. (1994) have proposed that entrepreneurs should be referred to as individuals who create, and are

actively involved in the management of, organisations. Using venture creation as a criterion for inferring entrepreneurship is also recommended by Rauch and Frese (2000) because founding, owning, and managing a business are easily identifiable behaviours.

As mentioned earlier, studies that look at entrepreneurial behaviour as a determinant of business success in SMEs have taken a similar approach to managerial work on successful leaders. One line of research focuses on personality traits in profiling successful entrepreneurs (Chell, Haworth, & Brearley, 1991; Entrialgo et al., 2000; Frese et al., 2002; D. C. McClelland, 1987; S. Singh, 1988). Another takes a broader perspective, focusing on the competencies (i.e., competency approach) of the individuals in the entrepreneurial process. The following section will discuss further on these two approaches.

2.4.1 Personality traits approach

As noted in the last paragraph, research into the relationship between personality and entrepreneurship demonstrates noticeable parallels to research into the relationship between personality and leadership (Korunka, Frank, Lueger, & Mugler, 2003). The personality traits approach assumes that there are distinct traits and motives that distinguish entrepreneurs from non-entrepreneurs, and successful entrepreneurs from unsuccessful entrepreneurs. This approach has involved entrepreneurial “profiling”. According to McClelland (1961), traits are inborn natural capacities that are developed in the early years of an individual’s life and are difficult or impossible to alter by training (Parry, 1998). Successful entrepreneurs have been described as extroverted risk takers who are creative, flexible, and independent (Ibrahim & Goodwin, 1986). Likewise, Cunningham and Lischeron (1991) profile successful entrepreneurs as individuals who are assertive, extroverted, sociable, single-minded, diplomatic, decisive, and judgmental. Interestingly, in the leadership research, these traits that have often been associated with the so called “great people” or “great leaders” (Robbins, 1998). Others depict successful entrepreneurs as people with a high need for achievement, an internal locus of control, and a risk taking propensity (D. Y. Lee & Tsang, 2001; Pearson & Chatterjee, 2001). Although attractive for its simplicity and common-sense appeal (Cunningham & Lischeron, 1991), there are limits to the usefulness of the approach, with the results reported in the literature showing considerable inconsistency (Rauch & Frese, 2000).

A second major criticism of the trait approach is that it views human potential as static, and incapable of development and change, thereby limiting the capacity to intervene (Caird, 1990). A third problem concerns the large number of traits that have been identified as being associated with successful entrepreneurship. As Gartner (1988, p. 21) argues:

A startling number of traits and characteristics have been attributed to the entrepreneur, and a psychological profile of the entrepreneur assembled from these studies would portray someone larger than life, full of contradictions, and conversely, someone so full of traits that (s) he would have to be a sort of generic everyman.

In addition to the problems above, it has also been extremely difficult to establish a causal relationship between traits and behaviours (Brockhaus & Horwitz, 1985; Delmar, 2006). The evidence suggests that personality traits are generally not reliable predictors of future behaviour (Ajzen, 1987; Gartner, 1988). This observation is consistent with research showing that having certain traits does not guarantee success. Specifically, it has been found that need for achievement, locus of control, and risk-taking propensity correlate only weakly with business performance (Aldrich & Wiedenmayer, 1993). Even when significant, the correlation between need for achievement and success accounts for less than 7% of the variance (B. R. Johnson, 1990). Consistent with this, recent studies have found very little evidence of a causal relationship between traits and successful entrepreneurship. For example, Entrialgo et al. (2000) studied the effects of three personality traits (i.e., locus of control, need for achievement, and risk taking) on business success among 233 Spanish SMEs and found evidence that suggests a nonsignificant correlation between the psychological traits and business success (i.e., measured by satisfaction with profitability and business growth). Accordingly, these researchers conclude that these traits might have indirect effects, on business success, only via their influence on the strategic behaviours of the managers. Overall, then, the traits theory of entrepreneurship is seen as insufficient for explaining a firm's success because personality traits are poor predictors of behaviour (Heffernan & Flood, 2000) and may influence success only indirectly, by influencing the likelihood of the entrepreneur displaying a particular behaviour.

The lack of success of the "trait" approach has led some to argue that the search for individual factors should be totally abandoned. Some economists, for example, suggest that entrepreneurial behaviour is actually caused by the environment, for instance, imperfections in the market create opportunities for entrepreneurs to earn more wealth (Kirzner, 1985). While emphasising the role of external market forces in motivating entrepreneurial behaviour, it has been suggested that this model fails to explain why some individuals are able to perceive and exploit environmental opportunities, while others are not (Busenitz & Barney, 1997). In view of this, Gartner (1988) suggests that the utilisation of a behavioural approach is a more productive perspective in studying issues related to entrepreneurship, especially in linking individual behaviour to firm performance.

More recently, approaches to the study of entrepreneurs have attempted to reintroduce traits, by making them part of a “bigger picture” endeavour to understand the competencies associated with business success (Kiggundu, 2002). In a study conducted by Baum and Locke (2004), it was observed that “passion” (a trait) has an indirect effect on venture performance. Consequently, the authors suggested that the weak association of this trait with performance revealed by earlier studies “may not have been caused by studying the wrong traits but by the fact that the trait has an indirect effect rather than direct effect on performance” (p. 596).

2.4.2 The competency approach

In advocating a competency approach, firstly, it is necessary to have a clear understanding of the concept of a competency. Many definitions of “competency (ies)” appear in the literature, leading to considerable confusion around what exactly is meant by the concept. The most basic argument pertains to the difference between “competency (ies)” and “competence”. These terms are often used interchangeably, despite being seen as distinct concepts by some scholars. For example, Rowe (1995) defines “competence” as a skill or standard of performance, in contrast to “competency (ies)” which he argues refers to a behaviour in which performance is achieved. In an extended review of the various meanings attributed to competencies, Hoffmann (1999) observes that competencies have been defined in three different ways: (i) observable performance (the output); (ii) the standard of the outcome, or result, of a person’s performance; and (iii) the underlying attributes of a person, such as his/her knowledge, skills, and abilities. Most studies that attempt to understand managerial competencies adopt this third definition of competency.

Clearly, the meanings given to the concept of a competency, or competencies, drawn from the management and entrepreneurship literature are based on the concept being used in ways ranging from very broad to more specific, as illustrated in Table 1.

Table 1 *Definitions of Competencies*

Scholar	Definitions of competencies
Boyatzis (1982)	underlying characteristics of a person in that it may be a motive, trait, skill, aspects of one’s self image or social role, or a body of knowledge which he or she uses (p. 21).
Brophy and Kiely (2002)	skills, knowledge, behaviours and attitudes required to perform a role effectively (p. 167).
Parry (1998)	a cluster of related knowledge, attitudes, and skills that; (1) affects a major part of one’s job, (2) correlates with performance on the job, and (3) can be improved via training and development (p. 60).
Tett, Gutterman, Bleier, and Murphy (2000)	an identifiable aspect of prospective work behaviour attributable to the individual (p. 215).
Thompson et al. (1997)	integrated sets of behaviours which can be directed towards successful goal accomplishment (p. 52)
Woodruffe (1992)	the set of behaviour patterns that the incumbent needs to bring to a position in order to perform its task and functions with competence (p. 17)

Four important facets of competencies appear to be common to these definitions:

1. Competencies include overall characteristics of an individual that are related to the effective performance of a given job.
2. Competencies are manifested in the individual's behaviour, and are therefore observable and measurable.
3. Competencies facilitate the accomplishment of goals and objectives.
4. Competencies are resources in the organisation that can be fostered and nurtured.

Based on the above description, it is argued that understanding business success as arising from competency provides an approach to intervention (Bird, 1995; Burgoyne, 1993; Parry, 1998). Wallace (1998), in a study of the impact of small business courses on competencies, confirmed that training programs for entrepreneurship could achieve their aim of developing entrepreneurial competencies. In addition to providing a focus for intervention, McClelland (1973) suggests that the competency approach is valuable insofar as being able to reduce the bias of the traditional personality approach. Despite its advantages, Sadler-Smith et al. (2003) have identified a caveat to the general endorsement of the competency model of entrepreneurial success. Specifically, they make the important point that research to date typically does not distinguish entrepreneurial competencies from managerial competencies. The identification of the specific competency requirements of the entrepreneur therefore remains an important research task.

2.5 The Concept of Entrepreneurial Competencies

As indicated in the previous section, entrepreneurial competencies can be defined as “underlying characteristics such as generic and specific knowledge, motives, traits, self-images, social roles, and skills which result in venture birth, survival, and/or growth” (Bird, 1995, p. 51). Muzychenko and Sae (2004) differentiate between innate and acquired aspects of competency. The former involve traits, attitudes, self image and social roles and the latter involve components acquired at work or through theoretical or practical learning (i.e., skills, knowledge, and experience), and are sometimes referred to as “internalised elements” (Bartlett & Ghoshal, 1997) while the latter are often referred to as “externalised elements” (Muzychenko & Sae, 2004). The internalised aspects of competencies are difficult to change, whereas the externalised elements can be acquired through proper training and education programs and need to be practised (Garavan & McGuire, 2001; Man & Lau, 2005). In the context of an SME, these competencies are

normally studied as characteristics of the entrepreneur, who owns and actively manages the business (Gibb, 2005; McGregor & Tweed, 2001).

For the purpose of the present study, entrepreneurial competencies are defined as individual characteristics that include both attitudes and behaviours, which enable entrepreneurs to achieve and maintain business success. Specifically, in this study, entrepreneurial competencies are comprised of the entrepreneur's motives, traits, self-image, attitudes, behaviours, skills, and knowledge (Boyatzis, 1982; Brophy & Kiely, 2002). Measuring these dimensions, particularly those representing non-behavioural elements, is a challenge because internal characteristics (i.e., need for achievement, self confidence, and risk taking) are hard to observe and must be measured through introspection and self report, or inferred from an entrepreneur's behaviours.

2.5.1 Linking entrepreneurial competencies and the roles of entrepreneurs

Chandler and Jansen (1992) suggest that, in order to explore the competencies required by entrepreneurs in managing their own businesses, researchers should first understand the roles played by entrepreneurs as owner-managers. The available literature suggests that entrepreneurs, particularly those in small businesses or SMEs, are engaged in three important roles: the entrepreneurial role; the managerial role ; and the technical or functional role (Baum & Locke, 2004; Beaver & Jennings, 2005; Chandler & Jansen, 1992). Various tasks are associated with the entrepreneurial role, including developing a challenging but achievable vision, formulating strategies, recognising unmet consumer needs, scanning the environment, spotting high quality opportunities, and producing superior products or services (Chandler & Hanks, 1994; Chandler & Jansen, 1992; J. L. Thompson, 1999; C. K. Wang & Ang, 2004). The entrepreneurial role also requires commitment and strong dedication on the part of the entrepreneur (D. C. McClelland, 1987). This commitment to see a venture through to fruition, as Chandler and Jansen (1992) describe it, is generally evidenced by intense effort and a willingness to work long hours, especially in the early years of start up (J. L. Thompson et al., 1997).

The second major role of entrepreneurs is the managerial role, which essentially reflects the traditional role of managers in any organisation. Since most entrepreneurs in SMEs are owner-managers, who typically have no assistance from a specific unit or department to help them perform managerial tasks, such tasks become the sole responsibility of the entrepreneur. Taking up the managerial role requires entrepreneurs to engage in planning, organising, directing, and controlling various resources in the organisation (Chandler & Jansen, 1992). Planning involves devising a systematic process for attaining the goals of the organisation, whereas organising involves arranging the

necessary resources to carry out the plan (Chandler & Hanks, 1994). These resources include people, jobs or positions, technology, facilities and equipment, materials and supplies, information, and money (Barney, 1991). Directing concerns guiding, leading and motivating the employees to achieve organisational goals. Finally, controlling involves verifying that actual performance matches the plan, and if performance results do not match the plan, identifying the corrective action to be taken. Performing managerial tasks requires interpersonal and communication skills. It also requires the capacity to act in a number of roles including figurehead, leader, liaison, disseminator, spokesperson, disturbance handler, and negotiator (Mintzberg, 1973).

The third role of entrepreneurs operating in SMEs is the functional role. Undertaking this role requires entrepreneurs to possess the ability to utilise tools, technical knowledge, and procedures relevant to the specific business (J. R. Baum, 1995; Chandler & Jansen, 1992; Martin & Staines, 1994; Winterton, 2002). These skills are required because the entrepreneur must make decisions about the business and its systems, in addition to training staff.

2.5.2 Existing models of entrepreneurial competencies

It has been argued that the competencies required by managers and entrepreneurs may differ, with those required by the entrepreneur being more complex (Busenitz & Barney, 1997). Hodgetts and Kuratko (2001) agree that there is a distinction between entrepreneurial behaviours and managerial behaviours, but assert that in managing a business, each complements the other, such that the ability to blend these two areas of competencies is crucial to success. Similarly, according to Sadler-Smith et al. (2003, p. 48):

Entrepreneurship and managerial competence represent two important and complementary strands for small firm research and practice that appear to have led largely separate existences. An exploration of both of these issues may help to further meaningfully circumscribe the areas of entrepreneurship and small business management and to shed additional light on those managerial behaviours that are associated with entrepreneurship and small firm performance.

Similarly, Bird (1995, p. 68) argues that:

We need a good theory of entrepreneurial competencies. We can ‘borrow’ the concept and related theory of competency from the management and education literatures and we can extend and ‘tweek’ the competencies to be more representative of what successful entrepreneurs do.

Accordingly, it is important to highlight some of the prominent models of managerial and entrepreneurial competencies.

2.5.2.1 Models based on studies of managers

A model of managerial competencies developed by Hay/McBer Associates (a company established by McClelland and Boyatzis), called the “Integrated Competency

Model” (Boyatzis, 1982) or ICM, is perhaps one of the foundation studies that provides insight into the development of models of entrepreneurial competencies. This model outlines the themes and associated clusters of competencies that are deemed important for managers (see Table 2). In the context of the present study, it is assumed that because entrepreneurs are required to engage in a managerial role, among others, the ICM provides a useful framework to guide entrepreneurs in performing managerial tasks.

Table 2 *Hay/McBer Competencies: Themes and Clusters*

Integrated Competency Model Themes	Clusters
1. Understanding what needs to be done	Reasoning, Visioning, Know How, Expertise
2. Influencing and gaining support	Communications, Interpersonal skills, personal impact, direct influencing, organisational influencing
3. Producing the results	Directing, motivating, productivity
4. Achieving against the odds	Enterprise which includes self motivation, initiative, tenacity, information seeking Confidence which includes self confidence, decisiveness Achievement which includes achievement drive, calculated risk taking Resilience which includes self control, flexibility and stress tolerance

In an analysis of “competencies as part of human resources management, Parry (1998) suggests that the core competencies of managers encompass four main clusters: (i) Administrative, (ii) Communicative, (iii) Supervisory, and (iv) Cognitive. He firmly believed that a means to evaluate managers’ performance in an organisation is by analysing his/her competencies. As with the Integrated Competency Model, this model offers useful insights into the competency required by entrepreneurs to perform managerial role. The indicators of these competencies are illustrated in Table 3 below.

Table 3 *Core Management Competencies*

Core competencies	Indicators
1. Administrative	Time management and prioritising Setting goals and standards Planning and scheduling work
2. Communication	Listening and organising Giving clear information Getting unbiased information
3. Supervisory	Training, coaching and delegating Appraising people and performance Disciplining and counselling
4. Cognitive	Identifying and solving problems Making decisions, weighing risks Thinking clearly and analytically

Source. Adapted from Parry (1998)

More recently, Bartram (2005) conducted a validation on a model called “The Great Eight Competencies” that emerged from factor analyses and multidimensional scaling analyses of self- and manager ratings of workplace performance. According to the author, the strength of this model is that it reflects the managerial work performance

domain that is consistent with a wide range of models used by practitioners in competency practice and has been supported empirically by other studies. The competency domains of the Great Eight Competencies are presented in Table 4.

Table 4 *Titles and High-Level Definitions of the Great Eight Competencies*

Competency domain title	Competency domain definition
1. Leading and Deciding	Takes control and exercises leadership. Initiates action, gives direction, and takes responsibility.
2. Supporting and Cooperating	Supports others and shows respect and positive regard for them in social situations. Puts people first, working effectively with individuals and teams, clients, and staff. Behaves consistently with clear personal values that complement those of the organisation.
3. Interacting and Presenting	Communicates and networks effectively. Successfully persuades and influences others. Relates to others in a confident, relaxed manner.
4. Analysing and Interpreting	Communicates and networks effectively. Successfully persuades and influences others. Relates to others in a confident, relaxed manner.
5. Creating and Conceptualising	Works well in situations requiring openness to new ideas and experiences. Seeks out learning opportunities. Handles situations and problems with innovation and creativity. Thinks broadly and strategically. Supports and drives organisational change.
6. Organising and Executing	Plans ahead and works in a systematic and organised way. Follows directions and procedures. Focuses on customer satisfaction and delivers a quality service or product to the agreed standards.
7. Adapting and Coping	Adapts and responds well to change. Manages pressure effectively and copes well with setbacks.
8. Enterprising and Performing	Focuses on results and achieving personal work objectives. Works best when work is related closely to results and the impact of personal efforts is obvious. Shows an understanding of business, commerce, and finance. Seeks opportunities for self-development and career advancement.

Source. Adapted from Bartram (2005, p. 1187)¹

Even though these competency models were developed for managers employed in larger organisations, they provide a theoretical basis for entrepreneurship researchers on the important competency areas that need to be given more emphasis.

2.5.2.2 Models based on studies of small business owners and business life-cycle

Snell and Lau (1994) undertook a qualitative study to understand the competencies important for the owners and senior managers of small businesses in Hong Kong. The sample was 21 Chinese-run small businesses having less than 500 employees. Data collection was via interviews (which utilised open-ended questions) and the critical incident method. The findings revealed that the important competencies for small growing firms are: having a vivid vision and clear purpose; having the ability to formulate effective strategy; using a strategic approach to human resource management; promoting a learning culture; maintaining closeness to customers; and a concern for quality. Since this study was qualitative-based, further validation using a larger sample of entrepreneurs is required to enhance its generalisability.

¹ The competency domain titles and definitions belong to the SHL Universal Competency Framework™ Profiler and Designer Cards; as published in Bartram (2005).

Research by Thompson et al. (1997) that investigated 30 SMEs in Northern Ireland has differentiated the competencies needed at the different stages of a firm's development. Competencies found to be important at the early stage of development included foresight and strategic planning, flexibility (ability to change), having a focused mind, fearlessness, tenaciousness, drive and dedication, communication skills, initiative flair, ability to create a good profit margin, global awareness, and an ability to motivate others. According to these researchers, competencies important to managing a new venture at all stages of development included financial management skills, advertising skills, ability to assess people and their fit with the organisation, ability to socialise easily, understanding of outside forces, ability to identify customer needs, teaching/training skills, problem solving capability, being adventurous financially, honesty with oneself, and ability to sell ideas.

Winterton (2002) has proposed a multi-dimensional framework of entrepreneurial competencies required by SME managers that comprises four competency domains, which includes: cognitive, functional, personal, and meta-competencies, based on his four different projects undertaken in the UK. According to the author, cognitive competency refers to the possession of knowledge relevant to the business. Functional competency includes goal and action management, leadership skill, and human resources skill. Personal competency includes acting assertively, behaving ethically, building teams, communicating, focusing on results, influencing others, managing self, and searching for information. Finally, meta-competencies refer to higher-order abilities that include the ability to learn, adapt, anticipate, and create. This model however, is yet to be empirically validated.

2.5.2.3 Validated models of entrepreneurial competency

Although the proposed frameworks described above have been important initiatives, their real contribution rests on the extent to which they have been empirically validated. Some researchers (Bird, 1995; Kiggundu, 2002) have argued strongly for the rigorous testing of these models in further qualitative and quantitative studies. Only a few such studies have been undertaken (Chandler & Jansen, 1992; Georgellis, Joyce, & Woods, 2000; Man, 2001; Martin & Staines, 1994; McGee & Peterson, 2000).

A quantitative study conducted by Chandler and Jansen (1992) that utilised a mail-out survey among 134 business founders in the State of Utah identified five competency areas (viz., ability to recognise opportunities, political competency, drive to see venture through to fruition, human/conceptual competency, and technical/functional competency) that were found to be significantly correlated to venture performance (i.e., that is measured by self-report profitability and firm growth dimensions). Competencies were factor

analysed and internal consistency addressed with factors returning a mean alpha of .75. Specifically, it was found that founders of highly profitable ventures rated themselves highly on managerial and technical competencies. Caution however, needs to be taken if this model is to be adapted to other contexts, given that the sampling frame was limited to a relatively small geographical area (the State of Utah). Its limitations aside, this model could aid in the operationalisation of entrepreneurial competencies for the present study.

Martin and Staines (1994) utilised both a qualitative and quantitative approach to understand the differences in managerial competencies between independent and multi-establishment SMEs (part of a larger chain of SMEs). Thirty business owners and managers in small firms in Scotland were interviewed and 150 responses were obtained from a mail-out survey. The interviewees expressed the importance of possessing technical knowledge of their industry. It was also found that operating in both types of SMEs (i.e., independent and multi-establishment SMEs) requires more universal competencies, especially those related to functional areas (i.e., managing people, finance, and production). Specifically, a factor analysis identified two important competencies: (i) personal competency and (ii) managerial and technical competency. Personal competency included the personal qualities of the manager such as an outgoing personality, approachability, being good with people, honesty, risk taking behaviour, creativity, leading by example, having a concern for performance standards, having ambition for oneself, and having self confidence. Managerial and technical competency included managerial experience and skills, technical skills, and knowledge of the industry. Martin and Staines' research provided some validation of existing competency models insofar as there was considerable overlap between the competencies they identified, and the competencies identified in earlier studies.

Using a sample of 300 small independent businesses drawn from Central London, Georgellis et al. (2000) examined how entrepreneurial behaviour affects business performance. Two competencies, the capacity to plan ahead and the capacity to innovate, were strongly predictive of small business performance, which is measured in terms of business growth (via self report). Another study by McGee and Peterson (2000) used a sample of 255 independent drugstore (retail pharmacies) owners in the US to demonstrate a positive relationship between the competencies and the business performance as measured by self-report performance relative to competencies in terms of gross profit, net income, and overall performance. The areas of competency identified were: (i) quality of customer service; (ii) the method of handling customer complaints; (iii) the business image; (iv) an effective pricing strategy; (v) effective cost containment; (vi) control and

evaluation of activities; (vii) putting plans into action; (viii) awareness of strength; and (x) employee training. The author indicated the need to replicate the result in other industries.

A recent study by Man (2001) that attempted to examine the effect of entrepreneurial competencies and firm performance among SMEs in Hong Kong's service sector have utilised both qualitative and quantitative methods to develop a model of entrepreneurial competency. Based on the interviews conducted with 19 SME owners, the author identified seven competency areas that were perceived important by these entrepreneurs including (i) Opportunity, (ii) Relationship, (iii) Conceptual, (iv) Organising, (v) Strategic, (vi) Commitment, (vii) Learning, and (viii) Personal Strength. Further validation of these competencies was undertaken via exploratory factor analysis using data obtained from a quantitative study (based on a survey conducted among 153 SME owners in Hong Kong's service sector). The findings showed that the competencies identified were reliable with internal consistency values ranging from .78 to .94 (see Appendix A). Specifically, the factor analysis generated ten competency areas, retaining all the competencies proposed earlier, with Conceptual and Organising competencies each divided into two other sub-domains; Conceptual (Innovative and Analytical) and Organising (Human and Operational)².

Studies of entrepreneurial competencies and their association with business success are noteworthy for the considerable overlap in content that is evident³. It is difficult to accurately compare either competency domains or behaviours associated with competencies because of the generic, or idiosyncratic, manner in which they are defined. Nonetheless, Table 5 provides an attempted synthesis, by the author, of the models and indicates that Man's (2001) model is among the most comprehensive of the models. It can be seen from Table 5 that the behaviours identified in most other studies could be categorised according to the competency areas defined by Man.

In addition to its comprehensiveness, the use of Man's (2001) model of entrepreneurial competencies offers one other advantage. Unlike many other studies, data validating this model were collected in an Asian rather than American or European context; the model could therefore be assumed to be less contaminated by a "western" perspective⁴ than existing models.

² Note that in the present study, "Innovative and Analytical" were aggregated as Conceptual Competency and "Human and Operational" were aggregated as Organising Competency, reflecting Man's (2001) proposed model.

³ A comparison of the behaviours that define competency is provided in Appendix A.

⁴ This is of course debatable and many would argue that Hong Kong is a strongly westernised environment. Moreover, there is just as likely to be bias arising from a model conceptualised according to eastern assumptions as there is from one conceptualised according to western assumptions.

There are, however, a number of potential problems with the use of this model in the present study. Validation of the model was based on the competencies of entrepreneurs in the service sectors (wholesale trade and IT services), and this limits the generalisability of the results. In addition, the strong correlation between all competency areas identified in Man's (2001) study raises important concerns about multicollinearity and the possible unreliability of the findings, which has not been addressed in the study. Despite several limitations, the competency model developed by Man (2001) was utilised as the basis for model development in the current study.

Table 5 A Synthesis of Behaviours Reflecting Competencies Identified in Previous Studies

Competency area	Examples of behaviours	Model of entrepreneurial competency									
		1	2	3	4	5	6	7	8	9	10
Strategic ^a	Develop vision and strategy, plan ahead, set goals and standards, sell ideas.				*			*	*	*	*
Commitment ^a	Demonstrate strong motivation to compete, drive to see venture through to fruition, capacity to make an impact, drive and dedication.		*		*		*			*	
Conceptual ^a (Innovative and Analytical)	Demonstrate the possession of cognitive ability and decision-making skill, ability to weigh risks, think analytically, be innovative, be creative, show reasoning, capacity to reduce risks.	*	*		*	*			*	*	*
Opportunity ^a	Ability to recognise opportunity, ability to capture opportunity, ability to identify customers need.	*	*		*		*		*	*	
Relationship ^a	Possess and use good interpersonal and communication skills, ability to influence others and gain support.		*		*	*	*	*	*	*	*
Organising ^a (Human and Operational)	Ability to direct, lead, delegate, motivate, plan and schedule work, develop program, prepare budget.	*	*		*	*	*	*	*	*	*
Personal ^a	Demonstrate the possession of high self-motivation, awareness of own strength, self-confidence, achievement drive, resilience, time management, accountability, persistence and determination.				*	*	*	*		*	*
Learning ^a	Constantly seek new information, open to new information, learn from various means.				*				*	*	
Technical ^b	Demonstrate the possession of technical skills, show an understanding of business and industry.	*	*			*				*	*

^a Competency areas identified by Man (2001).

^b A competency area identified by Chandler and Jansen (1992).

^c Literature source: (1) Baum (1995); (2) Chandler and Jansen (1992); (3) Georgellis et al. (2000); (4) Man (2001); (5) Martin and Staines (1994); (6) McClelland (1987); (7) McGee and Peterson (2000); (8) Snell and Lau (1994); (9) Thompson et al. (1997); (10) Winterton (2002).

2.5.3 Developing a new model of entrepreneurial competencies

The research summarised thus far highlights the inadequacy of existing models. Firstly, there is a lack of empirical validation of most models, with only a minority of the studies described presenting validation data. Bird (1995) identifies this as a major flaw and argues that before a model can be used to define training objectives, psychometrically sound tools for measuring competencies should be developed and validated.

Secondly, most models of entrepreneurial competencies have been developed within western societies with scant, if any, attention paid to the influence of country, culture, or business sector (Saffu, 2003). Pearson and Chatterjee (2001) suggest that entrepreneurial competencies may be context dependent, and that important aspects of context include culture, politics, history and geography.

Thirdly, there is the possibility that the validity of competency models will not be invariant across time. The models of entrepreneurial competencies described here were generally developed in the 1990s, under a specific set of global, economic, and political circumstances. Iversen (2000) has argued that changing business demands may require different competencies from those relevant to the latter part of the 20th century. In the context of SMEs, the competitive environment and the increasing particularity of customer preferences bring about new challenges for entrepreneurs. Temtime and Pansiri (2005) suggest that as competition increases, entrepreneurs need more than just basic skills and knowledge to manage their businesses. One practical way to cope with societal changes is to develop competencies that are relevant to the demands of the time.

In view of the inadequacies of existing models, the present effort to develop a model that links business success to entrepreneurial competencies cross-culturally can be seen as timely. The studies described in this thesis attempt to achieve this by building on the best of the existing work on competencies. The criteria for selecting the best model of entrepreneurial competencies included: the comprehensiveness of the model and the relevance of the competencies including the needs of entrepreneurs, as identified via face validity; the psychometric properties of the scales used to measure competencies, including their reliability and validity; and the replicability of the testing protocol. On the basis of these criteria, Man's (2001) model of entrepreneurial competencies has been selected as the starting point from which to develop and validate a cross-cultural model relating competencies to business success in SMEs in Australia and Malaysia. This model was chosen over a range of alternatives because: (i) it was evaluated as comprehensive (describing a large range of competencies); (ii) it fully described how variables were operationalised; and (iii) the reported psychometric properties of the scales used were

acceptable. This model provides a basis for the classification of behaviours that can be appropriately located in different areas of competency. It is also among the most recently developed of the models considered and was developed in an Asian, rather than a western context, though the extent to which Hong Kong can be considered representative of broader Asia is debatable. However, for the current study, Man's model has been extended to include Technical Competency, as identified by Chandler and Jansen (1992). In addition, Organising competency is labelled "Organising and Leading" to better reflect the definition of this domain. Accordingly, the nine categories of entrepreneurial competencies proposed for use in the present study include Strategic, Commitment, Conceptual, Opportunity, Organising and Leading, Relationship, Learning, Personal, and Technical competencies. These are defined in Table 6.

2.5.4 Domains of entrepreneurial competency

Engaging in various duties including managerial, entrepreneurial, and in many cases functional duties, means that the entrepreneur has to perform tasks and activities that are far more complex than those of managers working in most organisations. Not only are these tasks demanding, but they are multitudinous, and best operationalised behaviourally (Mole, Dawson, Winstanley, & Sherval, 1993). These behaviours, which encompass elements of individual characteristics including traits, motives, beliefs, self-image, social roles, knowledge, and skills (Bird, 1995), reflect the ability of entrepreneurs to perform business activities effectively. To further understand the behaviours that are associated with each competency area, the following more detailed discussion of each competency area is provided.

2.5.4.1 Strategic Competency

Strategic Competency is "a competency related to setting, evaluating, and implementing the strategies for the firm" (Man, Lau, & Chan, 2002, p. 132). Specifically, Man (2001) operationalised Strategic Competency in terms of the following behaviours: (i) being aware of the projected directions and how changes might affect the firm, (ii) prioritising work in alignment with business goals, (iii) redesigning the firm to better meet the firm's objectives, (iv) aligning current actions with strategic goals, (v) monitoring progress toward strategic goals, (vi) evaluating results against strategic goals, and (vii) determining strategic actions by weighing costs and benefits (Man, 2001, p. 304). Additionally, Thompson (1996) has proposed that managing change is a part of strategic competence that could be linked to competitive success, particularly for firms that operate in a dynamic and competitive environment.

Table 6 *Areas of Entrepreneurial Competencies Proposed for this Study*

Entrepreneurial competency domain	Behavioural definitions	Examples of behaviours
Strategic	Competencies related to “setting, evaluating, and implementing the strategies of the firm” (Man et al., 2002, p. 132).	Set challenging but achievable business goals and vision; devise strategies to achieve goals; diagnose the effectiveness of strategies and take corrective action when necessary; make strategic change and use tactics in business.
Commitment	Competencies that “drive entrepreneurs to move ahead with the business” (Man et al., 2002, p. 132).	Sustain effort; commit to long-term goals; commit to personal goals; and restart after failure.
Conceptual	Competencies related to “different conceptual abilities which are reflected in the behaviours of entrepreneurs, e.g., decision skills, absorbing and understanding complex information, risk taking and innovativeness” (Man et al., 2002, p. 132).	Think intuitively and quickly when making decision; view from different angle; innovate; assess risks.
Opportunity	Competencies encompass behaviours related to “recognising market opportunities through various means” (Man et al., 2002, p. 132).	Identify, assess and seek business opportunities.
Organising and Leading	Competencies related to “the organisation of different internal and external human, physical, financial, and technological resources, including team building, leading employees, training and controlling” (Man et al., 2002, p. 132).	Plan, organise, lead, motivate, delegate and control.
Relationship	Competencies related to “person-to-person or individual-to-group-based interactions, e.g., building a context of cooperation and trust, using contacts and connections, persuasive ability, communication and interpersonal skill” (Man et al., 2002, p. 132).	Build relationship and network; communicate; negotiate; manage conflict effectively.
Learning	Competencies related to the ability to “learn from various means, learn proactively, keep up to-date in the related field, and apply learned skills and knowledge into actual practices” (Man 2001, p. 304).	Learn from past mistakes, failures, own experiences, and from other people; apply the learned theories and knowledge into real situations.
Personal	Competencies related to the ability to “maintain a high level of energy, motivate self to function at optimum level of performance, respond to constructive criticism, maintain a positive attitude, prioritise tasks to manage time, identify own strength and weaknesses and match them with opportunities and threats, as well as recognise and work on own shortcomings (Man, 2001, p. 304-305).	Personal qualities include self-confidence; self-awareness; self-motivation; persistence; self-management; positive mindedness.
Technical	Competencies related to “the ability to use the tools, procedures, and techniques of a specialised field” (Chandler & Jansen, 1992, p. 226).	Handle tools and equipment relevant to business; expertise in business-related areas

2.5.4.2 Commitment Competency

Commitment Competency is “a competency that drives the entrepreneur to move ahead with the business” (Man et al., 2002, p. 132). Man (2001, p. 304) measured Commitment Competency using the following behaviours: (i) being dedicated to make the venture work, (ii) refusing to let the venture fail, (iii) possessing strong internal drive to

succeed, and (iv) committing to long term business goals. Other critical component of this competency area is the preparedness to persist through time (Chandler & Jansen, 1992).

2.5.4.3 Conceptual Competency

Conceptual Competency involves possessing “different conceptual abilities which are reflected in the behaviours of entrepreneurs, e.g., decision skills, absorbing and understanding complex information, risk taking and innovativeness” (Man et al., 2002, p. 132). Conceptual Competency for Chandler and Jansen (1992, p. 224) reflects the “mental ability to coordinate all of the organisation’s interests and activities”. According to Michalko (2000), conceptual ability is related to the ability to stimulate new thinking, and develop new ideas and engage in lateral thinking.

Man (2001) operationalised Conceptual Competency by measuring the following behaviours: (i) understanding the broader implication of issues and observations, (ii) translating ideas and observations into the business contexts, (iii) taking reasonable job-related risks, (iv) monitoring progress toward objective in risky actions, (v) looking at problems in new ways, (vi) exploring new ideas, and (vii) treating new problems as opportunities (p. 304). A factorial analysis undertaken by Man identified that Conceptual Competency was divided into two domains: Analytical and Innovative. In this study however, both were aggregated as Conceptual Competency, reflecting Man’s initial model.

2.5.4.4 Opportunity Competency

Opportunity Competency is defined as the ability related to “recognising market opportunities through various means” (Man et al., 2002, p. 132), which is operationalised by measuring behaviours such as identifying goods and services that customers want, perceiving unmet consumer needs, looking for product and services that provide real benefit to customers, and seizing high quality opportunities (p. 304). de Koning (2003) has also associated “opportunity development” among entrepreneurs with the ability to seek, develop, and assess high quality opportunities that are available in the market. It has been suggested that entrepreneurs often see opportunities where others fail to recognise them (Allison, Chell, & Hayes, 2000).

2.5.4.5 Organising and Leading Competency

Previous models of entrepreneurial competencies suggest that organising both the internal and external environment is one of the most important tasks to be mastered by entrepreneurs (Man, 2001). A factor analytical analysis undertaken by Man identified two sub-domains reflecting Organising Competency: Human and Operational. As for Conceptual Competency, the present study aggregates both sub-domains as representing “Organising and Leading Competency”, because they reflect the important wide-ranging

managerial responsibilities that entrepreneurs must assume (Chandler & Jansen, 1992). Specific behaviours that demonstrate this competency include developing plans, allocating resources, organising, motivating and leading employees, coordinating activities, delegating tasks, and keeping an organisation running smoothly (Man, 2001).

2.5.4.6 Relationship Competency

Relationship Competency is defined as “the organisation of different internal and external human, physical, financial, and technological resources, including team building, leading employees, training and controlling” (Man et al., 2002, p. 132). Man (2001, p. 304) operationalised Relationship Competency in terms of developing long term trusting relationship with others, negotiating with others, interacting with others, maintaining a personal network of work contacts, and communicating with others effectively.

In business, entrepreneurs are required to deal with many people including suppliers, customers, employees, government authorities, competitors, and other stakeholders. This contact gives them access to information and other resources (Jenssen & Greve, 2002). Evidence suggests that small firms in particular are critically dependent on their networks, because it is through these that they gain advice and support from professionals and experts such as lawyers, accountants, and consultants (Ramsden & Bennett, 2005), government bodies, research and training institutes, and even suppliers and customers (Ritter & Gemunden, 2004). This is consistent with the resource dependency theory (Barringer & Harrison, 2000), which suggests that entrepreneurs use their social relations to get the resources they need to support their business (Hansen, 2001; Jenssen, 2001). Entrepreneurs therefore, need to possess or acquire interpersonal and communication skills.

2.5.4.7 Learning Competency

Learning Competency refers to the ability to “learn from various means, learn proactively, keep up to-date in the related field, and apply learned skills and knowledge into actual practices” (Man 2001, p. 304). In an era where new knowledge is rapidly created and disseminated, entrepreneurs require learning competencies in order to adapt to the environment (Deakins & Freel, 1998). Learning is said to be central to the entrepreneurial process as it allows entrepreneurs to generate knowledge that helps them reduce possible risks and uncertainty (Moingeon & Edmundson, 1996; Ward, 2004).

A study conducted by Stokes and Blackburn (2002), that attempted to understand business owners’ experience of business failure, revealed that three-quarters of the respondents (from a sample of 386 business owners) had improved their skills in personal management areas (i.e., coping with setbacks, self-management, and adapting to change)

after experiencing business closure. The authors concluded that business owners do learn the hard way - through business closure and failure.

2.5.4.8 Personal Competency

High Personal Competency, demonstrated as the ability to “maintain a high level of energy, motivate self to function at optimum level of performance, respond to constructive criticism, maintain a positive attitude, prioritise tasks to manage time, identify own strength and weaknesses and match them with opportunities and threats, as well as recognise and work on own shortcomings” (Man, 2001, p. 304-305), has been linked to success in entrepreneurs. This domain of competency includes a number of aspects of personality and attitude that are variously named in the literature. Personal competency can include determination and self-belief (J. L. Thompson et al., 1997), self-awareness (Goleman, 1998), self-control and stress tolerance (Markman & Baron, 1998), and self-management (Winterton, 2002). According to Winterton (2002), high performance in this domain assists entrepreneurs face challenges in handling their business. In sum, the personal strength of the business owners is seen as one of the important resources a business has and only those who utilise this competence efficiently will succeed.

2.5.4.9 Technical Competency

Technical Competency refers to “the ability to use the tools, procedures, and techniques of a specialised field” (Chandler & Jansen, 1992, p. 226). Although this domain was not included in Man’s (2001) model of entrepreneurial competency, it has been widely cited as an important area of skill for successful entrepreneurs. It was reported that business owners who managed independent SMEs found technical competency to be important (Martin & Staines, 1994). In a study that examined the effect of specific competencies (technical and industrial skills), Baum et al. (2001) found that technical skill has a positive significant impact on venture growth.

As indicated, the present study proposes nine domains of entrepreneurial competency, described above, that are predicted to influence business success in SMEs in Australia and Malaysia. While competencies constitute the main focus of this study, there is research that highlights the role of environmental factors in determining business success. As such, the study also considers the direct and moderating influence of business environment on business success.

2.6 Influence of the Perceived Business Environment

Business success, including SME success, is inevitably constrained by the opportunities and threats that are presented by the environment in which the business operates (J. Covin & Slevin, 1989; Entrialgo et al., 2001; Naman & Slevin, 1993; Tsai,

MacMillan, & Low, 1991; Zahra, 1993). According to Bloodgood, Sapienza, and Carsrud (1995, p. 131), “the failure to factor in the environment in which the entrepreneur acts limits the extent to which causes of such actions can be comprehended”. This highlights the fact that any discussion of the influence of entrepreneurial competencies on business performance cannot be separated from a consideration of the environment in which these competencies are displayed. The relative influence of entrepreneurial competencies or behaviour and environmental circumstances on business success remains an area of debate. Even though the present study proposes that entrepreneurial competencies are more powerful predictors of success, empirical data is required to test this contention.

Several researchers have highlighted how these two variables interact to affect business outcomes. For example, Herron and Robinson (1993) suggested that an entrepreneur’s actions and decisions are determined by how he/she perceives the business environment. It has been shown that organisations, small or large, are affected by the environment in which they are operating (J. R. Baum et al., 2001; Bull & Willard, 1993).

Because of their lack of market power and critical resources, SMEs are more vulnerable than larger firms to external influences (Entrialgo et al., 2001; Stokes, 2006). More often than not, they are more adversely affected than larger firms by a hostile environment - characterised by intense competition, a shortage of critical resources, severe price wars, and low customer loyalty (Shane & Kolvereid, 1995). However, smaller firms are also better placed than larger firms to respond to their environment and the opportunities it presents in a way that serves their interests (Rice, 2000).

In order to minimise the negative affect of a challenging business environment, it is important that entrepreneurs engage with the environment proactively. In taking such a proactive approach, entrepreneurial competencies come into play. Influential work by Porter (1991) indicates that external factors such as the power of suppliers and buyers, the degree of rivalry, the availability of substitute products and barriers to entry are influential in determining the competitive advantage of an organisation. To deal with the threats imposed by the business environment, Porter suggests that organisations should engage in appropriate strategic activity. In the case of SMEs, the ability to do so depends heavily on the competencies of the business owner, given the role that (s)he typically plays in such firms. This raises a question as to what specific competencies might be required by entrepreneurs to operate successfully in the current business environment.

In this study, two dimensions of business environment are of interest. These are the extent to which the business environment can be described as Benign versus Hostile and as Stable versus Dynamic. In the entrepreneurship literature, both constructs have been used

to characterise the business environment (Entrialgo et al., 2001; Zahra, 1993). The constructs have demonstrated reliability, and scales have been developed that accurately measure them. A Benign environment reflects a munificent setting, characterised by relatively high profit margins, low competitive intensity, and high customer loyalty; a hostile environment is characterised by the opposite features. Environmental dynamism captures the frequency of change and turnover in the external environment, including changes in technology, customer preferences, and competitors' actions.

Past studies have identified differences between the actual and the perceived business environment (Boyd, Dess, & Rasheed, 1993). In conceptualising business environment, some advocate the use of objective measures of business environment (e.g., Goll & Rasheed, 2004), while others believe that a perceptual measure is more important (Sawyerr, 1993; Shane & Kolvereid, 1995). With respect to the latter, Duncan (1972) asserts that behaviour is determined largely by managerial perceptions of the environment. Sawyerr (1993, p. 290) argues that:

...firms respond to the environment perceived and interpreted by the decision makers and that the environmental conditions that are not noticed do not affect management's decisions or actions. Different firms perceive the same environment attributes differently and thus respond with different strategies.

Weaver, Dickson, Gibson, and Turner (2002) studied entrepreneurial behaviours and environmental uncertainty in three countries (i.e., Australia, Norway, and Sweden) and found that the perception of the environment held by key players in the organisation was critical in determining the way they coped with environmental uncertainty. Specifically, based on their perception of the environment, entrepreneurs implemented strategies that they considered to be appropriate to the environment.

2.6.1 Hostile versus Benign business environments

A hostile environment is an environment that presents constant threats to a firm's operations and strategic activities. The presence of strong competitors in this type of environment contributes to the fierceness of competition that the firm encounters (Zahra, 1993). It also signifies the degree of threat to which the firm is exposed, due to the vigour and intensity of the competition and the downswings as well as the upswings of the firm's principal industry. In a hostile environment, firms have to compete with scarce resources (D. Miller & Friesen, 1983). Customer loyalty has been shown to be low and there are severe price wars (J. Covin et al., 1999). The pressure on firms is so intense that one bad decision could easily threaten the viability of the business. The failure rate of companies in a hostile environment tends to be high (Covin & Slevin, 1989). In such an environment,

survival, rather than profitability, is often viewed as a noteworthy accomplishment (J. Covin et al., 1999).

As argued by Covin et al. (1999), in a hostile environment, entrepreneurs therefore need to establish close relationships with suppliers, in order to develop the “purchasing advantage” needed to successfully compete on low price. The authors add that the adoption of aggressive, proactive, or more generally entrepreneurial competitive postures, is required to manage a hostile environment. In a study of 88 US firms conducted by Miller and Friesen (1983), it was found that there was a significantly positive correlation between proactiveness and environmental hostility in firms that are growing more rapidly.

Similarly, as suggested by Zahra (1993, p. 324):

When rivalry is fierce, companies must innovate in both products and processes, explore new markets, find novel ways to compete, and examine how they will differentiate themselves from competitors.

Conversely, a non-hostile (benign) environment is generally safer for business, due to abundant investment and market opportunities, as well as a largely munificent setting (J. Covin & Slevin, 1989). Covin et al. (1999) have described a benign environment as characterised by relatively high profit margins and customer loyalty, low competitive intensity, and general tolerance for poor managerial decisions. Generally, the failure rate in a benign environment is relatively low and success is generally easier to achieve.

Based on the characteristics of these divergent business environments, most researchers subscribe to the notion that environments in general present organisations with constraints and opportunities. Recent empirical studies, however, have raised a question about the extent to which environment moderates the relationship between entrepreneurial behaviours (strategy choices) and business performance. While most, if not all, of these studies have found that business environment plays a significant moderating role, as argued by Covin and Slevin (1989), the interactions do not contribute much to the variance explained in the outcome variable. The limited variance in the interaction between entrepreneurial strategic postures (in which the authors refer to behaviours such as risk taking, innovativeness, and proactiveness) and environmental hostility in their study was consequently attributed to the possibility of greater influence by other organisational variables. Nevertheless, their study found that smaller firms operating in a hostile environment adopted an entrepreneurial posture to obtain higher financial performance. The authors further noted that in benign environments, the relationship between entrepreneurial orientation and performance may be weak and possibly negative. Consequently, although an entrepreneurial orientation in a benign environment could very well produce a competitive advantage, such a posture may not be necessary to sustain

superior performance. As suggested by Covin and Slevin (1989), such behaviours, even though significant in a hostile environment, may not be warranted when faced with a benign environment. Taken in the context of this study, this argument lends support to the moderating role of the business environment in the relationship between entrepreneurial competencies and business success.

2.6.2 Dynamic versus Stable business environments

Environmental dynamism refers to the degree of unpredictable change in an organisation's environment (Goll & Rasheed, 2004). According to Sohi (1996), changes in technology, customer preferences, and competitors' action are some examples of environmental dynamism. He maintains that although the literature uses a variety of terms such as uncertainty, volatility, and high-velocity, these terms all capture the same underlying theme of unpredictable change. A number of researchers in organisational theory have looked at the environment-performance linkage. Their research, which has focused primarily on firm level performance, indicates that the environment can affect performance (Tsai et al., 1991). The role of environmental dynamism in moderating the relationship between organizational variables and firm performance is also well documented. For example, Gilley and Rasheed (2000) found evidence for the moderating role of environmental dynamism in the relationship between outsourcing and firm performance.

According to Lindelöf & Löfsten (2006), environmental uncertainty and turbulence is a regular feature of the smaller firms' business environment, making it essential for the entrepreneur to possess certain competencies. Mascarenhas (1985) argues that an important requirement for an organisation operating in a highly dynamic environment is the ability to adapt to the changing environment and the flexibility to ensure success and survival. Conversely, according to Lozada and Calantone (1996), managers operating in a low dynamism environment have the luxury of added stability and the predictability of environmental change, as well as a greater ability to react to, and change, the environment. The authors conclude that, for an organisation to remain viable, particularly in a turbulent environment, it has to adapt to the changing business environment.

In sum, it is clear that organisations cannot be considered in isolation from the environments in which they operate. The environmental impact, however, could be minimised if entrepreneurs possessed appropriate competencies that enabled them to deal with environmental threats and exploit environmental opportunities. As a strong advocate of this view, Wasilczuk (2000) maintains that in order to mitigate against the potential

negative impact of the business environment, entrepreneurs should equip themselves with appropriate competencies.

Since the present study endeavours to investigate the influence of entrepreneurs' cultural orientations on the behaviours that delineate competencies, it is important to include discussion of cultural orientation and its link to individual behaviours.

2.7 Cultural Values/Cultural Orientations

Hofstede (1991, p. 5) defines culture as “collective programming of the mind which distinguishes the members of one group or category of people from another”. While Hofstede investigates the influence of culture at a country level, other researchers establish that culture could also be studied at an individual level. Specifically, it has been suggested that culture may affect an individual's behaviour and personality (Singelis & Brown, 1995; Triandis & Suh, 2002). Singelis and Brown (1995) believe that culture shapes individual attitudes, values, and the concept of self and that measuring culture at an individual level could further enhance the understanding of the links between culture and individual behaviour. The framework developed by Morrison (2000) has outlined various features associated with culture, as depicted in Figure 1.

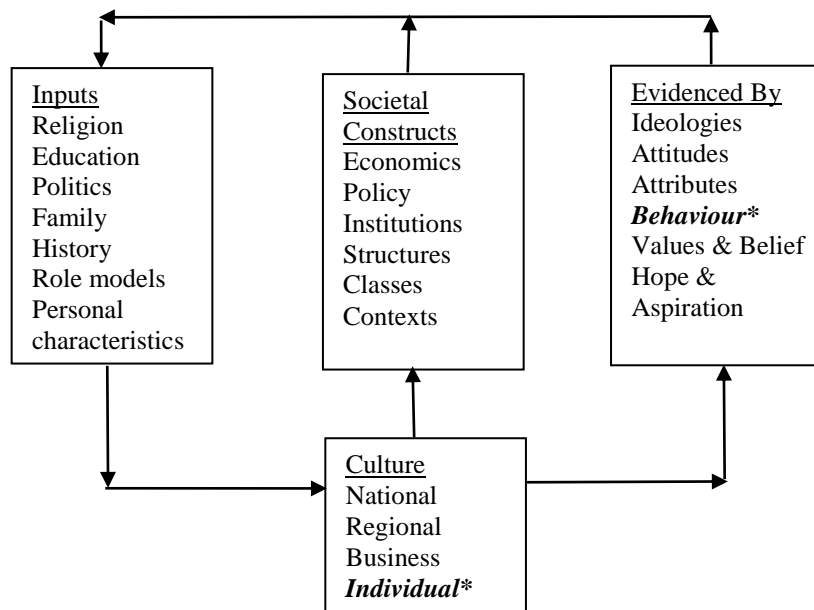


Figure 1. Key features associated with culture.

Source. Adapted from Morrison (2000)

Note. * The focus of the present research.

Of interest in this study is how the cultural orientation of the Australian and Malaysian entrepreneurs might affect behaviours that delineate their entrepreneurial competencies. Specifically, the focus of the present research is on culture at an individual level, in particular, the influence of cultural orientations on entrepreneurs' behaviours.

2.7.1 Culture and individual behaviours

Since the present study looks at these two countries, it is important to note the close link between cultural values and individual behaviour in order to understand how cultural values differentially affect entrepreneurs' behaviours in both Australia and Malaysia. This is because culture affects a wide range of human behaviours, which explains why one individual's reactions to a given situation vary from another's (Hofstede, 1980, 1991; Singelis & Brown, 1995). As suggested by Hofstede (1993), culture has a considerable impact on the individual since it is a consistent set of values peculiar to a society which is developed in the early stage of life through a socialisation process. Adopting a similar perspective, Triandis and Suh (2002) argue that culture affects the development of an individual's personality, which in turn, guide his/her choices, commitments, and behaviours.

Since culture shapes individual behaviours, scholars generally agree that, in order to study culture, be it at national or individual level, it is best to measure the behaviours of people who share a similar life experience (such as those who are exposed to a similar socio-cultural environment) (Hofstede, 1991; Triandis, 1995). In this study, the cultural orientations of Australian and Malaysian entrepreneurs are examined to generate an understanding of the effect of culture on the behavioural manifestations of the competencies of the entrepreneurs.

Geletkanycz (1997) conducted a study that examined the effect of four cultural values (i.e., using Hofstede's cultural dimensions) on "openness to change" using a sample of 1540 top managers from 20 different countries. He found that cultural values not only shape managers' views of organisations and the external contingencies they face, but also their preferences for different courses of action. He also found evidence that the cultural values of top management affect their behaviours and actions, particularly in terms of openness towards change.

Therefore, even though Hofstede's research on culture is based primarily on a national level of analysis, other researchers have developed measures to examine culture at an individual level. Research focusing on the individual level of analysis is said to offer many benefits especially in organisational studies (Dorfman & Howell, 1988; Oyserman, Coon, & Kimmelmeier, 2002; Triandis, 1995). Specifically, according to Triandis (1995), it provides the advantage of linking individual cultural orientation with both individual level outcomes such as job satisfaction, job commitment, and job performance and organisational level outcomes such as organisational performance and business success. This level of analysis may provide a promising avenue for the study of

entrepreneurship, given the importance of understanding how the values and beliefs of an individual influence the behaviours that define his/her competencies.

2.7.2 Culture, entrepreneurship, and entrepreneurial competencies

The relatively new but growing body of literature concerning the effects of culture on entrepreneurship indicates that many factors underlying entrepreneurial behaviours revolve around culture (Pearson & Chatterjee, 2001). Correspondingly, Hayton, George, and Zahra (2002) regard culture as one of the important variables in understanding entrepreneurial activities by suggesting that entrepreneurship is culturally bound.

Similarly, Berger (1991, p. 7) makes the point that:

Because entrepreneurship is embedded in culture, such dynamics must be incorporated into our studies of it. ... modern entrepreneurship is a distinctly new variant of a timeless species, created and sustained by culture.

Following this, various studies that attempt to link culture and entrepreneurship have been undertaken. For example, researchers have raised questions in regard to the following: “Are the motives of entrepreneurs to start a business similar or different across culture?” (Scheinberg & MacMillan, 1988); “What effect does national culture have on the national rate of innovation?” (Shane, 1993), and more recently, “Do entrepreneurial traits vary systematically across culture?” (Mueller & Thomas, 2001). Although posing different questions, the findings of these studies suggest that, to some extent, culture does matter in entrepreneurship.

In contrast there is other research that suggests that entrepreneurs across a culture exhibit behaviours that are similar, and that differentiate them from non-entrepreneurs in their native country. For example, Baum et al. (1993) found Israeli and American entrepreneurs were more similar in their attitudes towards achievement, affiliation, autonomy, and dominance than the non-entrepreneurs in their respective countries. Similarly, McGrath, MacMillan, and Scheinberg (1992) revealed that regardless of nationality and cultural background, entrepreneurs shared a set of “entrepreneurial values” that were different from the values of non-entrepreneurs in the same countries. These findings suggest the existence of universal values and behaviours among entrepreneurs that transcend culture.

Notwithstanding this evidence, it is reasonable to expect certain entrepreneurial behaviours that are more culture specific than others. This follows Steensma, Marino, and Weaver (2000, p. 592) who argue that “culture remains a powerful determinant of attitudes and explains key differences across entrepreneurs”. Thomas and Mueller (2000), in their study to examine the variation in entrepreneurial traits in nine countries, concluded that some traits were embedded in culture (i.e., risk taking propensity and internal locus of

control), while others were slightly universal (i.e., innovativeness). Dodd and Patra (2002), who studied the propensity of engaging in “entrepreneurial networking” among 149 Greek entrepreneurs, found that these entrepreneurs (who espouse collectivism values) preferred to engage in strong-tie networks, in which they believed that having strong support and trust from their networks (i.e., family, friends, and personal contacts) may impact positively their venture growth. Comparatively, Dood and Patra argue that US entrepreneurs prefer less personal but larger networks. Taken together, the findings suggest that while some characteristics, traits, and personal attributes of the entrepreneurs appear to be universal, there are others that are culture specific (McGrath et al., 1992). This led Marino, Strandholm, Steensma, and Weaver (2002) to caution entrepreneurship researchers that failure to account for culture in the framework may lead to a biased conclusion and to mistakenly identifying entrepreneurs in one nation as more successful than others.

Similarly, Rao (2004) challenges the conclusion made by several studies that view entrepreneurs in an individualistic culture as more successful than those in a collectivist culture. For example, a study undertaken by McGrath et al. (1992) has suggested that behaviours such as risk taking, proactivity, and innovativeness, that are often associated with entrepreneurial propensity, are found to be strongly embedded in a culture that values individualism and tolerance for ambiguity. In response to this, Rao (2004) argues that if entrepreneurs in collectivist society are less prosperous than those in individualist societies, what explanation can be given for the entrepreneurial success of Singaporean, Japanese, and even Malaysian entrepreneurs who hold strong collectivist values (Rao, 2004). Perhaps a statement made by Pearson and Chatterjee (2001, p. 285) could provide an answer to this phenomenon. They stated that:

The essence of the western conceptualisation of entrepreneurship lies in individualism whereas the foundation of success for the Asian entrepreneurship has been the collective family network support.

These authors further suggest that entrepreneurs in both contexts can be successful in their own ways. Perhaps the reason for the success lies in the presence of a set of entrepreneurial competencies that is applicable in these contrasting contexts.

Specifically, they suggest that:

The personal attributes (of entrepreneurs) may be the same in two different settings (countries) but entrepreneurial competency-mix will need a different portfolio for each context (Pearson & Chatterjee, 2001, p. 276).

It can therefore be inferred that acquiring and adopting the right mix of competencies could possibly increase the likelihood of a business succeeding. This is because culture provides an explanation of how people in a society perceive what best practices are

(Hofstede & Bond, 1988). Since some cultures reinforce certain types of behaviour, it is expected that some behaviours and actions are likely to be more highly practised in one culture than another (Choueke & Armstrong, 2000). For example, Marino et al. (2002) maintain that the entrepreneurs' decisions to form alliances and establish networks are dependent upon culture. Also, it has been found that individualists are less likely to engage in cooperative strategy due to their independent nature (Wagner III, 1995).

Even though studies that link culture and entrepreneurial behaviour (competencies) are limited, the available evidence suggests that the cultural values held by an individual entrepreneur are likely to influence the entrepreneur's mindset, which in turn affects the choice of the competency-mix perceived to be important.

2.7.3 Cultural dimensions

One noteworthy way to differentiate culture is by using the cultural dimensions proposed by Hofstede (1980). These dimensions offer a number of advantages in understanding entrepreneurial behaviours in different cultural contexts. Firstly, they have been verified by many researchers, with the spread of countries surveyed using these dimensions comprising both advanced and developing countries (Saffu, 2003). Secondly, Hofstede's cultural dimensions present a practical model for understanding national culture, which successfully ties cultural values and observable value differences between countries. All of these values are acquired, learned, and shared, to different extents, by all members of the society at varying levels. Thirdly, evidence has revealed that other cultural frameworks have been found to support and strengthen Hofstede's cultural framework rather than offer an alternative framework (Smith & Bond, 1999). Moreover, these cultural dimensions have been found to be significantly related to the behavioural preferences of people in organisation and business settings (Hayton et al., 2002). Finally, Hofstede's model is seen as offering an ideal way to categorise national culture, given its comprehensive, yet parsimonious way of describing cultural values (Lim, 2001; McGrath et al., 1992). Based on these reasons, Hofstede's cultural dimensions are adopted in the present study.

Of interest are Hofstede's dimensions of individualism versus collectivism and uncertainty avoidance versus tolerance for ambiguity. The two dimensions are chosen because they are directly related to the study of entrepreneurship and have often been used to differentiate entrepreneurs and non-entrepreneurs (McGrath, MacMillan, & Scheinberg, 1992; Mueller & Thomas, 2001). Accordingly, these two dimensions were included in this study.

2.7.3.1 Individualism versus Collectivism

The individualism dimension refers to a culture in which individual relationships are loosely-bound and people are expected to be independent and look after themselves with the main focus being on individual pursuits, in which personal goals precede group goals (Hofstede, 1991). This culture places primary importance on the needs and goals of the individual, and generally assumes that individuals are required to look after themselves. In contrast, the collectivism dimension refers to a culture in which people are integrated strongly and have a strong tendency to protect each other, especially family members and close associates. This culture places primary importance on the needs and goals of the society in general. Focusing on collective pursuits, people in this culture consider group interest and affiliation to be among the most important goals. The way decisions are made may also differ between the two cultures. In a collectivist culture, members strive for consensus decisions, while confrontation and voting are more common in individualistic countries where the need to save face is not so prevalent (Hofstede, 1993).

It has been argued that societies that value individualism may have different work goals compared with those who value collectivism. In individualistic societies, members are more attached to the following work goals; (i) preferring jobs that allow them to schedule their own time, (ii) choosing their own way of doing things, (iii) considering challenging jobs are interesting, and (iv) gaining satisfaction through personal achievement (Hofstede, 1991). Conversely, in collectivist societies, the ability of entrepreneurs to meet community obligations and maintain close ties with the community are seen as important for success (Saffu, 2003). Collectivist societies are said to have the following work goals; (i) consensus and harmony, (ii) equality over individual freedom (iii) motivation by security, and (iv) society/group interest (Hofstede, 1991). Evidence shows that in a collectivist culture, entrepreneurs may not necessarily place the primary emphasis on economic gain and profit; rather these goals are often secondary compared to social obligation (Saffu, 2003).

2.7.3.2 Uncertainty Avoidance versus Tolerance for Ambiguity

Uncertainty avoidance relates to a society's reaction towards uncertain situations or unknown events, so that a society that is high on this dimension would try to avoid ambiguous situations (Hofstede, 1991). In other words, uncertainty avoidance refers to the extent to which people within a culture are made nervous by situations they consider to be unstructured, unclear, or unpredictable, and the extent to which they try to avoid such situations by adopting strict codes of behaviour. In the workplace, this orientation is evidenced by three factors: (i) the amount of stress workers report; (ii) a greater need for

structuring activities, including formalisation and standardisation; and (iii) greater rule orientation, a preference for clear instructions, and taking fewer risks (Hofstede, 1984).

Clearly, individuals who value uncertainty avoidance prefer to work in a predictable situation and to have more control over their environment. Hofstede (1991) adds that even though they prefer to work in a predictable environment, they are willing to confront risky situations in order to reduce the level of uncertainty they are facing and will strive to minimise risky situations. It has also been indicated that societies that score high on individualism and low on uncertainty avoidance have a higher economic growth and a greater tendency to innovate (Hofstede, 1984). High individualism combined with low uncertainty avoidance is thought to encourage innovation and increase entrepreneurial propensity (S. M. Lee & Peterson, 2000). The tendency and willingness to innovate would therefore be more prevalent in a highly individualistic culture than in a collectivist culture. As cultures become less individualistic and more collectivist, people are more likely to identify with the group to which they belong, diminishing the degree of control they feel they have over their environments, yet not necessarily diminishing their entrepreneurial propensity (Thomas & Mueller, 2000).

2.7.4 Cultural differences between Australia and Malaysia

2.7.4.1 Australian cultural values

Leo, Bennett, and Härtel (2005) observe that the Australian culture is largely derived from European roots, with the majority of Australians being Anglo-Saxon. Thus, even though Australia is a multiracial country, its dominant culture is strongly influenced by western values. Previous research that has sought to identify the dimensions that characterise Australian culture shows that Australia scores very highly on the individualism dimension, but moderately on the uncertainty avoidance dimension (Hofstede & Bond, 1988). In another study, Abdullah and Lim (2001) compared the cultural dimensions of Anglos, Australians, and Malaysians and found that, whereas the cultural dimensions of the Anglos and the Australians were somewhat similar, the cultural dimensions of the Malaysians were very different. Specifically, Malaysian culture was found to be more collectivist, with a strong emphasis on the “relationship” aspect of the “relationship-task” dimension. The Anglos and the Australians were clearly classified as one group in that they demonstrated a similar pattern of cultural values, with the emphasis being on individualism and the “task” aspect of the “relationship-task” dimension. This finding was consistent with Berrell, Wright, and Hoa’s (1999) finding that Australian managers were more task-oriented than relationship-oriented.

In a recent study that compared the management style of Australian managers with that of Chinese managers from the People's Republic of China (PRC), it was found that Australian managers were less tolerant of uncertainty compared with the PRC managers (Poon, Evangelista, & Albaum, 2005). This result replicated Hofstede and Bond's (1988) finding that the relative scores on uncertainty avoidance for Australian managers were medium (index score of 51), but higher than those of the PRC managers (index score of 30). Interestingly, however, in their comparison of the entrepreneurial characteristics of Australian and Chinese Singaporean entrepreneurs, it was found that Australian entrepreneurs espoused a higher level of tolerance for ambiguity than did their Singaporean counterparts. The mixed findings regarding Australian cultural values, in particular values pertaining to the uncertainty avoidance dimension, suggest the need for further research to ascertain the values of Australian entrepreneurs.

2.7.4.2 Malaysian cultural values

Malaysian society consists of three main ethnic groups: Malays, Chinese and Indians. Owing to its multiracial composition, many have argued that Malaysians hold divergent cultural values. However, the work of Abdullah and Lim (2001) clearly showed that this is not the case. According to the authors, while Malays, Chinese, and Indians in Malaysia have their own unique tradition, language and religious beliefs, the evidence shows that Malaysians share similar cultural values (i.e., collectivism and a relationship orientation). The only difference found among the three races was in terms of religiosity, with Malays holding religious beliefs to be far more important than their Chinese and Indian counterparts.

These results reflect Yusof and Amin's (1999) findings regarding the shared values held by Malaysian teenagers (Malays, Chinese, and Indians). According to these authors, despite their different ethnic origins, Malaysians have streamlined their values under a shared wider socio-cultural environment. Factor analysis was used to identify the values associated with various attributes that the teenagers in their study admired most. It was found that "altruistic" values, comprising forgiving others, helping others, admitting mistakes and looking after aged parents, were admired most, compared with attention-seeking, self-achievement, materialistic and anti-social values. These values mirror the collectivist cultural dimension.

Similarly, in a study by Lim (2001) that replicated Hofstede's research among Malaysians, it was found that there were no significant differences between the Malays and Chinese in work-related values. At the same time, Lim's research provided evidence to suggest that the levels of uncertainty avoidance and individualism in Malaysia have

increased over the past several decades. As suggested by Lim (2001), increased pressure from economic activities, associated with increased attention by the government on economic development, has resulted in higher uncertainty avoidance among Malaysians. A more recent investigation of cultural values in Malaysia by Fontaine and Richardson (2005), using Schwartz's cultural values, provided general confirmation of earlier findings suggesting that Malays, Chinese, and Indians share similar cultural values. They found evidence that 91% of the cultural values they investigated were shared by the three ethnic groups, without any significance difference at 5%.

Notwithstanding the already established differences between Australian and Malaysian cultural orientations, the present study re-examined the cultural orientations of entrepreneurs in Australia and Malaysia. This was, in part, a response to Mellahi (2001), who reminds us that, since values are dynamic, the results of any study should be viewed as values at one point in time. Certainly, Lim's (2001) finding that the uncertainty avoidance dimension of Malaysians has increased over that previously reported by Hofstede and Bond (1988) provides some support for this view. Similarly, Rao (2004, p. 145) argues that:

No society is culturally static. Some societies change their cultural values much faster than others. For example, cultural values in Western societies change faster than many societies in the developing countries because of the forces of modernisation.

Consistent with these claims, Oyserman et al. (2002) question studies that simply presuppose the existence of cultural dimensions that differentiate particular societies, without direct assessments of the actual cultural dimensions of these societies. It is argued that such an approach can lead to problems of generalising the findings because it is unclear whether the differences between the societies are due to cultural elements, or to other country-specific differences. Hence, with the current rapid changes in the social, economic, and political environments of both Australia and Malaysia, as well as the dramatic and widespread influence of western cultural values, further research on the cultural dimensions that currently differentiate these two countries should be conducted before any conclusions can be made about the cultural values of entrepreneurs operating in these contexts.

In summary, by including "entrepreneurs' cultural orientations" as a variable in the current framework, it is anticipated that further insights will be gained into whether the model of entrepreneurial competencies proposed in this study is applicable in both the Australian and Malaysian contexts. Specifically, this will enable the researcher to identify whether or not there are particular competencies that should be given greater

weight in one culture than in another. This, in turn, would help to lay a foundation for the development of appropriate competencies in a given cultural context.

2.8 The Concept of Business Success in SMEs

Clearly, the aim of any business is to be successful, no matter how the concept of business success is defined. With the evidence regarding the achievements of SMEs being somewhat disparaging, there is an imperative to better understand the factors that contribute to SME success. In order to do this, it is first necessary to identify the most relevant success criteria, as perceived by entrepreneurs in SMEs. The accurate measurement of performance and success especially in SMEs is pivotal to ensure the accuracy in identifying the critical success factors of an SME (Murphy, Tailer, & Hill, 1996). Likewise, Watson, Newby, & Woodliff (2000) suggest that it is essential to have reliable and valid measures of SME success in order to explore the relationships between independent variables and business success, and to develop a plausible model of business success in smaller firms.

A review of the literature clearly shows that there continues to be a lack of agreement over what constitutes the best measure of success. One group of researchers advocates the strict use of financial indicators, while the other emphasises the relevance of non-financial indicators of success. The former asserts that the use of traditional financial measures of success such as profitability, sales turnover, and return on investment, is paramount in gauging the extent to which a firm is successful or not (Bruderl & Preisendorfer, 1998). Researchers in this group argue that for organisations to be considered successful, it is important for them to generate income and increases in profit, and to demonstrate some level of growth, as indicated in their sales and income (Perren, 2000). Hall and Fulshaw (1993) add that growth indicates long-term achievement, whereas profitability reflects short-term achievement. Even though some argue that not all small firms aim for growth since, for some entrepreneurs, success simply means survival or sustaining the business that they have created (Beaver, 2002), this group asserts that even if growth is not considered important, survival in business also requires a firm to be financially viable. Researchers following this path have perhaps been influenced by the notion that “businesses are only viable if they are financially solvent” (Marlow & Strange, 1994, p. 9).

In contrast, the latter group stresses the importance of non-financial measures of success (Frese et al., 2002; Hoque, 2004; O'Regan & Ghobadian, 2004). The reason for doing so is made clear by Jennings and Beaver (1997, p. 63) who argue that:

Contrary to popular belief and a great deal of economic theory, money and the pursuit of personal financial fortune are not as significant as the desire for personal involvement, responsibility and the independent quality and life style which many

small business owner-managers strive to achieve. Consequently, the attainment of these objectives becomes one of the principal criteria for success, as defined by the entrepreneur/owner-manager.

Explicit in the above is the idea that the best measure of success for small firms is the attainment of personal objectives such as satisfaction with one's own personal involvement, autonomy, and work-life balance, rather than financial outcome. In a similar vein, Beaver (2002) points out that, for many entrepreneurs, money is not a prime motivator but rather a pleasant by-product of having the freedom to take charge of their own future.

This "either-or" approach to looking at the indicators of success has received some criticism for being a poor reflection of reality. As indicated by Parasuraman, Purohit, Godshalk, and Beutell (1996, p. 276):

Studies on entrepreneurs have adopted a limited view of success, focusing almost exclusively on their business success as indicated by 'hard' measures of firm performance. With limited expectations, these studies have generally ignored the 'softer' more personally defined criteria of success that reflect the internal career.

Accordingly, Wiklund (1999) suggests that financial and non-financial measures complement each other and provide a richer description of actual performance. While it may be insufficient to focus solely on financial performance, discarding this indicator of success may introduce bias into the measurement of business success (Buttner & Moore, 1997). This view is also reflected by Murphy et al. (1996), who argue that:

Organizational performance is composed of multiple dimensions. Financial measures are necessary but not sufficient to capture total organizational performance. Thus, future studies should continue to include financial measures, but non-financial measures need to be emphasized as well...Closer attention to these performance measurement issues will allow empirical studies to be more precise and their results to be more meaningful. As a result, a more reliable and consistent basis will be provided for theory building (p. 22).

Thus, even though some studies argue that entrepreneurs value the attainment of their personal goals more than the financial gains, it may not be appropriate to rely solely on a non-financial measure since such a measure presumes that a certain level of financial security has already been created (Walker & Brown, 2004). Financial success determines a firm's ability to sustain and continue its operations, as well as its ability to grow in the industry. On the other hand, a non-financial measure of success, as indicated by overall satisfaction with goal attainment, would also seem to be relevant given that in smaller firms, achieving the entrepreneur's personal objectives is perceived to be important (Walker & Brown, 2004). Thus, focusing on a narrow range of success measures may be the wrong approach to understanding entrepreneurial success (Lumpkin & Dess, 1996), since financial measures fail to tap the subjective aspects of an entrepreneur's expectations (J. Low & Siesfeld, 1998). Multiple indicators of success are important to improve the

explanatory power of predictors of business success (Murphy et al., 1996). Also, given the complexity associated with evaluating the performance of smaller firms, and the difficulty in obtaining data on firm financial performance, the use of multiple measures of performance is recommended (Haber & Reichel, 2005).

In view of the above arguments, the present study has opted for the use of both financial and non-financial measures of success. Financial measures include profitability, sales turnover, sales growth, return on investment, and market share (Chandler & Hanks, 1993). Among the non-financial indicators that are worth considering for use in this study, given recommendations made by previous scholars, are customer satisfaction, customer retention, owner's self-satisfaction, firm's image and reputation, employees' satisfaction, and good workplace relations. Customer satisfaction is said to have an important role in both the manufacturing and service sectors (Haber & Reichel, 2005). Customer satisfaction is frequently associated with repurchase intention, such that there is a high probability that satisfied customers will recommend the firm's products or services to other potential customers (Adams & Sykes, 2003). Similarly, customer retention, which signifies loyalty, is an important non-financial success indicator, given its demonstrated effect of boosting market share and profitability (Haber & Reichel, 2005). These non-financial aspects are argued by many to enable a firm to secure future revenue, as well as a positive long term reputation (Anderson & Fornell, 2000). Other possible non-financial outcomes mentioned in the popular literature include: customer retention and customer satisfaction (O'Regan & Ghobadian, 2004); and owner's satisfaction and perception of his/her career progress (Frese et al., 2002). Other researchers have also drawn attention to employee satisfaction, relations with suppliers, good business image, workplace relations, and achieving work-life, as important non-financial indicators of success (Hoque, 2004; Walker & Brown, 2004).

Further to the arguments about financial and non-financial measures of success, another group of researchers has drawn attention to the value of a distinction between subjective versus objective measures of success. Naman and Slevin (1993) argue that firm performance can be measured in both objective and subjective ways. However, examining objective success in the context of smaller firms is rather problematic because data on the actual performance of smaller firms is generally not well documented. In addition, comparing the objective financial data obtained for small firms in different industries could be misleading because absolute scores on financial performance criteria are affected by industry-specific factors (Chandler & Hanks, 1993). It has therefore been suggested that

subjective measures are more flexible and thus more useful, particularly for multi-industry comparisons (Covin & Slevin, 1989).

Subjective measures refer to the owner's satisfaction with both financial aspects such as profitability, sales growth, and market share, and non-financial aspects, such as career progress, customer satisfaction, employees' satisfaction, customer retention, workplace relations, owner's satisfaction, and work-life balance (Frese et al., 2002; Hoque, 2004; O'Regan & Ghobadian, 2004). Subjective measures also include the owner's perception of his/her firm's performance relative to major competitors (Chandlers & Hanks, 1993). Since there are no readily available financial reports for SMEs, scholars advocate using the owner's self-reported data to measure the success of SMEs (Chandlers & Hanks, 1993).

2.9 Conclusion

To summarise, the present study argues that refocusing on the entrepreneur is an important step towards understanding the antecedents of business success in SMEs. Based on the foregoing discussion, it is anticipated that entrepreneurial competencies will be a significant determinant of the success, or failure, of SMEs. It is also anticipated that business environment will influence SME success, whether directly or as a moderator of the relationship between entrepreneurial competencies and success. By integrating the individual level (competencies) and the organisational level (business success), as well as two influential external factors (business environment and culture), a more viable model of SME success may be able to be developed. Generating a viable model of SME success is important. For any given nation, its success will depend at least in part on the success of its entrepreneurs, since entrepreneurial activities help to create wealth, job opportunities and national prosperity (Tracy, 2005).

Chapter 3

Advancing a Theoretical Framework That Links Entrepreneurial Competencies, Business Environment, Cultural Orientation, and Business Success

3.1 Introduction

The development of the theoretical framework for this study is based upon the gaps identified in the literature, particularly those related to understanding predictors of SME success cross-culturally. A review of the literature on entrepreneurial competencies suggests that an approach to modelling business success that starts from the premise that the abilities, skills, and behaviours of the entrepreneur are critical to business outcomes has both theoretical and practical appeal (Bird, 1995; Kiggundu, 2002; Man & Lau, 2005; Salomo, Brinckmann, & Talke, 2006). Competencies have attracted much attention in the strategy literature with papers identifying competitive advantage as arising from the “core competencies” and “distinctive competencies” – concepts that are integral to the resource-based view (RBV) of strategy – displayed by larger firms (Barney, 1991; Prahalad & Hamel, 1990; Westhead, Wright, & Ucbasaran, 2001). There is a dearth of studies that relate competencies and business success in smaller firms with interest in this area primarily directed at larger firms (McGregor & Tweed, 2001). As Winterton (2002) has argued, it cannot be assumed that the competencies required to operate SMEs are the same as those required by larger firms. Even so, studies addressing the link between competencies and business outcomes in smaller firms are few (J. R. Baum et al., 2001; Chandler & Hanks, 1994; Chandler & Jansen, 1992; Man, 2001). The present study endeavours to develop and extend the model of entrepreneurial competencies developed in large businesses and examines its causal link with business success in Australian and Malaysian SMEs. In doing so, it focuses on the entrepreneur as the unit of analysis, following McGregor and Tweed’s (2001, p. 280) argument that, in smaller firms, such as in SMEs, “the core competencies of the enterprise become virtually synonymous with the competencies of the manager (entrepreneur as owner-manager)”.

While the individual competencies of entrepreneurs are thought to be constituted within several competency domains, there is a lack of consistency in the definitions of the domains that are offered as well as behaviours representing each domain (Salomo et al., 2006). This lack of consensus may reflect the spread of studies across different business sectors, with individual studies focusing on industry specific competencies. Another limitation of existing research in this area is that the studies that have investigated the competency needs of entrepreneurs have focused on a limited number of competency

domains, with the majority emphasising the opportunity recognition, networking, and strategic behaviours of entrepreneurs (de Koning, 2003; Hills, 1995; O'Gorman, 2001; Pech & Cameron, 2006; R. Singh, Hills, & Lumpkin, 1999). The assumption underlying this emphasis is that the “important” and “relevant” activities undertaken by entrepreneurs are those that relate to the entrepreneurial role, as it has traditionally been defined. It is possible that this failure to recognise the broader competencies required of entrepreneurs, especially those related to the managerial and technical roles, may have compromised the capacity to predict business success from an analysis of entrepreneurial competencies. The need for a comprehensive analysis of competencies is clearly articulated by Garavan and McGuire (2001, p. 158) who argue that “to be of value, competency models need to encompass the total range of competencies necessary for effective performance”.

Drawing largely on Man's (2001) work for its model of entrepreneurial competencies, the present study is an attempt to bridge the gaps in the entrepreneurship literature described above, by utilising a comprehensive model of competencies and examining its link to business success in SMEs across sectors. The study also extends existing research by examining the cross-cultural relevance of the proposed competency model. According to Thomas and Mueller (2000), the lack of research in diverse contexts has been a persistent problem with respect to the application of entrepreneurship theory internationally. Moreover, according to these authors: “international comparative studies of entrepreneurship are rare, hampered by barriers such as difficulty in gaining access to entrepreneurs in other countries, the expenses involved, and the lack of reliable published data” (p. 289). It is also the case that efforts to design educational and training programs and to develop policies based upon assumptions about entrepreneurs, that derive from “foreign” models, are unlikely to be successful in a context where “the tasks and psychic environments may be vastly different” (Thomas & Mueller, 2000, p. 289). Thus, it has been argued that research that departs from the traditional western-based perspective is required (Dodd & Patra, 2002; Saffu, 2003).

Following Dodd and Patra (2002, p. 131) who argue that “findings from the western context cannot be grafted onto other contexts without considerable prior empirical verification”, an understanding of more deep-seated issues, particularly the influence of the entrepreneurs' cultural orientations on the competencies model, is important to enable the development of context-appropriate policies and practices. In view of this, the theoretical framework advanced in the present study also takes into account the influence of an entrepreneur's cultural orientations on the behaviours that delineate entrepreneurial

competencies, as well as analysing the predictive capability of the competency model in an eastern (Malaysia) and western (Australia) country.

The lack of consistency in the measurement of competencies highlights the need for the development and psychometric testing of an instrument that is reliable and valid for use in both western and eastern societies (Bird, 1995; Chandler & Hanks, 1994; Kiggundu, 2002). As Lawler (1994) notes, the challenge in adopting a competency approach to understand organisational performance is to develop a pragmatic and valid way of evaluating and measuring competencies. This study therefore represents an attempt to validate a comprehensive instrument for measuring competencies in the context of Australian and Malaysian SMEs. In doing so, it builds upon different models of competencies available in both the management and entrepreneurship literatures to develop a multidimensional scale of entrepreneurial competencies. Following Bird's (1995) suggestion to develop a broader research design that links this individual-level variable to organisational-level outcomes, the model of entrepreneurial competencies that has been validated here will be tested for its link to business success in SMEs.

Based on the previous comprehensive review of the literature, the present chapter outlines the major constructs that form the theoretical framework for this study. These constructs include: entrepreneurial competency domains and the behaviours that define these domains; business success; business environment; and individual cultural orientations. A theoretical framework linking these constructs is proposed and hypotheses are developed for empirical testing that examine: (1) the direct effect of entrepreneurial competencies on business success; (2) the direct and moderating effects of perceived business environment; and (3) the direct effect of individual cultural orientation on entrepreneurial competencies. This study also examines a number of potential antecedents of entrepreneurial competencies, namely: education level; training; and work experience.

3.2 Development of a Preliminary Theoretical Framework

In the theoretical framework that is proposed, entrepreneurial competencies are treated as the independent variable, while the dependent variable is self-reported business success. With respect to the latter, achieving success is the prime goal of any business and the primary outcomes with which to establish the predictive validity of a model of entrepreneurial competency. In addition to the main independent and dependent variables, the framework also takes account of the potential direct and moderating roles of perceptions of the business environment. This is because research suggests that individual differences in the manner in which entrepreneurs deal with environmental challenges constitute a key differentiator of business performance (Chandler & Hanks, 1994; Shane &

Kolvereid, 1995; Tsai et al., 1991). There are also arguments that it is important to model the direct effect of the business environment on business success (J. R. Baum et al., 2001).

Consistent with the arguments of Singelis and Brown (1995), the present study also examines how the cultural orientations of the individual entrepreneurs shape the behaviours that define their competencies. This cultural variable and a number of demographic factors are tested for their direct links to entrepreneurial competencies. The preliminary framework developed for this study is depicted in Figure 2.

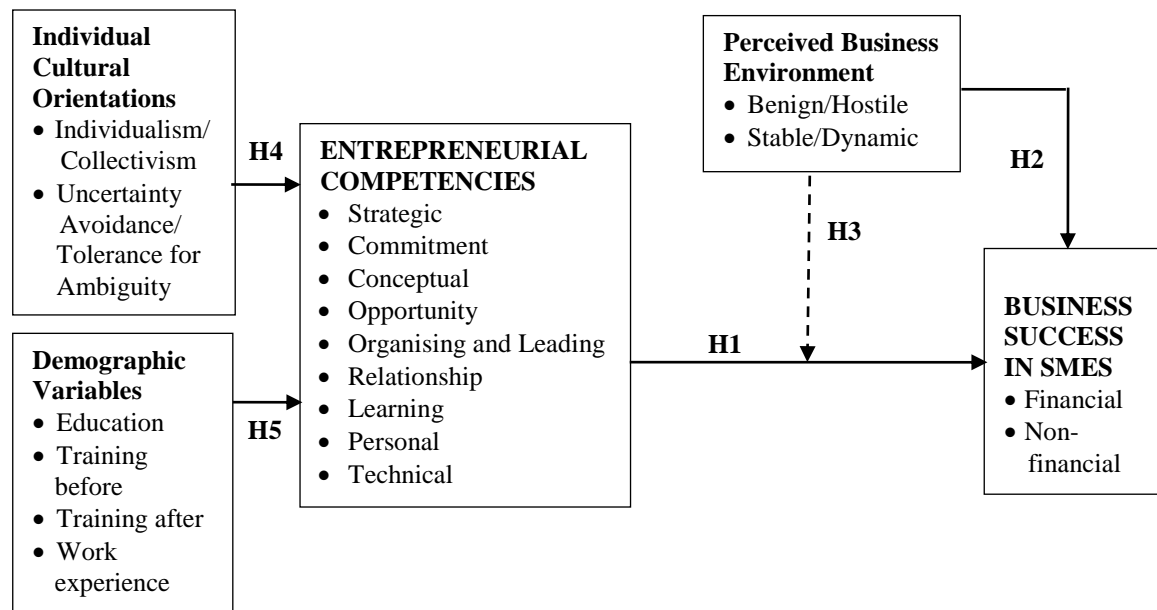


Figure 2. Preliminary theoretical framework developed for this study.

Note. —> indicates direct effect, - - -> indicates moderating effect

3.3 Development of Hypotheses

Based on the literature review, a number of hypotheses are articulated that describe the causal links between entrepreneurial competencies, the perceived business environment, the entrepreneur's cultural orientations, and perceived business success. The following sub-sections outline the hypotheses developed for this study.

3.3.1 Direct effect of entrepreneurial competencies on business success

Studies exploring the factors associated with SME success have indicated that the entrepreneur's action and inaction are important (Masurel, Montfort, & Lentink, 2003). The most recent approach to understanding how an individual's behaviour might impact upon business outcomes focuses primarily on competencies (Baum et al., 2001; Man, 2001). Drago and Clements (1999) argue that entrepreneurs determine business directions and then act accordingly. Their decisions are guided by their characteristics, knowledge, skills, and abilities (i.e., their competencies). In addition, Sadler-Smith et al. (2003) argue that small business owners are required to have diverse skills across a range of competency

domains, performing a “generalist role”, rather than the more “specialist role” favoured by managers in larger firms. Earlier studies have endorsed the generalist role played by entrepreneurs. For example, Chandler and Jansen (1992) suggest that entrepreneurs in SMEs undertake three main roles: entrepreneurial, managerial, and functional. Arguably, developing the right mix of competencies that suits the demands of tasks associated with these roles would directly enhance the effectiveness of the entrepreneur.

The traditional entrepreneurial role, defined regardless of organisational size, requires entrepreneurs to engage in three major tasks: opportunity recognition and exploitation; risk taking; and innovating (Chandler & Hanks, 1994). Consistent with this, many recent studies have concluded that opportunity recognition and development is at the heart of entrepreneurial activities (de Koning, 2003; Hills, 1995; Pech & Cameron, 2006). Entrepreneurs develop strategies that allow them to transform recognised opportunities into profitable outcomes (Stokes, 2006). As highlighted by Muzychenko and Saeed (2004), while exploring opportunities, entrepreneurs act under a condition of uncertainty, which requires them to take risks. Researchers have identified that, in responding to risks, entrepreneurs do not act blindly; rather, they learn from their environment, from mistakes they have made (Stokes & Blackburn, 2002), and from other people (Gibb, 1997; Harrison & Leitch, 2005; Smilor, 1997). Once decisions are made, entrepreneurs then commit themselves to achieving their goals and objectives, and this requires them to combine resources appropriately, and at times devise new ways of doing things (Georgellis et al., 2000; Masurel et al., 2003; Meeus & Oerlemans, 2000; Zhao, 2005). Strong commitment by entrepreneurs is essential to keep them motivated in the face of both failure and success (Chandler & Jansen, 1992; J. L. Thompson et al., 1997). This summary of the entrepreneurial role highlights the fact that competency must be demonstrated in many domains: Strategic; Opportunity; Conceptual; Commitment; and Learning.

Managerial skills are also critical to SME survival. A report published by the Productivity Commission of Australia indicated that failure among SMEs in this country could be attributed to a lack of management and organisation skills (Bickerdyke, Lattimore, & Madge, 2000). Brush, Greene, and Hart (2001) argue that the management and organisation of tangible and intangible resources are critical tasks in running a business. The acquisition, management, and organisation of these resources are through establishing a good relationship with others (de Koning, 2003; Terziovski, 2003). Given the difficulty of attracting skilled labour to small ventures, good networks provide entrepreneurs with access to expertise and various forms of support (Starr & MacMillan, 1990). People management skills are also important. Hartenian (2003) has suggested that

the ability to energise a team is one of the essential skills required by managers and supposedly, entrepreneurs alike. In fact, Cooper (2006) argues that competitive advantage could be optimised through teamwork. These arguments summarise that, to perform the managerial role effectively, entrepreneurs require the following competency domains: Organising and Leading as well as Relationship.

Chandler and Jansen (1992) found that competencies in technical and functional areas are important for entrepreneurs operating in SMEs. Baum et al. (2001) argue that technical or industry-related skills are an important source of “expert” power that legitimises the entrepreneur in the eyes of his/her staff, and assists in the implementation of the entrepreneur’s plan. Clearly, it is essential for entrepreneurs to acquire venture-specific skills to provide sustainable competitive advantage for their ventures (Barney, 1991), which reflect the possession of Technical Competency.

In addition, personal strength is seen as an important competency area critical to all of the roles played by entrepreneurs (Man, 2001). Successful entrepreneurs are often observed to possess a high level of confidence in themselves and in their ability to achieve the goals they set. They are described as having a tremendous amount of personal energy and drive, and the capacity to work long hours (Timmons, 1978). They are also said to possess a high level of determination (J. L. Thompson et al., 1997), a desire to overcome hurdles, and a drive to pursue their goals despite obstacles (Chandler & Jansen, 1992). They are believed to be goal and action-oriented and possess a high need for achievement (D. Y. Lee & Tsang, 2001). Taken in concert, the personal strength competency has the potential to enhance the effectiveness of entrepreneurs and is predicted to have a positive affect on business success.

Based on the foregoing argument, it is hypothesised that:

H1: A higher level of entrepreneurial competencies will be associated with greater business success.

3.3.2 The direct and moderating effects of perceived business environments

The effect of the business environment on entrepreneurial activities, especially in SMEs, is important with evidence suggesting that the way entrepreneurs run their businesses is affected, to a considerable extent, by the environment in which they are operating (Covin & Slevin, 1989). The moderating effect of business environment has also been reported in the entrepreneurship literature, in particular, the moderating effect of business environment on the relationship between business strategies and performance (Tsai et al., 1991; Westerberg, Singh, & Hackner, 1997). The present study attempts to

examine the direct and moderating effects of Benign versus Hostile and Stable versus Dynamic environments on business success in SMEs.

3.3.2.1 Direct effects of Benign versus Hostile and Stable versus Dynamic environments

Covin et al. (1999) have described a benign environment as a “munificent” setting characterised by relatively high profit margins and customer loyalty, low competitive intensity, and general tolerance for poor managerial decisions. The failure rate in a benign environment is relatively low and success is generally easier to achieve. This can be contrasted with a hostile environment in which competition and business failure rate are high and in which many businesses fail. Tsai et al. (1991), in their study that examined the direct effect of environmental hostility on the firm performance among 161 corporate ventures, obtained evidence that showed a significant impact of hostile environment on firm performance.

The business environment can also be described in terms of the amount of change occurring. A stable environment is characterised by the absence of unpredictable change and a lower frequency of change and turnover in the market (Duncan, 1972). Baum et al. (2001) suggest that because it is often easier to navigate a stable environment, this type of environment is related positively to business success. In contrast, a dynamic environment requires the business to be both robust and proactive and in this sense, it presents the entrepreneur with a considerable challenge. With respect to the business performance of SMEs, the extent of hostility and dynamism in the general economic environment, as well as within the specific business sector, is likely to have a direct effect on firm success. The associated hypotheses for testing in the current study are as follows:

H2: Perceptions of the extent of Stability, or Benignity, of the business environment will be significantly associated with perceptions of business success in SMEs.

Specifically,

H2a: A more Benign (less Hostile) environment will be associated with greater business success.

H2b: A more Stable (less Dynamic) environment will be associated with greater business success.

3.3.2.2 Moderating effects of Benign versus Hostile and Stable versus Dynamic environments

Contingency theory holds that the decisions adopted by managers, as reflected in their behaviours and actions, are influenced by their views about the most suitable ways to act in a given environmental context (Entrialgo et al., 2001). As mentioned, evidence

suggests that a hostile environment is characterised by unpredictable consumer demand and competitor actions, which requires frequent changes in marketing practices and in the way in which the business operates (Covin et al., 1999). According to Gibb (2005), survival in such a situation requires entrepreneurs to build competencies that enable them to face the challenging setting. One such competency involves building and developing the kinds of relationships and networks likely to benefit the business (Johannisson, 1990). It is thought that forming connections and networks enables the entrepreneur to navigate a safe course in a demanding setting, such as that presented by a hostile environment (Baum, Calabrese, & Silverman, 2000; Suarez-Villa, 1998). Thompson (1999) suggests that in a chaotic situation, as might be encountered in a hostile or dynamic business environment, entrepreneurs are required to synthesize information, act, and respond quickly to opportunities.

According to Carsrud and Krueger (1995), the importance of entrepreneurial behaviours, like risk taking and opportunity recognition, is increased in unstable socio-economic environments. Covin and Slevin (1989) argue that in a hostile environment, entrepreneurial strategic postures (i.e., risk taking, innovativeness, and proactiveness) are positively associated with firm performance. Specifically, their study that examined the effect of strategic postures of small firms' managers in the US (a sample of 161) and the effect of environmental hostility on firm performance found that smaller firms operating in a hostile environment adopted entrepreneurial postures to obtain higher financial performance. On the contrary, they noted that in a benign environment, the relationship between entrepreneurial posture and performance was somewhat weak. As such Covin and Slevin (1989) suggest that such behaviours, even though significant in a hostile environment, may not be warranted when faced with a benign environment. Consistent with these findings, the following hypotheses about the moderating effects of the business environment on the relationship between entrepreneurial competencies and business success are articulated:

H3: The business environment significantly moderates the relationship between entrepreneurial competencies and business success in SMEs.

Specifically,

H3a: The association between a higher level of competencies and business success will be more strongly evident in a Hostile (less Benign) environment.

H3b: The association between a higher level of competencies and business success will be more strongly evident in a Dynamic (less Stable) environment.

3.3.3 The direct effect of individual cultural orientation on entrepreneurial competencies

It has been suggested that competencies are “context-sensitive” (McClelland, 1973; Pearson & Charterjee, 2001) such that the behaviours (which delineate competencies) that are highly valued in one culture may not necessarily be those that are valued in another (Choueke & Armstrong, 2000; Hofstede & Bond, 1988). It has also been argued that “acting entrepreneurially in an individualistic culture may be different from doing so in a collectivist society” (Marino et al., 2002, p. 157). According to Pearson and Chatterjee (2001), while the values associated with individualism may be the key to the conceptualisation of entrepreneurship in the West, in most Asian countries, entrepreneurial success lies in values associated with collectivism (i.e., family support and network). It would appear therefore, that the entrepreneurial behaviours that define competencies may be influenced by the cultural orientations of the entrepreneurs in a specific cultural context.

There is clear evidence in the literature that certain behaviours are more highly practised in collectivist cultures than in individualist cultures and vice versa. For example, Herbig and Dunphy (1998) argue that the propensity to engage in social interactions, including relationship building, is influenced by collectivism. In a study by Marino et al. (2002), which examined the effect of national culture on “strategic alliances” in 647 SMEs in six countries (i.e., Finland, Greece, Indonesia, Mexico, the Netherlands, and Sweden), it was found that societies that can be described as highly individualistic are less likely to enter into networking than societies that are more collectivist. This finding confirmed the results of research by Steensma et al. (2000) that investigated the attitudes of SME entrepreneurs towards cooperative strategies in seven nations (i.e., Australia, Finland, Greece, Indonesia, Mexico, Norway, and Sweden). This research found that entrepreneurs operating in an individualistic society, such as Australia, had less appreciation for cooperative strategies than did those from a collectivist society, such as Indonesia. Entrepreneurs in a collectivist culture are therefore predicted to be more committed than those in an individualistic culture to maintaining good social relationships as a means to compete in a turbulent environment (Lincoln & Kalleberg, 1990).

Presumably, in a business context, building relationship and networking can also be seen as means to minimise risks when operating in a turbulent environment, of the kind generally experienced by SMEs at start-up. Following this logic, it could be hypothesised that an entrepreneur’s orientation towards individualism may impact the behaviours that delineate competencies among Australians, whereas a collectivism orientation may influence the behaviours that define competencies among Malaysian entrepreneurs. It is also important to note that even though most of the studies described above specifically

looked at national culture, it is presumed that the effect of the variable “culture” on individual cultural orientations would parallel the effect found nationally.

Tolerance for ambiguity is another cultural value that has been shown to have considerable influence on entrepreneurs (Mueller & Thomas, 2001). People in low tolerance for ambiguity cultures prefer to have more control over their environment and are less willing to embrace novelty than those in high tolerance for ambiguity cultures (Hofstede, 1991). McGrath et al. (1992) argue that behaviours such as risk taking, innovativeness, optimism, and openness to competition and change are strongly embedded in the tolerance for ambiguity value. Specifically, they compared the values of entrepreneurs against those of other managers (i.e., career professionals) using a sample of 1217 entrepreneurs and 1206 non-entrepreneurs from 13 nations. Results indicated that entrepreneurs demonstrate stronger tolerance for ambiguity than do non-entrepreneurs. The values associated with tolerance for ambiguity then could be linked to entrepreneurial behaviours that are required to operate in an unstable and dynamic business environment, of the kind frequently confronting SMEs. According to Koh (1996), where there is insufficient information for dealing with a given situation, a person with a high tolerance for ambiguity will organise the information needed to respond to the situation. Since the model of entrepreneurial competencies proposed in the present study is comprised mainly of behaviours that could be associated with activities undertaken to organise and manage an uncertain environment (i.e., behaviours related to Strategic, Commitment, Organising and Leading, Relationship, Learning, and Personal Competencies) as well as behaviours that are directly linked to “being tolerant of uncertain condition” (i.e., behaviours related to Conceptual and Opportunity Competencies), it is expected that entrepreneurs who espouse high tolerance for ambiguity will report possessing these competencies to a greater extent.

Based on the evidence that links cultural orientation with individual behaviours in entrepreneurs and other managers, it is hypothesised that:

H4: An entrepreneur’s cultural orientations will have a significant impact on the behaviours that delineate his/her competencies within different cultural contexts.

Specifically,

H4a: Higher Individualism will have a positive significant impact on entrepreneurial competencies among Australian entrepreneurs whereas higher Collectivism will have a significant positive impact on entrepreneurial competencies among Malaysian entrepreneurs.

H4b: Entrepreneurs with greater Tolerance for Ambiguity will report possessing greater competencies in both countries.

3.3.4 Direct effects of education, training, and work experience on entrepreneurial competencies

The influence of education, training before and after start up, and work experience on the development of an individual's competencies has been investigated in a number of studies (i.e., Chandler & Jansen, 1992; Haynes, 2003). Generally, empirical data suggest that education, training, and work experience are positively associated with competencies. For example, Krueger and Brazeal (1994) argue that work experience increases perceived competencies and the ability to recognise opportunities. Similarly, Haynes (2003) suggests that education increases an entrepreneur's knowledge about the business and the industry, which in turn improves an entrepreneur's skills and abilities. In addition, Brush et al. (2001) argue that training and work experience are important sources of skill and technical knowledge. In light of this, it is postulated that:

H5: Education, training before and after start up, and previous work experience will have a significant positive effect on the development of entrepreneurial competencies. Specifically,

H5a: Entrepreneurs with more education will report possessing greater competencies.

H5b: Entrepreneurs with more training before start up will report possessing greater competencies.

H5c: Entrepreneurs with more training after start up will report possessing greater competencies.

H5d: Entrepreneurs who report more work experience will report possessing greater competencies.

3.4 Conclusion

In short, the overall aim of this study is to explore the concept of entrepreneurial competencies and to empirically examine the relationship between this construct and business success in the context of Australian and Malaysian SMEs. Other important covariates of interest are business environment and the individual's cultural orientation. To achieve the objectives of this research, a two-stage sequential investigation is proposed. The first study (Study 1) adopts a qualitative approach to obtain insights into similarities and differences in the entrepreneurial competencies and behaviours identified as important by a group of practising entrepreneurs in Malaysia and Australia. In the second study (Study 2), a quantitative approach is used to examine the link between entrepreneurial competencies and business success, as well as the influence of the proposed covariates, in Australian and Malaysian SMEs. A detailed discussion of Study 1 is provided in Chapter 4 and a detailed discussion of Study 2 is provided in chapters 5 and 6.

Chapter 4

Study 1: Exploring Behaviours Delineating Entrepreneurial Competencies among Entrepreneurs in SMEs in Australia and Malaysia

4.1 Introduction

An extensive review of the literature clearly suggests that the competencies of business owners in small to medium sizes enterprises (SMEs) constitute an important factor in determining the success of the enterprise (Bird, 1995; Chandler & Jansen, 1992; Man, 2001). Based on this premise, this study seeks to extend models of entrepreneurial competencies, which have largely been developed in the US and UK, and determine whether they are applicable to other cultural contexts, specifically Australia and Malaysia. In doing so, attention will be given to the following important issues: (1) the applicability of the existing models and methodological concerns; (2) the possible emergence of new competencies sensitive to cultural influences; and (3) generational changes in the competencies considered critical to business functioning.

The first issue concerns the applicability of existing models to cultural contexts outside that from which they have been developed. Given evidence suggesting that there are cultural differences in entrepreneurs' ways of thinking (Mitchell, Smith, Seawright, & Morse, 2000) and how these influence their behaviour (Berry, Poortinga, Segall, & Dasen, 1992), researchers should be cautious when adopting "foreign" models for use in other cultural contexts. Leung and Zhang (1996) maintain that a source of bias in most cross-cultural studies is that instruments used in the western context are simply applied to non-western countries without acknowledging that they may be of little relevance to these other contexts. As argued by McGrath, MacMillan, Yang, and Tsai (1992), the instruments used to measure constructs in a western cultural context may not be appropriate for tapping cross-cultural phenomena, because it is unclear whether any differences observed arise from cultural differences or simply reflect differences in instrument validity between countries. This issue raises an important methodological concern about the instrument to measure entrepreneurial competencies proposed for use in the present study. In light of this, the researcher recognised the need to validate and update existing measures for use in a subsequent quantitative study in order to generate a context-sensitive model. The exclusion of important items relevant to other cultural contexts in instruments developed in a different cultural context may result in misleading findings (Ramayah & Jantan, 2004).

Existing models of entrepreneurial competencies are largely "American-based". In an attempt to expand the generalisability of these models, the present study explores entrepreneurial competencies in two countries in the Asia-Pacific Region, namely,

Australia and Malaysia. Doing so, however, raises a second major concern with regards to the possible emergence of new competencies arising from cultural or country differences. It is likely that the cultural differences between Australia and Malaysia (Hofstede, 1991) could impact on the content of entrepreneurial competencies assumed to tap the different competency domains, as operationalised by descriptions from entrepreneurs in both countries. For example, Abdullah and Lim (2001) found that Australians and Malaysians differed significantly in their approach to business management, the former emphasising the “task” and the latter focusing on the “relationship” (in the “relationship-task” dimension). In view of Hofstede and Bond’s (1988) contention that culture has a strong influence on the perception of best practices in an organisation, it is important to acknowledge the possibility that the same competency domain may be characterised differently in different countries.

It is also important to realise that as business practices evolve, new competencies are constantly emerging as critical to success. For example, the management literature in the 21st century is characterised by the emergence of a new set of business priorities. These consist of arguments about ethical practices (Román & Munuera, 2005; Ushedo & Ehiri, 2006), social responsibility (Zairi & Peters, 2002), and corporate governance (Mardjono, 2005; Spanos, 2005). Tett et al. (2000) have cautioned that the omission of more contemporary concerns when deciding on business practices could adversely affect managerial performance in an organisation. Moreover, Cheng, Dainty, & Moore (2005) have argued that competencies are dynamic not static, changing in accordance with changing business trends. In addition, Garavan and McGuire (2001, p. 158) argue that, “to be of value, competency models need to encompass the total range of competencies necessary for effective performance”. Taken in the context of the present study, identifying new competencies that are perceived to be important by current entrepreneurs is critical to the development of a comprehensive and “up-to-date” model of entrepreneurial competencies.

A qualitative study is proposed to obtain a description of the behaviours that entrepreneurs currently operating in Australia and Malaysia identify as important to business success. These behaviours can then be compared to those identified in existing models and used to operationalise various domains of competency, as currently defined, and any new domains of competency that might emerge. Thus, Study 1 aims to:

1. Obtain evidence of the competencies deemed important by entrepreneurs within the context of SMEs in Australia and Malaysia, including those that are not currently

referred to in the existing literature. This tests the limits of current models by identifying emerging competencies that are more context-specific; and

2. Use these results to modify and expand the content of the measure of entrepreneurial competencies used in the subsequent quantitative study.

4.2. Method

In selecting an appropriate method for any study, the nature of the research questions to be addressed must be considered (Morse & Richards, 2002; Shaw, 1999). Given the exploratory nature of the research questions addressed in the current study, a qualitative approach to data collection was taken. The main research questions addressed were:

1. What are the competencies perceived to be important by entrepreneurs in SMEs in Australia and Malaysia? Are there competencies that are perceived to be important by entrepreneurs operating in these contexts that are not included in existing models?
2. Are the competencies identified by Australian and Malaysian entrepreneurs the same in both countries?

In the context of the present study, employing this approach enables the identification of new behaviours that are not currently included in existing models, in addition to providing a “fresh” view of what behaviours are deemed important to business success. Morse and Richards (2002) argue that employing a qualitative approach is appropriate if:

The purpose is to learn from the participants in a setting or process the way they experience it, the meaning they put on it, and how they interpret what they experience (p. 28).

As also suggested by Snell and Lau (1994):

The practical advantage of such research (qualitative) is that it can avoid the dangers of imposing inappropriate ‘solutions’ borrowed from larger organisations in the West (p. 4).

Furthermore, a qualitative approach allows the researcher to understand participants’ worldview of the important issues surrounding them rather than imposing her own perception of what is important (Gill & Johnson, 1991).

The point should be made however, that this study did not attempt to develop a purely grounded theory of entrepreneurial competencies. This would have required the utilisation of unstructured interviews that allowed interviewees to comment freely on a given topic (Glaser, 1992). Rather, this phase of the research involved collecting data for the purpose of comparing and validating existing models of entrepreneurial competencies, as well as identifying new competencies not included in these models. This follows Bird’s (1995) argument that there is already a sufficiently well-validated model of entrepreneurial competencies from which to start to explore the possibility of cultural differences. As such,

to ensure that the areas identified in existing models were covered and at the same time, allow new competencies to emerge, a semi-structured interview was administered (Kandola & Pearn, 1992). To summarise, a semi-structured interview was the data collection technique of choice because it: (i) could contribute to the study of competencies by highlighting important competency areas; (ii) allows comparisons to be made between good and less good performers; and (iii) assists in the development of behavioural indicators reflecting the competency domains.

4.3 Sample

The sample for the interview study was drawn from a number of sources. In Australia, participants were members of Business SA (South Australia) or were recommended by the director of the SA YES program⁵. In Malaysia, individual entrepreneurs known to the researcher were identified and they in turn identified other entrepreneurs (i.e., they were identified via "snowballing", Salganik & Heckathorn, 2004). This purposive sampling has been widely applied in qualitative research because it allows the researcher to get maximum variation in the data and to identify cases of interest from the participants (Patton, 1990). The sample for the present study comprised businessmen and businesswomen who had founded their own businesses. The inclusion criteria used for sample selection were as follows:

1. the founder must currently play an active role in running the business;
2. the business must have been operating for at least 2 years;
3. the business must have less than 200 employees for Australia and less than 150 employees for Malaysia; and
4. the business must be a stand-alone firm, not a franchise or part of a larger organisation⁶.

Given that the overall aim of the qualitative interview was to identify all competencies displayed by entrepreneurs, behaviours were not defined specifically in terms of their relationship to business success, though entrepreneurs were asked the extent to which they were satisfied with their current business performance. A similar approach was adopted by Man (2001) in his study of the competencies of entrepreneurs operating in the Hong Kong service sector.

⁵ A project initiated by Business SA to provide young South Australians with the confidence to develop and implement their business ideas.

⁶ SMEs that are franchises or part of a larger firm were excluded because in most cases, these firms have a lack of control over their operations. Shefsky (1994, p. 82) states that "there does not seem to be much room to do your own thing" among franchisees since they are commonly monitored by the parent company and have to abide by specific rules and regulations.

Participants were invited from both the manufacturing and service sectors in order to ensure broad representation in terms of the technical competencies tapped. Both men and women were included in order to ensure generalisability as were participants from all three major ethnic backgrounds in Malaysia: Malays, Chinese, and Indians. Twenty interviews were conducted. The number, although small, was considered sufficient for an exploration of competencies and their fit to existing models. Previous studies of entrepreneurs in SMEs have sampled comparable numbers. For example, Man and Lau (2000) interviewed 19 entrepreneurs in their study of entrepreneurial competencies in Hong Kong, and Glancey, Greig, and Pettigrew (1998) interviewed 20 entrepreneurs when studying entrepreneurial motives, objectives, and strategies among small business owners in Scotland.

4.3.1 Participant profiles—Australia and Malaysia

Even though the study was not specifically designed to explore gender differences in competencies perceived to be important by entrepreneurs, an effort was made to obtain data from both male and female entrepreneurs. This strategy was adopted to increase the richness of the data gathered and to identify a range of competencies (both from male and female participants) that could inform the subsequent validation of earlier models of entrepreneurial competency. Tables 7 and 8 summarise the characteristics of the Australian and Malaysian participants.

Australian participants included five males and five females. Table 7 indicates that the entrepreneurs' ages ranged from 23 to 63 years with the mean age being 39 years ($SD = 13.19$). Age at business "start-up" of the Australian entrepreneurs varied from the mid 20s to the early 40s, with a mean of 28.6 years old ($SD = 6.54$). As reported by Global Entrepreneurship Monitoring (2006), participation in entrepreneurship (referring to those who actually start a business) is generally in the 25 to 44 year age group, with Bennett and Dann (2000) reporting a mean age of start-up in Australia of around 30 years. All participants had some working experience prior to venturing into their current business. All but two had some form of tertiary qualification.

All of the Australian entrepreneurs had attended formal or informal training in either management or a technical area. The type of training undertaken varied considerably. At one extreme, formal training included attending courses that focused specifically on developing business plans, marketing strategy, financial budgeting, and developing a business model (e.g., Entrepreneur A, the owner of a handbag designing and manufacturing company). In contrast, a number of Australians described themselves as having "informal training". This included previous experience in managing a business and informal technical training associated with "hands-on" experience. For example,

Entrepreneur G (the owner of an electrical goods and furniture retail store, Australia) described in detail how his experience as a store manager assisted him in handling procurement and inventory-related matters associated with his current business. He also had hands-on experience in technical areas, especially those related to repairing and servicing electrical goods.

Although not indicated in the table, it is worth noting that male and female entrepreneurs were divided in their perceptions of the value of formal training. All female entrepreneurs highlighted the importance of formal training in handling their business, whereas all male participants considered formal training as having little value compared to the hands-on experience they had gained at work. For them, practical experience was seen as being far more valuable than theoretical knowledge. This finding is consistent with Watson, Hogarth-Scott, & Wilson (1998) who found that among 166 small business owners in the UK, female entrepreneurs sought and received more training than male entrepreneurs.

As can be seen from Table 8, the Malaysian participants included five Malays (3 males and 2 females), four Chinese men, and one Indian man. Obtaining data from the three ethnic groups was considered important at this exploratory stage since the aim was to identify all competencies deemed important by entrepreneurs in a country, regardless of background. In other words, the aim was simply to obtain an overall picture of the competencies perceived to be important by Malaysian entrepreneurs. There was some difficulty in getting Indian entrepreneurs to participate in this study because of language constraints. Similar problems in recruiting Indian volunteers were faced by an earlier researcher in his attempt to investigate work-related values among Malays, Chinese, and Indians in Malaysia (Lim, 2001).

The greater representation of male compared with female entrepreneurs in the Malaysian sub-sample is consistent with the higher percentage of males who start up their own business in this country. It has been reported that the participation rate of female entrepreneurs was 36.8 % in Malaysian SMEs (United Nations Development Programme (UNDP) Malaysia, 2007). Similarly, in a study that evaluated the business practices of SMEs in Malaysia, the over-representation of male over female respondents was apparent with 75.5% being male entrepreneurs (Osman & Hashim, 2003). This suggests that the imbalance of the sexes in the present study is representative of the wider population of entrepreneurs.

Table 7 Characteristics of the Australian Participants

Participants	Gender	Current Age	Education Level	Start up Age	Previous occupation	Management / technical training prior to start up (Formal/ Informal)
A	Female	28	Bachelor degree	25	Solicitor	Management (Formal)
B	Male	63	Certificate	26	Involved in other business	Management (Informal)
C	Male	37	Certificate	25	Involved in other business	Technical (Informal)
D	Male	40	Halfway through university	32	Electronic Technician	Technical (Informal)
E	Male	42	High School	27	Electrician	Technical (Informal)
F	Female	45	Masters degree	42	Company Director	Management and technical (Formal)
G	Male	56	High school	36	Store Manager	Management and Technical (Informal)
H	Female	23	Masters degree	21	Human Resource Advisor	Management (Formal)
I	Female	32	Certificate	30	Retail	Technical (Formal)
J	Female	24	Bachelor degree	22	Working with government	Technical (Formal)
<i>M</i>		39		28.6		
<i>SD</i>		13.19		6.54		

Table 8 Characteristics of the Malaysian Participants

Participants	Gender	Race	Current Age	Education Level	Start up Age	Previous occupation	Management / Technical training prior to start up (Formal/ Informal)
K	Female	Malay	45	High school	40	Involved in other business	Management (Formal)
L	Female	Malay	40	Diploma	38	Bank officer	Management (Formal)
M	Male	Malay	44	Masters degree	39	General Manager in a public listed company	Management and Technical (Formal and informal)
N	Male	Malay	50	High school	20	NIL	Technical (Formal)
O	Male	Indian	43	High school	27	Factory worker	NIL
P	Male	Chinese	42	High school	25	Involved in other business	Technical (Informal)
Q	Male	Malay	41	High school	38	Factory worker & doing part time business	Technical (Informal)
R	Male	Chinese	35	Bachelor degree	26	Employed in a private company	Technical (Formal)
S	Male	Chinese	36	High school	29	Employed in a private company	Technical (Informal)
T	Male	Chinese	45	High school	30	Salesperson	Technical (Informal)
<i>M</i>			42.1		31.2		
<i>SD</i>			4.43		7.04		

As indicated in Table 8, the age of starting up a firm in the Malaysian sample varied from the mid 20s to the mid 40s, with a mean start up age of 31.2 years ($SD = 31.2$). With respect to exposure to training, the profile for Malaysian entrepreneurs was similar to that for the Australian entrepreneurs. All of the Malaysian entrepreneurs had some formal or informal training in either management or a technical area. For example, Entrepreneur N (the owner of a motor trading and insurance services firm, Malaysia) stated that:

After taking up this business on a part time basis, I felt a need to go for a formal training if I wanted to build this business further. I attended a training course that taught me how to run a business systematically, especially ways to manage and organise my business (translation).

Entrepreneur S (the owner of a printing service company, Malaysia) indicated that he had had informal training while working in a previous company, handling machines and tools. He mentioned that in managing his current business, he had fully utilised the “hands-on” experience he gained while working in a company that offered the same service. His former employer had taught him how to operate the machinery and every single detail of how to maintain the machinery.

A difference between the Malay and Chinese entrepreneurs in the value ascribed to formal training was identified. All of the Malays interviewed agreed about the importance of attending formal training, especially in areas identified to be a weakness for them. These participants suggested that the faster one was able to identify gaps in one’s skills and take some initiative to overcome these gaps, the better it was for one’s firm. In contrast, the Chinese entrepreneurs believed that experience was far more important than formal training. The “just-do-it” approach was strong among this group, similar to that of male entrepreneurs in Australia. Interestingly, this is consistent with the findings of Fontaine and Tan (2004) who found that the Chinese prefer informal learning whereas Malays prefer formal learning. This phenomenon could also be explained by the fact that in Malaysia, “some SMEs perceive training as a cost rather than investment” (SMIDEC Media Release, July 21, 2003, p. 14). A study conducted by Simpson, Tuck, and Bellamy (2004) on the role of training as a factor contributing to small business success in the UK found the same kind of conflicting evidence, pertaining to the perceived value of training, as that observed here.

4.3.2 Firm profiles—Australia and Malaysia

With respect to the characteristics of the firms owned by the Australian entrepreneurs, only two of the 10 entrepreneurs were involved in the manufacturing sector. The remaining operated in the service sector. The size of the firms varied from 2 to 17 employees with a mean size of 9 employees ($SD = 6.25$). Firm age varied from 2 to 47

years, with a mean firm age of 11.5 years ($SD = 13.96$). Four of the 10 entrepreneurs had taken a business partner. The reasons given for taking up a partner included: to generate more capital for the business; and to share the workload. Four of the 10 entrepreneurs had had previous experience of a start up but had left this business for various reasons. For example, entrepreneur B (the owner of a tailoring and dry cleaning business, Australia) had asked his son to take-over the first business because he wanted to concentrate his efforts on the new business. Entrepreneur C (the owner of software development and computer related service company, Australia) had split with his business partner and taken up a new business that focused on something that he really loved to do. He believed that the earlier business had diverted him from his original plan and moved him towards something that he did not enjoy doing. Entrepreneur E (the owner of an air conditioner services company) reported that he closed down the original business because of problems with size (too large), finances, and poor advice. Similarly, entrepreneur F (the owner of a public relations consulting firm) indicated that she sold off her earlier business due to her inability to manage the large number of employees in the business and because of financial problems.

All but two firms owned by the Malaysian entrepreneurs were service-related. The size of the businesses varied from 3 to 30 employees ($M = 15.3$, $SD = 8.28$) and firm age also varied from a minimum of 3 years to a maximum of 20 years, with a mean firm age of 10.2 years ($SD = 6.40$). Four of the Malaysian entrepreneurs (Entrepreneur K, L, Q, and S) had prior experience in business.

Table 9 Characteristics of the Firms Owned by Australian Participants

Participant	Nature of business	No of employees	Firm Age	Founding method	Previous business
A	Handbag designer and manufacturer	14	3	Start up	No
B	Tailoring and dry cleaning	15	47	Start up	Yes (managed by son)
C	Software development and computer service	5	12	Start up then take a partner	Yes (split with partner)
D	Computer and related services	2	8	Start up	No
E	Air conditioner service	17	15	Start up	Yes (closed)
F	Public relations consulting	3	3	Start up	Yes (sold)
G	Electrical goods and furniture retailer	15	20	Start up	No
H	Website development	4	2	Start up, then take a partner	No
I	Musical instruments manufacturer	13	3	Start up	No
J	Business consulting	2	2	Start up	No
<i>M</i>		9	11.5		
<i>SD</i>		6.25	13.96		

Table 10 Characteristics of the Firms Owned by Malaysian Participants

Participant	Nature of Business	No of employees	Firm Age	Founding method	Previous business
K	Cosmetics producer/manufacturer	13	5	Start up	Yes (close)
L	Software development and computer services	8	4	Start up	Yes (close)
M	Steel trading and retail	15	5	Start up, then take a partner	No
N	Motor trading and insurance services	27	20	Start up	No
O	Transportation and logistics service	17	16	Start up	No
P	Car trading and insurance services	25	18	Start up	No
Q	Catering service and restaurant	11	3	Start up	Yes (close)
R	Optometry service	6	9	Start up, then take a partner	No
S	Printing service	5	7	Start up	Yes (split with partner)
T	Ice cube producer/manufacturer	26	15	Start up	Yes
<i>M</i>		15.3	10.2		
<i>SD</i>		8.28	6.40		

4.4 Data Collection Procedure

An interview protocol that consisted of eight sections was developed prior to the interview, to provide guidance and to ensure consistency throughout the interview process (refer to Appendix B2). Section 1 contained questions that sought to obtain a demographic profile of the participants. Section 2 included questions that asked participants to define business success. The objective was to understand the participants' perceptions of success in business, with a view to incorporating these definitions into the measurement of business success for the subsequent quantitative study. Section 3 consisted of questions that were broadly concerned with how entrepreneurs managed their business. These questions were designed to enable the identification of both existing competencies, that is, competencies included in existing models, as well as new competencies. Specifically, entrepreneurs were asked to describe their behaviours (i.e., what they actually did) in handling their business. The emphasis on entrepreneurial behaviours to identify competencies - through an "indirect questioning method" - was designed to minimise the impact of "social desirability bias" (Fisher, 1993). Questions designed to probe the actions of entrepreneurs were modelled partly on those included in Man's (2001) study and included:

- How do you run your business? In particular what are your daily routines?
- How have you continued to develop your organisation since starting up?
- How have things changed over time?
- What sort of things have you done to cope with the changes?
- What are the characteristics, abilities, and skills required to succeed in your position?
- To what extent do your own abilities relate to the success of your business?

Questions about the respondent's "toughest experience" were also included in the interview protocol. These questions drew on the critical incident method. In the present study, participants were asked to recall the toughest experiences that they had encountered while handling their business; they were asked about how they handled these experiences and what impact these experiences have had on the way they ran their business. Answers from these questions were used as behavioural indicators and then translated into competencies. Questions pertaining to critical incidents included:

- Could you please describe the toughest experience you have encountered while handling your business?
- How did you overcome the problem or handle the situation?

- What have you learned from the incident?

To gain further insight into competencies associated with business success, Section 4 included questions pertaining to role models. Through these indirect questions, competencies can be inferred from what is valued in others. Section 5 contained questions that asked participants' opinions of the value of formal training and the extent to which external support, including getting advice from the experts, mentors, and trainers, was considered important for their business. The objective was to understand participants' views about the value of formal training and external support in managing their business.

In order to understand the entrepreneurs' views about whether external factors played an important role in determining their business success or failure, Section 6 explicitly asked about the nature of the opportunities and threats participants had experienced. Finally, to obtain more information on perceptions of the importance of specific behaviours and competency domains to success, a question on the advice that the participants would give to someone who wanted to start his or her own business was included (Section 7).

Prior to conducting the interview, approval from the University of Adelaide Human Research Ethics Committee was gained (approval letter-project no. H-115-2004). The major ethical implications concerned issues of the privacy and confidentiality of the information provided. An undertaking was given to obtain participants' informed consent to be interviewed and to de-identify data in the final report. Once the documentation and interview guide had been approved, the researcher undertook a series of practice interviews with five South Australian entrepreneurs for the purpose of strengthening interviewing skills and testing interview questions. The participants were informed that these interviews were conducted merely for practice purposes; the tape-recorded interviews would be reviewed by the supervisors who would provide feedback to the researcher on how she could improve the interview questions and her interviewing skills. The practice interviews were conducted in September 2004.

Taking into account the necessary changes and feedback obtained from the practice interviews, data collection for the present study was carried out from November 2004 to February 2005. All interviews were individual, face-to-face interviews. They were conducted in either English or Malay. Eighteen interviews were conducted at the participants' business premises. Two interviews with Australian participants were held at the Adelaide Graduate School of Business's boardroom, at their request. The duration of the interviews varied between 45 and 90 minutes.

At the beginning of the interview, participants were provided with several documents as instructed by the Human Research Ethics Committee. Specifically, an information sheet entitled “Understanding Entrepreneurs’ Experience” was provided, along with a standard “Consent” form and a standard “Complaint Procedure” form (refer to Appendices B1, C, and D). Participants were also briefed verbally on the aim of the study, and issues related to privacy and confidentiality were clarified.

During the interview, the researcher frequently rephrased and repeated participants’ responses. The aim was to ensure the accuracy of the researcher’s understanding of the key points and to encourage further explanation of these points. At the end of the interview, participants were asked to fill in a standard form requesting particulars of their background such as age, years in business, educational background and position in the company. They were also asked to provide details of their firm’s characteristics including founding method, years in business, number of employees, and nature of business (see Appendix B3). Finally participants were informed that they would be contacted again if further clarification was needed during the process of data analysis.

4.5 Data Analysis

Prior to data analysis, the tape-recorded interviews of the Australian participants were sent to a professional transcriber; it was thought that the use of such a service would help to ensure the accuracy and precision of the transcripts. Because of language constraints, the researcher transcribed the Malaysian interviews herself.

4.5.1 Focus of data analysis

The main analysis involved the extraction of behaviours reflecting competencies that could potentially lead to business success, which were either consistent with or different from those identified in existing models. A coding scheme, which was developed *a priori* on the basis of the model of entrepreneurial competencies proposed for this study, was used to categorise behaviours. Behaviours that could not be grouped under the nine proposed competency areas, included in the aforementioned model, were grouped into categories that were then given new labels. The competencies identified by Australian and Malaysian entrepreneurs (whether new or existing competencies) were then compared in order to capture cross-cultural similarities and differences.

In addition to a focus on competencies, the analysis also sought to identify behaviours that might be associated with business failure. During the interview, participants were asked about any previous experience they had had in starting a business. They were asked to explain why the earlier business was unsuccessful, if this was the case,

and/or to give reasons for closing down or selling off this business. Participants were also asked to describe some tough experiences they had had while managing their business and how they responded to these experiences. From these discussions, behaviours perceived to be associated with business failure were extracted. These behaviours were used to cross-check and validate those competencies associated with business success, the assumption being that behaviours associated with failure would, in many cases, be the opposite of behaviours associated with success. This served as a basis to ascertain the competencies that lead to business success, and could further validate the competencies identified.

To begin the analysis process, transcripts of interviews with both Australian (10) and Malaysian (10) participants were examined for evidence of behaviours reflecting competencies that are perceived to be important by them. Transcripts were read several times to ensure familiarity with the data before the process of identifying and organising themes commenced (Easterby-Smith, Thorpe, & Lowe, 1991). It has been suggested that the familiarity created by reading transcripts increases the researcher's "awareness of the patterns, themes, and categories" (Patton, 1987, p. 150) that exist in the data. The process of data analysis was conducted concurrently with data collection, to allow for the identification of important issue pertaining to the research and to probe for further information in the following interviews.

From the transcribed conversation, behaviours that reflected competencies were given codes (i.e., Strategic, Commitment, Conceptual, Opportunity, Organising and Leading, Relationship, Learning, Personal, and Technical), based on the competency domains proposed in this study. New codes were added as behaviours reflecting new competency domains emerged. Once all 20 cases were analysed, a table was formed to categorise the behaviours representing each competency domain. At the end of the coding process, a total of 196 behaviours were identified. To facilitate the description of the behaviours identified, behaviours sitting under each competency domain were further regrouped into "clusters". Thus, behaviours were aggregated, on a logical basis, to form clusters that were presented in the column labelled "clusters of behaviours" (a similar method of classification was utilised by Man, 2001). For example, devising strategies to attract customers is a behaviour that could be categorised as a Strategic Competency while establishing good personal relationship with others reflected a Relationship Competency. It is debatable however, that one cluster is equally different from another cluster. Notwithstanding this point, clusters were used to enhance descriptions of the data. Eventually, fifty-two clusters of behaviours, reflecting 12 competency areas were formed

representing the 196 behaviours elicited from the qualitative data. To make sense of the findings, three columns were created which were labelled “competency areas”, “clusters of behaviours” and “examples of behaviours” (refer to Sections 4.6.1 and 4.6.2). These labels were used by Man (2001) in his study of competencies among Hong Kong entrepreneurs.

4.5.2 Reliability and validity

In order to ensure the consistency in the coding process, the coding scheme was clearly described and the behaviours reflecting a particular competency area were clearly defined based on earlier models of entrepreneurial competencies. This coding scheme was frequently referred to throughout the coding process. Also, to ensure consistency, efforts were made to ascertain that the framework was followed precisely while conducting the interviews.

To assess inter-rater reliability for this qualitative study, a card sorting exercise of the kind employed by King (1994) was undertaken. The aim of this exercise was to check the consistency with which different raters could assign behaviours identified from the interviews to the proposed competency domains. To this end, each of the 196 behaviours that were identified by the researcher was printed on an individual card. A definition of each of the 12 competency domains was provided, together with some brief comments about how these competencies have typically been operationalised, to guide the participants in this exercise. Five students who were at the time enrolled in studies with the School of Commerce, University of Adelaide, were invited to participate in this exercise. They were asked to classify the behaviours into the domains based on the definitions provided. They were requested to carry out the exercise independently so as to get their individual opinion about which domain each of the 196 behaviours belonged to. Their responses were listed and the percentage agreement between each pair of raters was calculated using Goodwin and Goodwin’s (1985, p. 14) formula:

$$\text{Inter-rater reliability: } \frac{\text{No of Coding Agreements}}{\text{No of Coding Agreements} + \text{No of Coding Disagreements}}$$

The inter-rater reliability estimates for the competency areas are depicted in Table 11. For each competency area, the rater pair with the lowest percentage agreement is shown, followed by the rater pair with the highest percentage agreement. Also shown is the average percentage agreement (mean estimate) for all rater pairs. It can be seen that the mean inter-rater reliability estimate for each competency area ranged between 0.65 (Strategic Competency) and 0.94 (Learning Competency).

Table 11 *Inter-Rater Reliability for the Competency Areas*

Competency area	Minimum inter-rater reliability estimate	Maximum inter-rater reliability estimate	Mean inter-rater reliability estimate
Strategic	.61	.75	.65
Commitment	.62	.85	.72
Conceptual	.51	.88	.73
Opportunity	.83	.92	.89
Organising and Leading	.68	.93	.79
Relationship	.82	.92	.88
Learning	.70	1.00	.94
Personal	.75	.94	.85
Technical	.75	1.00	.86
Ethical	.86	.86	.85
Social Responsibility	.75	1.00	.86
Familism	.82	.86	.84

Evidence of validity was established through the process of comparing the behaviours associated with success (refer to Sections 4.6.1 and 4.6.2) with the behaviours associated with failure (refer to Section 4.6.3). In addition, Maxwell (1996) suggests that a method to check the validity of a particular outcome is to verify its replicability by comparing the results obtained in the present study with other studies. It was found that the behaviours and competency domains identified in the current study overlapped significantly with results reported by Chandler and Jansen (1992) and Man (2001), providing some evidence of the validity of the qualitative data.

4.6 Results

4.6.1 Confirmation of entrepreneurial competencies identified in existing models

The identification of behaviours that reflected nine areas of competencies, as proposed by the existing literature, confirmed the applicability of Man's (2001) model of entrepreneurial competencies in Australia and Malaysia. The nine domains of competencies that shared commonalities with existing models of entrepreneurial competencies, including Man's, were: Strategic, Commitment, Conceptual, Opportunity, Organising and Leading, Relationship, Learning, Personal, and Technical Competency domains. Some additional competency domains were also identified, namely, Ethical, Social Responsibility, and Familism (refer to Section 4.6.2).

4.6.1.1 Strategic Competency

Strategic Competency refers to "setting, evaluating, and implementing the strategies of the firm" (Man et al., 2002, p. 132). Based on the qualitative data gathered, participants in general perceived Strategic Competency to be important in handling their business. Altogether, six clusters of strategic behaviours were derived including devise strategies, develop vision and business goals, conduct research, create competitive edge for firm to compete effectively, make strategic adjustment, and weigh costs and benefits. The

clusters and 26 examples of behaviours reflecting Strategic Competency are summarised in Table 12.

Table 12 Strategic Competency Domain: Clusters and Examples of Strategic Behaviours

Cluster	Examples of behaviours
Devise strategies*	<ul style="list-style-type: none"> • Devise strategy to overcome crisis • Devise strategy to match current business trend • Devise strategy to compete with others • Devise strategy to attract customers • Devise strategy to boost sale • Devise strategy for business production • Map ways to reach business goals
Develop vision and business goals*	<ul style="list-style-type: none"> • Think about the future and develop long run goal • Have clear direction • Move ahead towards goals systematically • Prioritise activities with alignment to business goals
Conduct research*	<ul style="list-style-type: none"> • Conduct research before proceeding with investment, e.g. setting up new branch; before introducing products/services introducing new products • Conduct research on business premise • Conduct research on potential customers • Conduct research on the quality of a product • Analyse changes in business environment
Create competitive edge	<ul style="list-style-type: none"> • Utilise firm's capabilities to improve performance • Diversify business portfolio or specialised in one portfolio • Create good business image and reputation • Outsource non-core business activities such as marketing and advertising
Make strategic adjustment or change (adaptability)*	<ul style="list-style-type: none"> • Plan to overcome difficulties during low periods • Prepare and plan for the worst scenario • Be flexible in developing plans/contingency plans
Weigh costs and benefits*	<ul style="list-style-type: none"> • Consider the benefits of investing in technology and R&D • Analyse pros and cons to determine strategic action • Evaluate business activities

Note. * Clusters identified in Man (2001). Note that a cluster identified in this study that was not mentioned by Man (2001) is “create competitive edge”. Some behaviours representing this cluster however were identified in Thompson et al. (1997).

All 20 participants from Australia and Malaysia recognised the importance of strategic behaviours in managing their business. Devising strategies to achieve business goals appeared to be the best represented cluster of Strategic Competency. As reported, strategies were formulated for a variety of goals: to achieve the overall business goal; to boost sales and increase turnover; to attract customers; to improve production; and to survive/succeed in a competitive environment. Besides developing strategies to achieve the business goals, Entrepreneur C (the owner of software development and computer related service company, Australia) highlighted the need to develop back-up strategies if the initial strategies did not work as planned. He stated:

I had also started to think about what happens if this doesn't actually succeed, like we would expect, and so I've been developing some thoughts on, essentially a fall back position of ensuring that if it doesn't succeed, then I'll ensure that the business does keep maintaining itself.

It was also the case that 17 participants (9 Australians and 8 Malaysians) perceived having a long-term vision and plans for business as being crucial. A remark illustrating the importance of this cluster was made by entrepreneur C (the owner of software development and computer related service company, Australia):

In terms of the actual business success, I think a lot of that comes down to having your direction and mapping your ways to get there, that would be a major, major contributor to a business not succeeding.

The other behaviour reflecting Strategic Competency pointed out by 15 participants (7 Australians and 8 Malaysians) was conducting research. The focus of research, however, varied across countries. Australians focused their research on the products and services available in the market, and the analysis of the business environment to forecast trends and customers' preferences. As stated by entrepreneur A (the owner of a handbag designing and manufacturing company, Australia):

You have to really do your research in terms of not only starting your own business and what is required from you but really research what product or service you can offer...

By contrast, Malaysians participants expressed concern about researching their major competitors and a strategic business location issues not highlighted by Australian participants. The focus on the importance of location is consistent with suggestions made by Chawla, Pullig, and Alexander (1997) who argued that location was critical for business success, especially in retail firms. Nonetheless, a number of other topics of research were consistently mentioned by entrepreneurs from both countries: potential customers, the state of business environment, and current trends. Entrepreneurs also indicated that small business owners could not afford to allocate time and financial resources to formal research, and, consequently, most research was done informally. According to entrepreneur M (the owner of a steel trading company, Malaysia):

I think everybody did SWOT and PEST either formally or informally... but here, we do it informally. We do research on price, location, capacity, and our strength in marketing. We even sent our staff to survey potential customers...but not formally because we don't have to present it to the boss (as in large firms) (translation).

Entrepreneur Q (the owner of catering service and restaurant, Malaysia) stated that:

For me, I see conducting market research as the backbone of knowing what products or services that the customers want; how and where to sell those products or services. So it is very important to do a bit of research about the industry, customers, as well as your competitors...(translation).

According to this participant, conducting market research, especially on competitors, would help entrepreneurs understand their firm's position and gaps in the industry, thereby enabling them to identify a market niche. Similarly, Entrepreneur M (the owner of a steel trading company, Malaysia) mentioned:

We monitor and scan the environment. Now there are 2 big steel manufacturers and since they are big, their advantages are they have big name and they produce big volume. Normally they target big customers. Our aim is to approach small customers who have problem purchasing from big company (translation).

He commented further that market research was extremely important in the start-up stage, but that the process should not stop there; it should be continued through all stages of the business life cycle. This corresponds to Choo's (2001) argument that environmental scanning allows the identification of opportunities and threats posed by the environment.

Surprisingly, four of 10 participants from Australia indicated that they did not pay much attention to what their competitors did because they picked up new customers based on referral by existing customers who were satisfied with their products or services. Clearly, these entrepreneurs believed in having a strong base of loyal and satisfied customers. As mentioned by Entrepreneur E (the owner of an air conditioner service company, Australia):

We are a very funny little company especially in terms of how we operate... we do virtually no advertising. 90% of the work we do is referrals from existing clients.

Six of 10 Malaysians mentioned it was important to be aware of the competitors' actions and devise appropriate responses. Entrepreneur S (the owner of a printing service company, Malaysia) said:

In these days, business faces very intense competition. Even though the market is big, I need to develop effective strategies to compete (translation).

The strong focus on competition and competitors' practices in Malaysia may reflect the availability of numerous choices of products and services in the Malaysian market. Evidence has shown that competition is one major cause of switching behaviours among customers to a new provider because of the "attraction" posed by them (Keaveney, 1995). The fear of losing customers to competitors may put business owners in Malaysia under considerable pressure to formulate strategies that mitigate this risk.

Entrepreneurs from both countries also highlighted the significance of making strategic adjustments over time. Six participants from Australia and five from Malaysia reported that it was vital to make strategic adjustments to overcome difficulties that arose during low demand periods, or in saturated markets, by being flexible or developing contingency plans. According to Entrepreneur A (the owner of a handbag designing and manufacturing company, Australia):

Flexibility is very important in running a business because things change, particularly in my sort of industry, and when things change, you have to be able to adapt to it as well...so, I have to be able to have a contingency plan.

Correspondingly, the ability to adjust to market crises, such as a sudden downturn in demand, has been associated with successful performance in small firms (Smallbone, Leig, & North, 1995).

The importance of creating a competitive edge was emphasised by 13 entrepreneurs (6 Australians and 7 Malaysians). However, different methods of doing this were highlighted by participants from both countries. Participants from Australia reported outsourcing non-core activities; specialising in one business portfolio; and creating a good business image and reputation. Three examples are worth highlighting:

These days most people running a small business are actually outsourcing skills to get tasks done that they cannot do themselves or they are not equipped to do or they do not have time to do... (Entrepreneur E, the owner of air an conditioner service company, Australia).

There's no point diversifying and doing a bit of everything and trying to get people in when all you're doing is making them upset because you do not know anything, you know, you're stretching yourself too thinly (Entrepreneur D, the owner of computer and related service company, Australia).

If something bad happens, it's better if we keep it within the business because you don't want to tarnish the company's reputation... For us, creating and having a good reputation is important (Entrepreneur H, the owner of a website development company, Australia).

By contrast, Malaysians focused more on investing in technology especially communication technology and utilising up-to-date technology. This was seen as a means whereby to remedy the common constraint on growth of SMEs in Malaysia, namely, the use of outdated technology (Osman & Hashim, 2003). Another method for building competitive advantage in Malaysia was diversifying the business portfolio. As mentioned by Entrepreneur N (the owner of a motor trading company, Malaysia):

It is important for me to diversify my business portfolio so that I do not rely on only one source of income (translation).

It has also been noted that several interviewees (3 Australians and 6 Malaysians) actively weighed the costs and benefits of undertaking strategic actions. This was especially significant if the actions required a significant financial commitment on the part of the entrepreneurs because more often than not, the owners utilised their own personal savings for business investment (Bennett & Dann, 2000; Tucker & Lean, 2003).

In general, the examination of the nature of the strategic behaviours identified by participants from both countries highlighted four key elements. First, the need to devise strategies that would enable their business to succeed was clearly articulated. Second, Australians and Malaysians exhibited a common understanding of the importance of having a clear vision and direction for their business. These findings are consistent with the literature that has reported that formulating strategies and developing clear business goals

and a vision are significantly related to entrepreneurial behaviour in smaller firms (Sadler-Smith et al., 2003). Third, entrepreneurs from both countries agreed on the importance of creating a competitive edge in business; however, different means for achieving this goal were articulated. Australians highlighted the significance of outsourcing non-core business activities such as advertising, payroll, and marketing. Among Malaysian entrepreneurs, there was no discussion of outsourcing business activities; these entrepreneurs emphasised investing and utilising up-to-date technology as means whereby to develop the firm's competitive advantage. Fourth, a marked contrast was noted with respect to the importance of diversification or specialisation to gain competitive advantage. Australians stressed specialisation whereas Malaysians emphasised diversification. This variation may reflect the differences in the industries in which the entrepreneurs were operating, differences in their firm's maturity, and differences in the degree of competition. The results of the analysis of Strategic Competency, and the clusters of behaviour that define it, are summarised in Figure 3.

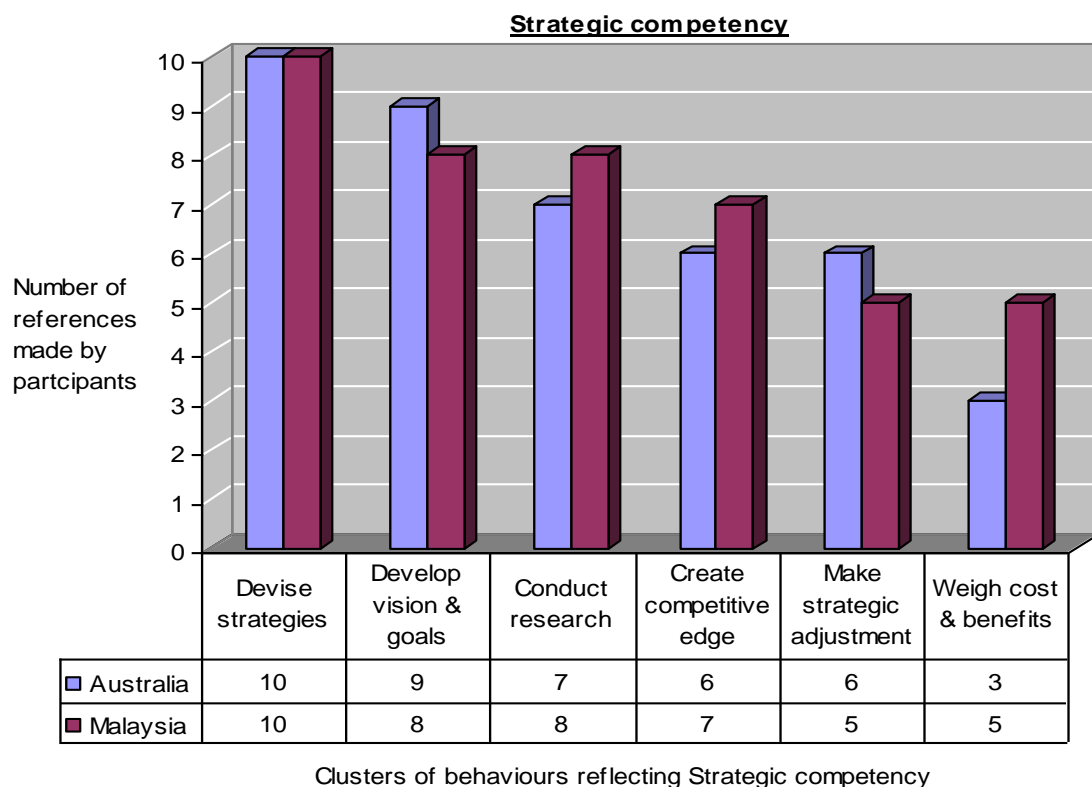


Figure 3. *Clusters of Behaviours that define Strategic Competency in Australia and Malaysia.*

4.6.1.2 Commitment Competency

Commitment Competency refers to behaviours that “drive entrepreneurs to move ahead with the business” (Man et al., 2002, p. 132). It includes the following behaviours:

(i) dedication to make the venture work; (ii) refusal to let the venture fail; (iii) possession of strong internal drive to succeed; and (iv) commitment to long term business goals. All interviewees agreed that success required strong commitment. Interviews revealed three clusters of commitment behaviours representing 13 specific behaviours that reflected the strong commitment of the entrepreneurs (refer to Table 13).

Table 13 *Commitment Competency Domain: Clusters and Examples of Commitment Behaviours*

Cluster	Examples of behaviours
Commit to business goals*	<ul style="list-style-type: none"> • Take business seriously and be committed • Commit to producing quality products/services • Strive to make the best out of the products • Commit towards achieving goals • Passionate about the business • Devote oneself to business
Sustain effort*	<ul style="list-style-type: none"> • Restart business if fail and never give up • Find other opportunities if fail • Sacrifice time to make sure business goes well • Willingness to walk the extra mile • Continue to fight for business course • Be consistent in one's effort
Stay focused on business goals*	<ul style="list-style-type: none"> • Stay focused on business objectives/goals

Note. * Clusters or behaviours identified in Man (2001).

Although the behaviours that demonstrated commitment took many forms (i.e., commitment towards achieving business goals despite various obstacles, commitment to producing quality products, and commitment to ensuring that the business succeeded), the focus was explicitly on “taking the business seriously” for participants in both countries. This is captured by two quotes:

I take my business seriously. If something does not work, then I will try to find ways around it. I'll make sure that I get there one way or another. That requires a strong commitment on my part (Entrepreneur A, the owner of a handbag designing and manufacturing company, Australia).

People have good intentions and dreams, but only a few are willing to commit to what is necessary to achieve them and only this few would eventually succeed in their endeavours (translation) (Entrepreneur L, the owner of a software development and computer service company, Malaysia).

Closely related to commitment to business goals is the notion of “never giving up”, “restart the business if you fail”, and “find other business opportunities if you fail”, as highlighted by all participants from Australia and Malaysia. A good example of behaviours reflecting the willingness to restart the business, after experiencing failure, was provided by Entrepreneur D (the owner of a computer and related service company, Australia) who said:

I don't look for a free lunch, but this business can go tomorrow and I can start another business, I would have no hesitation, I would get into an antique shop, or would get into

anything I feel strongly about, and it's all going back to the basics, buying something for \$1 and selling it for \$2 or whatever, but no, I'm not scared of my own business failing. I would not give up.

Similarly in Malaysia, striving and persisting were behaviours that were highlighted. For instance, Entrepreneur Q (the owner of a catering service company and a restaurant) passionately observed:

I believe in persistent efforts to do the very best possible. It is hard work that overcomes a lot of obstacles...and it is hard work that makes successful people (translation).

Participants also stressed the importance of "holding on" to the business especially in the early years of start-up, because it could be years before results were achieved. As mentioned by Entrepreneur D (the owner of a computer and related service company, Australia):

Don't think that you are going to make lots of money quickly; if you do make lots of money, it will be after a lot of hard work, at least for a fair period of time, your life will tend to revolve around the business rather than anything else. You've just got to put the hard time into it to make it happen.

These comments are consistent with observations in the literature (see for example, Locke, 2000). In addition, all participants highlighted that "passion" is important to success. Entrepreneurs need to "love what they are doing". An example that clearly illustrated the importance of "passion" is:

We are so passionate about the business and it does not feel like working at all, it feels like we are doing something that we love (Entrepreneur H, the owner of a website development company, Australia).

This passion, as claimed by Entrepreneur L (the owner of a software development and computer service company, Malaysia), "would drive people to do things whole-heartedly". This is consistent with Timmon's (2000) view that passion is relevant in entrepreneurial settings because it allows entrepreneurs to face uncertainty with a degree of equanimity. Another behaviour that reflected the Commitment Competency that was identified in this study was the ability to stay focused on business goals. Six Australians and five Malaysians maintained that it was crucial for business owners to be focused on what they wanted to achieve.

In summary, the findings demonstrated strong consistency in the importance attached to commitment and determination among Australian and Malaysian participants. Participants confidently stated that the fate of their business was in their hands, making strong commitment on the part of the entrepreneurs pivotal. There were two behaviours that best described the Commitment Competency, namely, commitment to pursuing business goals and having the motivation to "bounce back" when experiencing failure. The findings verified earlier studies that reported a link between commitment to the business

and subsequent success (J. L. Thompson et al., 1997; Timmons, 2000). The number of interviewees from each country who identified a cluster of Commitment Competency behaviours is summarised in Figure 4.

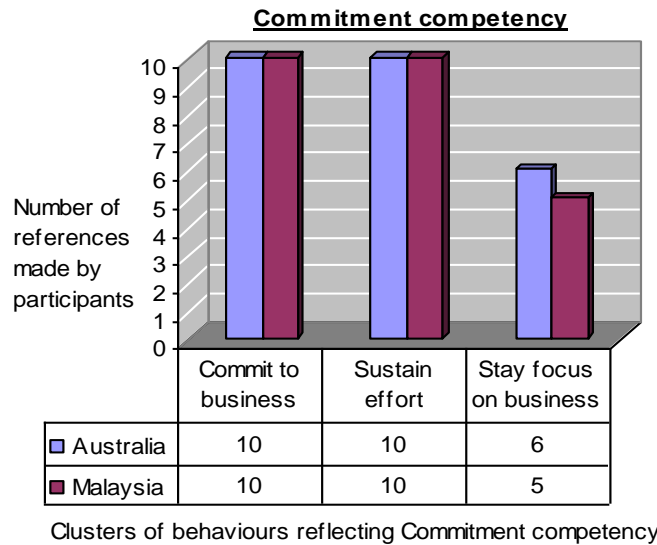


Figure 4. Clusters of Behaviours that define Commitment Competency in Australia and Malaysia.

4.6.1.3 Conceptual Competency

Conceptual Competency refers to “different conceptual abilities which are reflected in the behaviours of entrepreneurs, such as decision skills, absorbing and understanding complex information, risk taking, and innovativeness” (Man et al., 2002, p. 132). As shown in Table 14, the qualitative data revealed 19 behaviours that could be categorised into six clusters of conceptual behaviour.

Eighteen participants reported that they frequently faced challenging situations that required them to engage in the process of analysing, evaluating, and selecting the best possible alternative from a number of options. Interestingly, despite the common belief that analysing should be conducted formally and taken step-by-step, six participants from Australia and two from Malaysia clearly stated that too much time spent on analysing could be problematic and harmful to the business. This was because engaging in these activities required time and financial resources, both of which were considered to be in “short supply”.

Table 14 *Conceptual Competency Domain: Clusters and Examples of Conceptual Behaviours*

Cluster	Examples of behaviours
Think analytically *	<ul style="list-style-type: none"> Analyse effective ways to overcome hurdles Be analytical in decision making Pay attention to details before making decision Analyse consequences of any decision to be made Make good business judgments
Assess and take risks*	<ul style="list-style-type: none"> Assess and calculate the possible risks and challenges Assess risks (do not go blindfolded) Able to manage risks Adopt “just-do-it” approach
Innovate*	<ul style="list-style-type: none"> Be innovative and do things differently Be creative in business Reinvent oneself and come out with something new Experiment with new ideas
Think intuitively*	<ul style="list-style-type: none"> Be spontaneous and quick in making decision Make decision based on gut instinct (not identified in Man, 2001)
Be proactive*	<ul style="list-style-type: none"> Be proactive and responsive to changes Focus on finding new ideas Take drastic steps in making necessary changes
Manage ambiguity	<ul style="list-style-type: none"> Manage ambiguity

Note. * Clusters identified in Man (2001). Note that a cluster identified in this study not mentioned by Man (2001) included “manage ambiguity”. Behaviours representing this cluster however, were discussed by Covin et al. (1999) as behaviours required in managing a turbulent business environment.

Fifteen of 20 participants (8 Australians and 7 Malaysians) indicated that they engaged in some form of “risk-taking” in order to support their business. Many described the imperative as “just-do-it” regardless of the possible consequences. According to Entrepreneur C (the owner of a software development and computer related service company, Australia):

When I decided to start my own business and walk away from employment, I was basically risking everything. Financially, I had nothing that was guaranteed anymore...The most important thing for entrepreneurs is to be comfortable with not having a guaranteed future.

Demonstrating similar risk-taking behaviour, Entrepreneur D (the owner of a computer and related service company, Australia) stated that he had nothing to worry about in starting his own business because he knew that he could always start another business should he fail in the first attempt. This view was shared by Entrepreneur I (the owner of a musical instruments manufacturing company, Australia) who said:

We entrepreneurs are very much risk-takers. You have to jump in the deep end and be willing to step outside the comfort zone...It’s better to have tried and failed than to never have tried at all.

Malaysian participants believed that risks were always there, but at the same time, they highlighted ways to minimise those risks. These included conducting informal research before investing, and having specific back-up plans as a form of preparation for

bad outcomes. As suggested by Entrepreneur L (the owner of a software development and computer service company, Malaysia):

The problem with some people is that they are afraid to try. We have to be strong in taking risks and invest in areas that we have passion for. So go for it, but always be prepared for the worst outcome (translation).

The impression conveyed was that Malaysian entrepreneurs have a somewhat more cautious attitude towards risk. Even though they demonstrated a willingness to explore and take up risks in business, they also made an attempt at risk reduction. As suggested by Entrepreneur Q (the owner of a catering service company and a restaurant, Malaysia), this could be achieved by being aware of and understanding the actions of competitors. He said:

It is important for me to know what my competitors are doing, their strategies, and especially their strengths so that I can start revising my business strategies and plans to compete and outperform them (translation).

Fourteen participants (8 Australians and 6 Malaysians) mentioned that it was important to reinvent the business, create new ways of doing things, and even create new products or services that could be perceived as valuable by potential customers. Participants from Australia highlighted the value of reinventing the business and producing something new (i.e., innovation). Entrepreneur A, (the owner of a handbag designing and manufacturing company, Australia) reported being uncomfortable with doing things that other people had already done. Those from Malaysia stressed the importance of: having new ideas on how to market products and services; having new approaches to customer service; and developing a new business concept. For example, Entrepreneur Q (the owner of a catering service and restaurant, Malaysia) said:

To differentiate our service with others, we came out with a new concept of serving the customers. We highlighted serving fresh seafood (translation).

Thinking intuitively was also highlighted in the interviews. Six Australian participants stated that they would rather follow their “gut instincts” in making a decision, even though this might involve risk. They pointed out that entrepreneurs do not necessarily follow formal, logical steps in analysing the implications of their decisions and most of the time, they make spontaneous decisions based on their experience and knowledge. Two examples are:

Normally I trust my gut instincts. It’s only when you analyse things too much or listen to the wrong people that will make you sway (Entrepreneur D, the owner of a computer service company, Australia).

The best thing to do sometimes is to follow one’s gut instincts, and for me, 99% of it I got them right (Entrepreneur I, the owner of a musical instruments manufacturing company, Australia).

Two participants from Malaysia mentioned the importance of being quick in making decisions. However, the notion of following one's gut instincts was not apparent in the interviews with Malaysian entrepreneurs. This could be explained by the more cautious attitude toward taking risks among Malaysian entrepreneurs, as evident in the emphasis on conducting research, weighing costs and benefits, and constantly being aware of the competitors' actions. In addition, the ability to manage ambiguity was also discussed by five participants (3 Australians and 2 Malaysians).

Four Australians and three Malaysians added that being proactive, responsive, and flexible in business was crucial, given the rapidly changing business environment especially for the service sectors. According to entrepreneur F (the owner of a public relations consulting firm, Australia):

I think the business environment has changed dramatically. I mean in that 20 years the business environment has changed a lot and I think the pace of change is much faster now. So I think the business now relies on being very proactive, responsive, and flexible.

In sum, participants from both countries demonstrated behaviours reflecting the Conceptual Competency, with “thinking analytically”, “assessing and taking risks”, and “innovating” dominating the discussions. It was apparent however, that even though entrepreneurs from both countries demonstrated risk-taking behaviour, the nature of this behaviour differed between countries. It was observed that Malaysians were more cautious in their attitudes towards risks, attempting to develop “safety nets” in order to minimise possible costs. Behaviours reflecting caution were often cited by Malaysian interviewees: assessing and calculating risks; conducting informal research on customers, location, and products or services; and preparing back-up plans for bad outcomes. However in Australia, “making decisions based on gut instinct” appeared to be more the norm. Expressions such as “...seat-of-the-pants...seriously, every time it's just seat-of-my-pants...” (Entrepreneur E, the owner of an air-conditioner service company, Australia) reflected the tendency among Australian entrepreneurs to make decisions based on gut instinct and the “just do it” attitude. Interestingly however, none of the Malaysian participants talked about using gut instinct in their business management, though they did highlight the need to make “quick” business decisions. The numbers of entrepreneurs who identified behaviours that could be described as fitting one of the Conceptual Competency clusters is summarised in Figure 5.

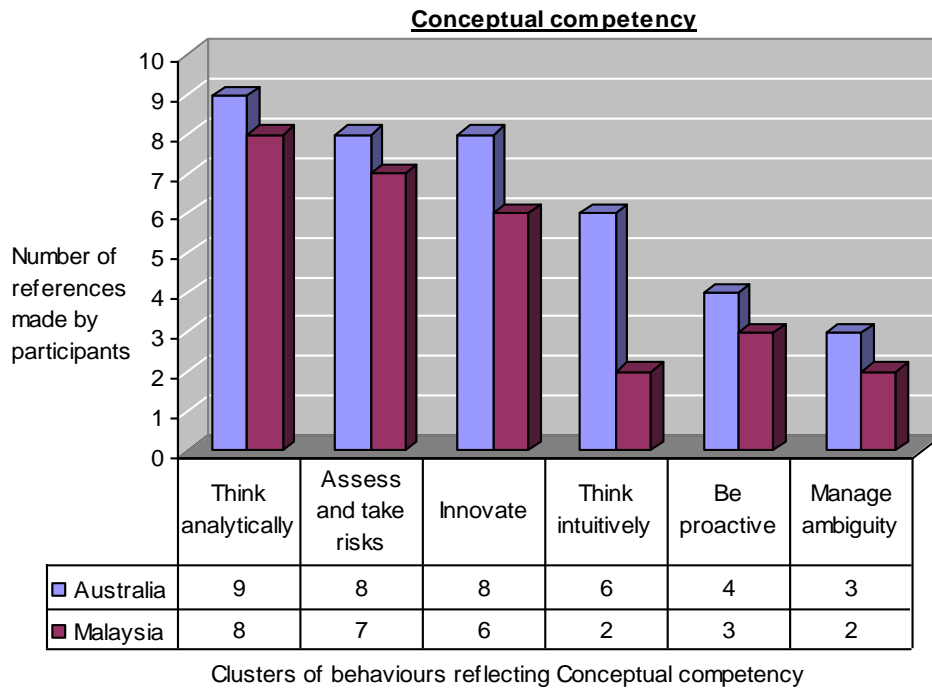


Figure 5. Clusters of Behaviours that define Conceptual Competency in Australia and Malaysia.

4.6.1.4 Opportunity Competency

Opportunity Competency encompasses behaviours related to “recognising market opportunities through various means” (Man et al., 2002, p. 132), which include: identifying goods and services that customers want; perceiving unmet consumer needs; looking for product and services that provide real benefit to customers; and seizing high quality opportunities (Man, 2001, p. 304). Thirteen responses that were classified into four clusters of opportunity behaviours were extracted from the interviews. These are summarised in Table 15.

Evidently, seventeen participants (9 from Australia and 8 from Malaysia) agreed that one of the major challenges for entrepreneurs was to recognise business opportunities when they come along. An interesting aspect of opportunity recognition was related to advancements in information technology. Five entrepreneurs from Australia and four from Malaysia believed that the rapid development of information technology provided entrepreneurs with a great opportunity to improve the effectiveness of their business processes. These entrepreneurs recognised the opportunity to develop more efficient ways of running their businesses by automating their activities using information technology.

Table 15 *Opportunity Competency Domain: Clusters and Examples of Opportunity Behaviours*

Cluster	Examples of behaviours
Identify/recognise opportunities*	<ul style="list-style-type: none"> • Recognise and spot quality opportunities • Recognise the importance of technology • Recognise potential customers
Respond and take action on opportunities	<ul style="list-style-type: none"> • Respond quickly to opportunities • Take a concept and turn it into a profitable outcome • Turn ideas into reality • Create a niche
Seek business opportunities*	<ul style="list-style-type: none"> • Scan the environment and look for opportunities • Actively search for opportunities • Actively search for customers • Explore new opportunities • Anticipate customer needs and trends to spot opportunities • Visualise available opportunities before they become reality

Note. * Clusters identified in Man (2001). Note that a cluster identified in this study that was not mentioned by Man (2001) is “respond and take action on opportunities”. Some behaviours representing this cluster however, were identified in McClelland (1987).

For instance, Entrepreneur C (the owner of a software development and computer related service company, Australia) said:

The Internet has completely redefined what we do and how we do it...It has been a huge change and even at the business level, how you conduct business has changed so much with the Internet. We are just connected to Internet all the time and get lots of information that we need from the Internet. We order things that we need by Internet, all our communications with clients is by the Internet, we even publish information out to our clients via Internet so we could be doing development and have them looking at what we are doing at the same.

Similarly, Entrepreneur L (the owner of a software development and computer service company, Malaysia) stated that the information technology revolution had provided vast opportunities for her in managing the business. Internet technology allowed her to automate her business activities, such that she no longer had to be in the office all the time. This allowed her to allocate more time to performing important business activities including meeting customers, doing promotion, and networking.

Recognising the existence of opportunities, by itself, will not improve business outcomes. Rather, it is the ability to respond to these opportunities by taking appropriate actions quickly that is critical. A total of sixteen participants (9 Australians and 7 Malaysians) identified the importance of this behaviour:

Millions of good ideas are destined to only be ideas. A true entrepreneur is someone who is able to turn ideas into realities (Entrepreneur I, the owner of a musical instruments manufacturing company, Australia; expressed in writing).

Opportunity normally presents itself only once. Grab it and make something out of it because the second one that comes may not be as good as the first (translation) (Entrepreneur K, the owner of a cosmetics manufacturing company, Malaysia).

Being proactive in searching for opportunities was also mentioned by a number of participants as an important aspect of managing their business. Five participants from Australia stated that entrepreneurs should not just wait for opportunities arise, but should go out and seek them, looking for those that match their business capabilities. Techniques for identifying opportunities included obtaining feedback from customers on their needs and interests, and being alert to the changes in business trends. As stated by Entrepreneur G (the owner of an electrical goods and furniture retail store, Australia):

The only way to know whether you've got the right products is to ask questions... People come in the store and they're just looking and I always ask questions because the more questions you ask, the more answers you're going to get. That's the only way to know if you've got the right products on the floor, by asking questions.

Similarly, for Malaysian participants, six of the 10 Malaysian participants mentioned the significance of seeking opportunities to grow the business further. Two examples reflecting this behaviour are:

I have to find my own ways. People will not tell you where the opportunities are and how to get them (translation) (Entrepreneur K, the owner of a cosmetics manufacturing company, Malaysia).

We can't just wait in the office and hope the opportunities will come. We have to go out and look for them. We have to be proactive. Go out. Do promotion. Meet people (translation) (Entrepreneur M, the owner of a steel trading company, Malaysia).

In sum, the findings demonstrated consistency with respect to the behaviours reflecting the Opportunity Competency in both countries. The behaviours most frequently highlighted were seeking and responding to business opportunities. The findings supported existing entrepreneurship theory that maintains that the core of entrepreneurship is recognising and exploiting opportunities (Chandler & Hanks, 1994; Shane & Venkataraman, 2000). The number of interviewees who identified relevant behaviours for each Opportunity Competency cluster is shown in Figure 6.

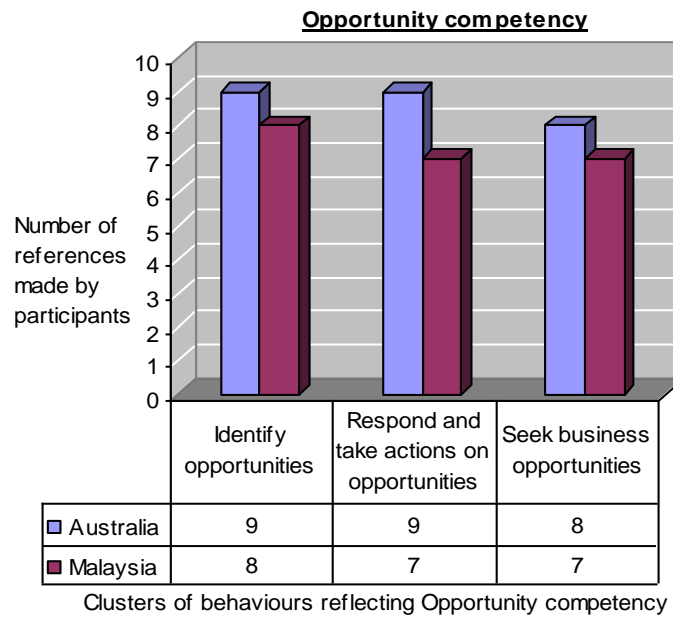


Figure 6. Clusters of Behaviours that define Opportunity Competency in Australia and Malaysia.

4.6.1.5 Organising and Leading Competency

Organising and Leading refers to “the organisation of different internal and external human, physical, financial, and technological resources, including team building, leading employees, training and controlling” (Man et al., 2002, p. 132). As indicated in Table 16, twenty five specific behaviours representing eight clusters of Organising and Leading behaviours were identified.

All 20 entrepreneurs reported that they had spent considerable time planning and organising various resources in the organisation. This included planning business activities, organising and mobilising resources, particularly human resources, controlling and monitoring the firm’s expenses, as well as leading and motivating staff. Australian participants emphasised the critical importance of staffing, recruiting the right number and type of people, handling under-performing and difficult staff, leading and motivating staff, as well as retaining outstanding staff. For example, as stated by Entrepreneur G (the owner of an electrical goods and furniture retail store, Australia): “Recruiting the right staff is hugely important because if you’ve got the wrong ones, it can make your business go bad as well”. Similar concerns were expressed in Malaysia.

Australian interviewees mentioned a number of techniques for motivating staff; being flexible, giving them the “bigger picture” of where the business was moving, allowing staff to take time off when required, and giving them autonomy and a stake in the business. They believed that by using these techniques, staff would feel they were a part of the organisation. This approach to staff motivation is consistent with research suggesting

that successful SMEs are those where the staff feel that they are partners within the organisation, rather than just workers (Choueke & Armstrong, 2000).

Table 16 *Organising and Leading Competency Domain: Clusters and Examples of Organising and Leading Behaviours*

Cluster	Examples of behaviours
Plan*	<ul style="list-style-type: none"> • Plan business activities either formally or informally • Plan and utilise resources effectively • Plan and develop formal working procedure for guidelines
Organise*	<ul style="list-style-type: none"> • Organise the financial side of things • Organise financial back up • Organise important resources effectively
Motivate*	<ul style="list-style-type: none"> • Motivate staff by providing them benefits and incentives • Cultivate entrepreneurial culture that encourage staff to be entrepreneurial in their jobs
Lead*	<ul style="list-style-type: none"> • Manage staffs effectively • Lead by example • Demonstrate strong leadership
Control and monitor*	<ul style="list-style-type: none"> • Monitor staff and production • Monitor results and progress to keep on track • Keep overheads low • Manage spending and other financial aspects • Keep employees focus on tasks • Meet project deadlines • Consistently monitor customer feedbacks
Delegate and coordinate*	<ul style="list-style-type: none"> • Delegate tasks effectively • Give autonomy to staff • Coordinate tasks and activities in the organisation
Build teamwork	<ul style="list-style-type: none"> • Encourage teamwork in organisation • Work as team • Get team energised to perform tasks effectively
Identify and recruit staff (the right people)	<ul style="list-style-type: none"> • Identify and recruit the right people on board (i.e., those with enthusiasm, motivation, and right attitude)

Note. * Clusters identified in Man (2001). Note that clusters identified in this study that were not mentioned by Man (2001) are “build teamwork” and “identify and recruit staff”. Behaviours representing these clusters however, were proposed by Winterton (2002).

Malaysian participants on the other hand, tended to focus on motivating staff through the use of tangible rather than intangible rewards: pay increments and other benefits; making sure that they were paid on time; and offering them cash advances when they were in financial difficulties. Nonetheless, some intangible reinforcements were also provided including: delegation of authority and more responsibility in their jobs; training when necessary; and a “positive” work climate.

Behaviours associated with the ability to control and monitor business activities and resources were also highlighted by a number of participants (4 Australians and 5 Malaysians). In both countries, particular attention was drawn to the issue of financial management. The interviewees mentioned that it was crucial for small business owners to

manage the firm's spending, keep overheads low, and be extra careful in giving credit to customers. As stated by Entrepreneur M (the owner of a steel trading company, Malaysia):

One of the most challenging areas in business is debt collection. I had that problem 3 years ago and it affected my business badly (translation).

A similar view was expressed by Entrepreneur L (the owner of a software development and computer service company, Malaysia):

One of the toughest parts in business is debt collection. We have to do follow up and sometimes to the extent that we have to take legal action (translation).

This finding is consistent with Hood and Young's (1993) finding that financial management was ranked among the most important areas in managing business by CEOs of successful entrepreneurial firms in the US.

Delegating and coordinating activities were also highlighted by 13 participants (5 Australians and 7 Malaysians) as important tasks in managing a business. Among the specific behaviours reported to be important were the ability to delegate tasks effectively, give autonomy to staff, and coordinate activities in the organisation.

Another significant area related to the Organising and Leading Competency was the ability to create a strong team. This cluster of behaviours was highlighted by nine entrepreneurs (5 Australians and 4 Malaysians). As indicated by Entrepreneur I (the owner of a musical instruments manufacturing company, Australia):

The best thing is, as business owners, we should not try to do everything on our own but to build a team that help us do things together. My staff are actually a part of this organisation. They do not just work for me; they are part of the core team.

These entrepreneurs believed that teamwork could help to overcome problems associated with a lack of capacity because it encouraged "multi-skilling" and "work sharing". They stated that as business owners, they were unable to manage everything by themselves and needed to depend on other staff in order to accomplish various tasks. Consequently, some argued that it was important that the owner and staff work together as a team. According to Entrepreneur M (the owner of a steel trading company, Malaysia):

Teamwork means working alongside your staff, giving them extra hands if needed, and helping them if they face problems (translation).

Participants (4 Australians and 3 Malaysians) also emphasised that it was crucial to identify and recruit the right people. For Australian participants, important qualities for staff were enthusiasm, motivation, and the "right" attitude. For Malaysian entrepreneurs, recruiting people who they could trust was the most important criterion.

The findings revealed commonalities in the clusters of Organising and Leading competencies identified by Australians and Malaysians. Common clusters included planning and controlling activities, leading and motivating staff, and encouraging

teamwork. However, the focus on financial management differed between countries in a number of ways. Participants from Malaysia were more concerned about credit control and debt collection. By contrast, Australian participants appeared to be more preoccupied with keeping overheads low in their business. Both aspects of financial management - managing debtors and creditors as well as managing cash flows and overheads - were identified by a sample of 306 small business owners in the UK to be among the most important aspect of management (Stokes & Blackburn, 2002). The number of interviewees from each group who identified a behaviour within a cluster of the Organising and Leading Competency is illustrated in Figure 7.

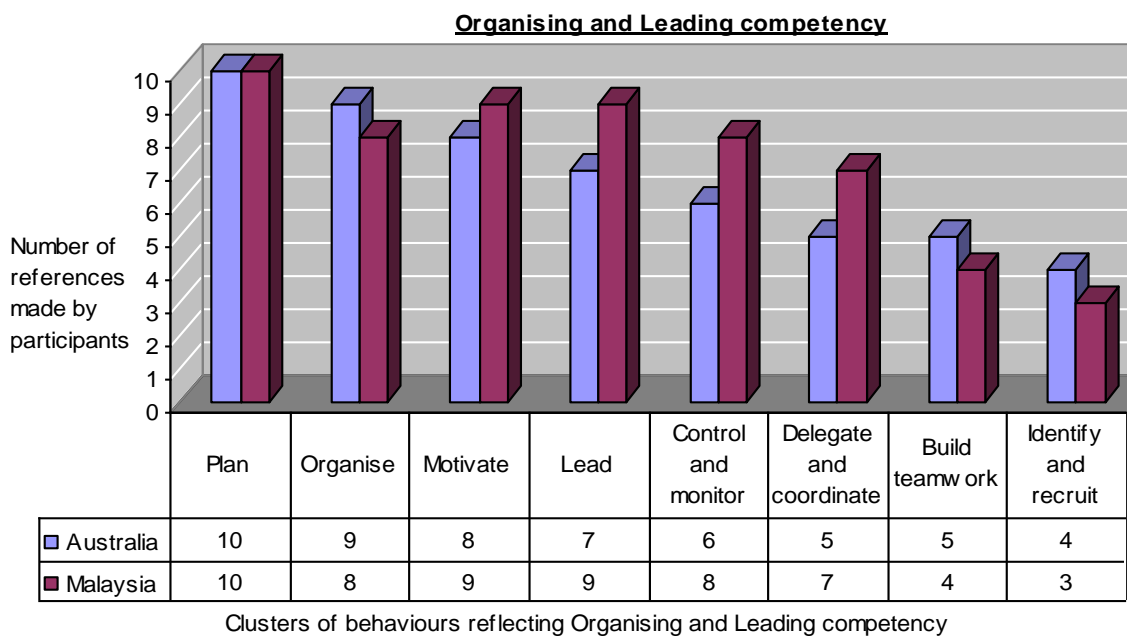


Figure 7. Clusters of Behaviours that define Organising and Leading Competency in Australia and Malaysia.

4.6.1.6 Relationship Competency

The Relationship Competency relates to skills in “person-to-person or individual-to-group-based interactions, such as building a context of cooperation and trust, using contacts and connections, persuasive ability, communication and interpersonal skill” (Man et al., 2002, p. 132). These behaviours were clearly identified by interviewees from Australia and Malaysia as impacting on their business’s performance. As depicted in Table 17, six clusters representing 38 behaviours reflecting the Relationship Competency were identified.

The interviews revealed that the Relationship Competency was considered crucial by entrepreneurs because their daily routines required them to deal with many people. The behaviour that was most frequently cited (8 Australians and 9 Malaysians) was gaining the

trust and confidence of customers. In the case of Australia, Entrepreneur C (the owner of a software development and computer related service company, Australia) indicated that playing the role of “client liaison” was vital for his business. Other participants commented that it was important for them to be open and friendly with customers and to show customers that they were committed to “looking after” them.

Table 17 *Relationship Competency Domain: Clusters and Examples of Relationship Behaviours*

Cluster	Examples of behaviours
Build trust and convince customers*	<ul style="list-style-type: none"> • Provide good customer service • Focus on customers satisfaction • Be open and friendly to customers • Be persuasive and convincing in selling ideas, product or services • Demonstrate to customers that they are being taken care of • Convince customers of your own expertise • Impress customers by being alert to their needs • Be patient when dealing with difficult customers • Show interest in customers needs • Give customers good impression to build trust • Speak politely to customers with a level of competence
Possess good interpersonal skills*	<ul style="list-style-type: none"> • Communicate effectively with others • Relate to others using good interpersonal skills • Be diplomatic and kind to others • Aware of others’ feelings when dealing with them • Mind your personality and attitude when dealing with people • Appreciate cultural differences • Avoid having bad perception of other people
Develop and maintain relationships*	<ul style="list-style-type: none"> • Build and maintain good relationship with staff • Develop good relationship with anybody you meet • Build and maintain good relationship with customers – take up the role of “client liaison”
Build network and contacts*	<ul style="list-style-type: none"> • Develop network with experts, advisors, government agencies and financial institutions • Surround yourself with supportive and knowledgeable people • Seek advice from experts when necessary • Select the right people for advice • Develop contacts to achieve recommendations or to gain more information • Meet the right people
Discuss and share (to create positive working climate)	<ul style="list-style-type: none"> • Get staff involvement in setting goals and plans • Get staff involvement in making decision • Discuss with employees on their works and problems • Create positive working climate through discussion and problem-sharing • Be open to staff and provide useful advice • Be open to criticism
Manage conflicts*	<ul style="list-style-type: none"> • Handle staff conflict • Encourage staff to discuss matters/problems openly • Manage crises effectively
Negotiate*	<ul style="list-style-type: none"> • Negotiate with customers • Negotiate with suppliers effectively

Note. * Clusters identified in Man (2001). Note that a cluster identified in this study that was not mentioned by Man (2001) is “discuss and share” (to create a positive working climate). Some behaviours representing this cluster however, were identified in Snell and Lau (1994) such as gaining staff commitment and maintaining good relationships with staff.

For Malaysian participants, the development of close personal relationships with customers seemed to be particularly important. For some, customers later became friends and an important source of referred custom. Expressions such as “treat customers as friends” (entrepreneur Q, Malaysia) and “customers eventually become my close friends and source of reference” (entrepreneur R, Malaysia) denoted the importance that Malaysians attributed to the personal network. A very illustrative example of the value given to personal relationships was provided by Entrepreneur S (the owner of a printing service company, Malaysia):

My relationship with customers is very close as if we are in a ‘marriage relationship’. Never lose contact with your customers for more than 3 months or they will find other suppliers. ...so in business, our relationship with customers is like ‘husband and wife’. Show them that you care and maintain close relationship (translation).

Another Relationship Competency that was identified was good interpersonal and communication skills (7 Australians and 9 Malaysians). Both Australian and Malaysian participants emphasised the importance of an ability to communicate effectively with others, to be able to connect with them, and to be diplomatic and kind. An interesting comment made by two Australian participants, not mentioned by any Malaysian participant, was the ability to appreciate cultural differences. This might reflect the multicultural nature of Australian society, where ethnic diversity appears to be significantly greater than in Malaysia. In Malaysia, there are three main racial groups who share a lot of commonalities, despite holding different religious beliefs (Abdullah & Lim, 2001).

Establishing long-term trusting relationships with others was also highlighted in the interviews with both Australian and Malaysian entrepreneurs. Thirteen of 20 entrepreneurs (6 Australians and 7 Malaysians) reported that developing good personal relationships could help them gather relevant information in order to expand their knowledge about the business. Australian participants stressed good relationships with suppliers and customers. Malaysian participants shared this view in addition to emphasising the need to establish good relationships with government agencies in order to secure projects, and with financial institutions, in order to apply for loans successfully. For example, Entrepreneur K (the owner of a cosmetics manufacturing company, Malaysia) claimed that her success in importing quality raw materials and exporting her products to other Asian countries was due to the good relationship that she had managed to establish with “the right people”.

Building networks and contacts emerged as an important cluster of Relationship competencies in the data for both countries. As indicated by one of the Australian participants: “...if you have not got the right contacts, then you are not in the same game as

your opposition” (Entrepreneur G, the owner of an electrical goods and furniture retail store, Australia). Australian and Malaysian participants did appear to differ in their views about the need to get advice from “the experts” or from those who have a strong background in business. Seven participants (5 females and 2 males) from Australia, compared with only two (females) from Malaysia, argued that it was essential to surround themselves with supportive and knowledgeable professionals including accountants, lawyers, and business mentors or consultants. Entrepreneur A (the owner of a handbag designing and manufacturing company, Australia) said that she was fortunate to have a “great team of mentors who had been fantastic in helping her to tap into the potential of her business”. She further commented:

It is very important for me to surround, you know, with people like lawyers and accountant because they are much more in tune with what you are trying to achieve.

Her observation is consistent with results of a study by Stanger (2004) that showed a high usage of external advisors, particularly among female entrepreneurs in Australia. Moreover, in this study, accountants and lawyers were identified as the most popular source of assistance. By contrast, the results of a study in Malaysia showed that nearly 70% of SME owners in their sample did not utilise external assistance in managing their business (Osman & Hashim, 2003).

Even though participants from both countries made reference to the importance of building networks and contacts, there was a stronger focus on this competency among Australian women than Australian men. This evidence is seen as an endorsement of the findings of a study by Rosa, Hamilton, Carter, and Burns (1994) which showed that women entrepreneurs were more inclined than their male counterparts to use networking as a strategy. In Malaysia, both male and female participants stressed the importance of having networks and contacts with the right people. Five male participants from Malaysia emphasised the need to establish personal contacts with government officials and financial institutions for various sorts of support.

Being small in size has historically created problems for SME owners (Morris, 2001), particularly in the area of staff retention. Attractive remuneration packages offered by larger firms could be a threat to retaining effective staff, as argued by two participants from Malaysia. According to these participants, creating a positive working climate where every member in the organisation could discuss and share their concerns openly was one strategy for mitigating this threat.

In addition, the ability to negotiate with customers and suppliers and the ability to manage conflicts within the firm were also highlighted by Australian and Malaysian

participants. However, both behaviours were emphasised more strongly by the Malaysian entrepreneurs than their Australian counterparts. Interestingly, this may reflect differences in the cultural orientations of Australian and Malaysian entrepreneurs, whereby maintaining harmonious relationships and avoiding conflicts are more highly valued by those who espouse collectivist values.

In sum, even though participants from both countries demonstrated behaviours reflecting the Relationship Competency, their patterns were slightly different. Australians demonstrated more formal and less personal relationships with customers, whereas the reverse was true for Malaysians. As mentioned earlier, Malaysian participants expressed informal and more personal relationships with customers. The higher tendency to negotiate and manage conflicts among Malaysian compared to Australian entrepreneurs may also indicate the influence of cultural differences between the countries. The number of people from each country who identified behaviours from one of the Relationship Competency clusters is depicted in Figure 8.

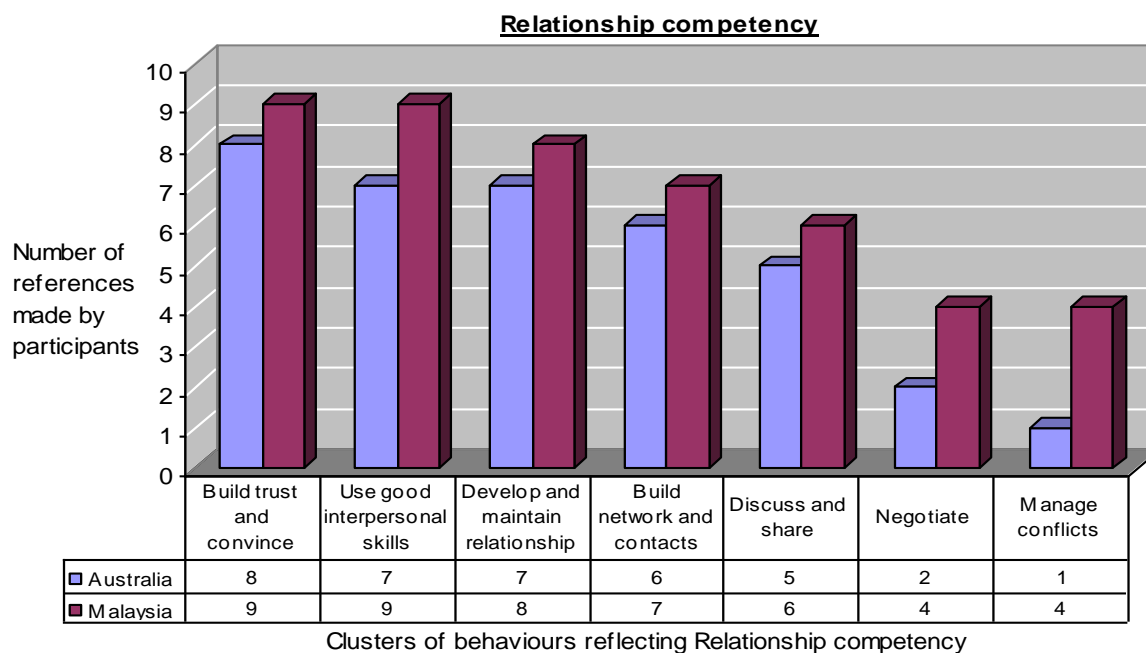


Figure 8. Clusters of Behaviours that define Relationship Competency in Australia and Malaysia.

4.6.1.7 Learning Competency

Learning Competency refers to the ability to “learn from various means, learn proactively, keep up to-date in the related field, and apply learned skills and knowledge into actual practices” (Man 2001, p. 304). In the present study, a commitment to learning was perceived by entrepreneurs to be a crucial competency. Moreover, there was a belief that the opportunity to continuously engage in learning activities would increase the

likelihood of business success. As indicated in Table 18, the Learning Competency was represented in this study by 8 behaviours that formed two clusters.

Table 18 *Learning Competency Domain: Clusters and Examples of Learning Behaviours*

Cluster	Examples of behaviours
Learn from various means*	<ul style="list-style-type: none"> • Learn from experiences and previous mistakes • Learn by observing others • Learn new approaches to improve business • Learn the “ins” and “outs” of the industry • Learn from the customers about their needs and expectation
Educate oneself*	<ul style="list-style-type: none"> • Gather information to keep oneself up-to-date • Educate and improve oneself • Attend training courses to fill in gaps in one’s knowledge

Note. *Behaviours representing both clusters were identified in Man (2001) except for “learn from the customers about their needs and expectation” and “attend training courses to fill in gaps in one’s knowledge”.

Seventeen of 20 participants (9 Australians and 8 Malaysians) reported that they had learnt a lot in terms of managing a business from their own experiences while handling the business. Learning typically took place in the early years of start-up or, alternatively, it involved the transfer of skills learned in the participant’s previous job. Learning also continued throughout the subsequent stages of development of the business. As indicated by Entrepreneur J (the owner of a business consulting firm, Australia):

I have learnt about the running of small business, how to sell and undertake project management from previous jobs. This has been instrumental in my success during the start-up phase. In addition, offering advice and consulting on a business marketing function requires a strong competency in business knowledge, so I could not survive without having learnt that, plus continuing to develop and learn new skills.

For the Australian participants, learning took various forms: learning from previous experiences and mistakes; learning from reading various materials related to business; learning by attending training courses and business conferences; and learning by watching how others did things. As indicated by Entrepreneur C (the owner of a software development and computer related service company, Australia), “...you cannot always be sure that your decision is right...you make mistakes, you learn from it”. In a similar vein, Entrepreneur I (the owner of a musical instruments manufacturing company, Australia) commented, “...don’t be afraid to make mistake as they are the greatest lessons we get along the way”. Australian participants also described acquiring new skills and knowledge relevant to business and obtaining up-to-date information about the industry as important to their business success. Similarly, for Malaysian participants, learning from watching others do their business, learning from their own experiences and mistakes, and learning by attending courses and training programs were reported to be important. As Stokes and Blackburn (2002) have observed, business owners who have had unsuccessful experiences

when managing a previous business are “motivated and more able to make it next time because of lessons learned” from that experience (p. 17).

Collectively, entrepreneurs from Australia and Malaysia viewed learning as important. The findings pertaining to this competency domain supported results from earlier studies indicating that adaptive adjustment in business requires an ongoing commitment to learning (Deakins & Freel, 1998). Interestingly, some within-country and gender differences emerged in participants’ views about the value of formal training and education. In Australia, male participants were less committed to formal training than female participants. In Malaysia, Chinese entrepreneurs were against the idea of participating in formal training, whereas the Malays, regardless of gender, perceived formal training as beneficial. This cultural difference was considered to be an interesting finding, worthy of follow-up in the quantitative study. Figure 9 shows the number of references made by participants to behaviours in each of the Learning Competency clusters.

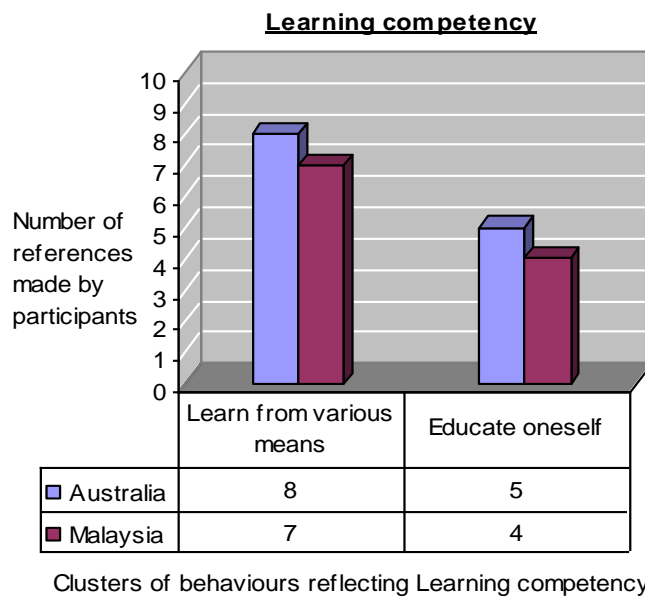


Figure 9. Clusters of Behaviours that define Learning Competency in Australia and Malaysia.

4.6.1.8 Personal Competency

Personal Competency related to the ability to “maintain a high level of energy, motivate self to function at optimum level of performance, respond to constructive criticism, maintain a positive attitude, prioritise tasks to manage time, identify own strength and weaknesses and match them with opportunities and threats, as well as recognise and work on own shortcomings” (Man, 2001, p. 304-305). Behaviours thought to indicate good Personal Competency include high motivation to succeed and high energy level; a positive attitude that is maintained through time; the ability to manage time

effectively; and good knowledge of one's own strengths and weaknesses (Man, 2001). Behaviours reflecting this competency were also evident in comments by entrepreneurs who participated in this study. In total, 22 behaviours and personal qualities were identified and were categorised into nine clusters of behaviours reflecting the Personal Competency domain, as depicted in Table 19.

Table 19 *Personal Competency Domain: Clusters and Examples of Personal Qualities*

Cluster	Examples of behaviours and personal qualities
Self-confidence (high internal locus of control)*	<ul style="list-style-type: none"> • Have unquestioning belief in one's own ability • Have strong self-confidence • Have strong belief that one's effort influence the business outcome
High need for achievement*	<ul style="list-style-type: none"> • Have strong need for achievement • Have strong ambition and internal drive to succeed
Self-motivation*	<ul style="list-style-type: none"> • Have strong self motivation • Able to deal with pressure and challenges
Organised and systematic (self-management)	<ul style="list-style-type: none"> • Be organised and systematic in performing tasks • Manage different things at the same time (multitasking) • Work smart
Maintain a balanced life*	<ul style="list-style-type: none"> • Maintain a balanced life between work and family
Self-awareness*	<ul style="list-style-type: none"> • Possess self-identity • Aware own abilities, strengths, and also weaknesses • Admit weakness and willing to ask for help
Time management*	<ul style="list-style-type: none"> • Manage time effectively • Avoid procrastination • Be disciplined
Energetic*	<ul style="list-style-type: none"> • Physically and emotionally tough • Be active and energetic in doing business • Possess energy to work long hours
Positive minded and outward looking *	<ul style="list-style-type: none"> • Have a positive attitude when dealing with difficult situations • Be outward looking

Note. * Clusters identified in Man (2001). Note that a cluster identified in this study that was not mentioned by Man (2001) is "organised and systematic". "Organised and systematic" however, was identified in Winterton (2002) as representing behaviours consistent with the notion of "self-management".

Self confidence (comparable to high internal locus of control), high need for achievement, and high levels of self-motivation were among the personal attributes that were frequently reported by Australian and Malaysian participants as being important for entrepreneurial success. The following excerpt illustrates:

To enable others to be confident with our business, we must first be confident with ourselves. Demonstrate to the customers that we are able to deliver as promised. For me, that is the most important thing in business life (translation) (Entrepreneur K, the owner of a cosmetics manufacturing company, Malaysia).

Participants from Australia and Malaysia believed that possessing a high need for achievement and strong motivation were two important attributes. They also recognised the importance of being organised and systematic in the performance of their tasks. Some pointed out that self-management was crucial because, as owner-managers, entrepreneurs have to manage various things including clients, staff, suppliers, cash flow, and other

important resources. According to Entrepreneur D (the owner of a computer and related services company, Australia): “Because there are never enough hours in the day, I think self management and being very well organised is important”. Entrepreneur F (the owner of a public relations consulting firm, Australia) commented:

I think one important thing of being an entrepreneur is being able to have a lot of balls in the air. You can't just be focused because you have to be thinking about so many things at the same time and balance all of those things with your other commitments. So I think that sort of ability to multitask is probably an important thing.

The ability to maintain a balance between work and family was recognised by 10 participants (6 Australians and 4 Malaysians) as an important, albeit indirect, factor leading to business success. According to Entrepreneur K (the owner of a cosmetics manufacturing company, Malaysia), this is because a balanced life is a prerequisite for good health and energy, the two essential requirements for SME entrepreneurs.

Self-awareness was also highlighted by nine participants (5 Australians and 4 Malaysians). For example, Entrepreneur F (the owner of a public relations consulting firm, Australia), highlighted the importance of being able to admit one's weaknesses. Specifically, one should acknowledge that one has a lack of knowledge in a particular area and should seek to acquire this knowledge. She observed that often, people were unwilling to admit that they had weak points in certain areas and as a result, they refused to go out and seek help to remedy these problems. Entrepreneur D (the owner of a computer and related service company, Australia) drew attention to the importance of knowing what one is good at (self-awareness) before venturing into any business and being confident about one's abilities. He said: “Always find something that you know that you can do better than somebody else and just do it”.

Closely related to being organised and systematic was the ability to manage time effectively. Time management was highlighted by participants as crucial, particularly given that SME business owners are often “a one-man band”. Given the various tasks undertaken by entrepreneurs, the ability to manage time effectively was viewed by participants as part of the reason why one succeeded in business.

It was also evident from the interviews that entrepreneurs were energetic. They indicated that they had a “huge amount of energy” and were “able to keep going at a million miles”. For instance, Entrepreneur K (the owner of a cosmetics manufacturing company, Malaysia) indicated that she gets easily bored and needs to constantly stimulate her mind with things that could help improve her business. She also indicated that she hardly ever feels tired when it comes to managing the business and said that being active, energetic, and hardworking were, in her opinion, important qualities for the maintenance of

the business. A majority of participants in the study agreed that these criteria distinguished successful entrepreneurs from less successful entrepreneurs.

Having a positive mindset and being outward looking were also perceived to be important both in Australia (3 participants) and in Malaysia (2 participants). Although these personal qualities were highlighted by only a few interviewees, other studies have indicated that being outward looking and positive are pivotal, especially in a globalised economy (Hood & Young, 1993). Entrepreneur F (the owner of a public relations consulting firm, Australia) said:

I think the way that the marketplace has changed in that now people are thinking nationally and globally, which 20 years ago you really didn't. Now it doesn't matter where you are. So that's been a big change I think. And I think having to be positive and outward looking is a change in perspective... I believe my business success is due to things like never ending positivity. I'm always positive.

In general, the personal attributes described by participants in the present study were consistent with those identified by Man (2001). Earlier, Hood and Young (1993) found that positive thinking, self-motivation, and self-confidence were among the top personal factors ranked by CEOs in successful entrepreneurial firms. Consistent with this, Naffziger, Hornsby, and Kuratko (1994) and Kuratko et al. (1997) have indicated that it is the entrepreneur's self-motivation that will ultimately determine a firm's success.

In the interviews, it was also noteworthy that participants from both Australia and Malaysia had a strong belief in their own abilities to minimise the effect of the external environment, suggesting that these entrepreneurs had an internal locus of control. This finding supports earlier studies showing that entrepreneurs believe that they are reasonably in control of their own futures (D. Y. Lee & Tsang, 2001; Pearson & Chatterjee, 2001). Figure 10 shows the number of references by participants from each country to behaviours associated with each of the Personal Competency clusters.

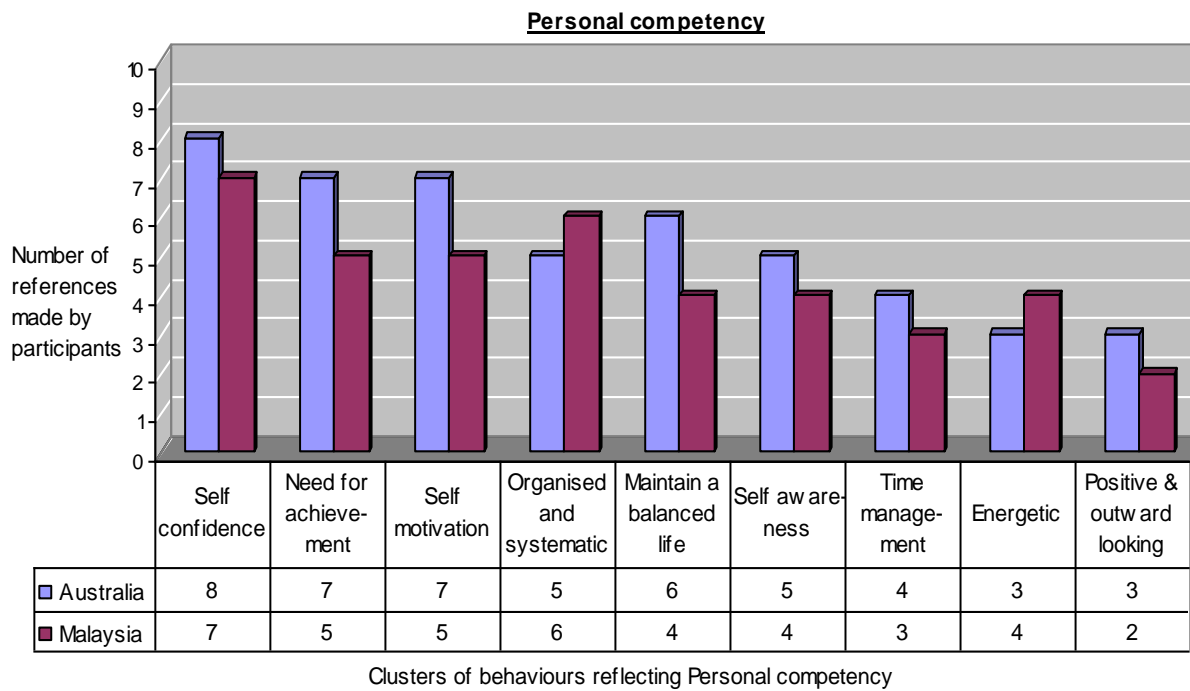


Figure 10. Clusters of Behaviours that define Personal Competency in Australia and Malaysia.

4.6.1.9 Technical Competency

Technical Competency refers to “the ability to use the tools, procedures, and techniques of a specialised field” (Chandler & Jansen, 1992, p. 226). Adapting this definition, in the context of this study, Technical Competency is demonstrated where the entrepreneur applies technical business *know how* and shows a good understanding of the requirements of the specific business domain. As shown in Table 20, participants in the present study identified a number of behaviours reflecting the importance of the Technical Competency for entrepreneurs.

Table 20 Technical Competency Domain: Clusters and Examples of Technical Behaviours

Cluster	Examples of behaviours
Possess*	<ul style="list-style-type: none"> • Demonstrate the possession of expertise in technical areas related to business • Demonstrate the possession of good grounding knowledge before venturing into the business
Apply*	<ul style="list-style-type: none"> • Apply technical knowledge relevant to business • Use specific techniques or tool relevant to business

Note. *Behaviours representing these clusters were identified in Chandler and Jansen (1992) and Martin and Staines (1994).

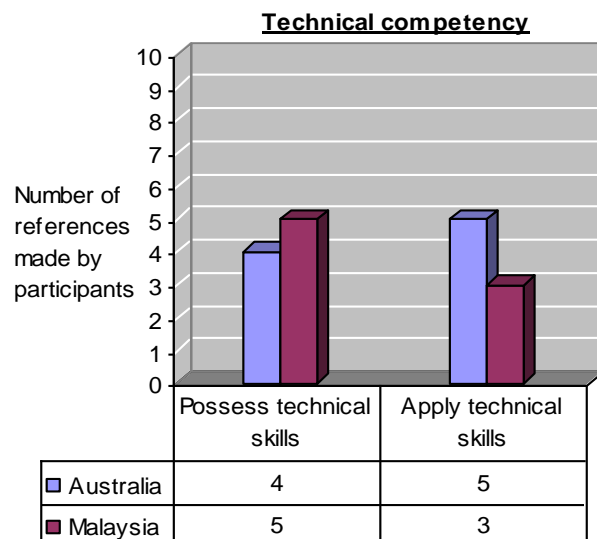
Interviewees stated that possessing technical expertise in business-related areas and having a good basic knowledge of the business were crucial for success. Nine participants (5 Australian and 4 Malaysian) indicated that possessing knowledge related to the business was crucial; particular attention was drawn to knowledge of financial management, marketing, staff management, and technical expertise. Entrepreneur A (the owner of a

handbag designing and manufacturing company, Australia) indicated that “it is pivotal for entrepreneurs to have good grounding knowledge on how to run their business even before they started”. This is because, being the owner-manager, the entrepreneur is the “source of reference” for employees in the organisation. In a similar vein, Entrepreneur B (the owner of a tailoring and dry cleaning service company, Australia) commented:

I strongly feel that if you haven’t got the expertise and experience yourself, then how do you expect others (the staff) to follow you. So it’s very important that you are up to the top. You have to have the right answers for the rest of the staff for them to follow.

One participant from Malaysia indicated that it was important to demonstrate that one possessed the necessary technical expertise, and convince the customers of this fact. Entrepreneur R (the owner of an optometry firm, Malaysia) argued that, “...in order to give the customers what they are paying for, entrepreneurs need to possess a certain level of technical expertise”. Possessing technical expertise was seen as critical to ensuring that entrepreneurs could deliver their products or services to customers as expected.

In sum, the results revealed that some participants from both countries recognised that in order to manage the business, the owner needed to have a thorough technical knowledge of his/her industry. However, this was not a majority observation, with only about half of the participants from each country recognising this requirement in each cluster. Figure 11 shows the number of references by participants from each country to behaviours associated with each of the Technical Competency cluster.



Clusters of behaviours reflecting Technical competency

Figure 11. Clusters of Behaviours that define Technical Competency in Australia and Malaysia.

4.6.1.10 Concluding remarks

The identification of nine competency areas, as elicited from the interviews conducted with Australian and Malaysians entrepreneurs, has confirmed the applicability

of existing models of entrepreneurial competencies, particularly Man's (2001). These models suggest the universality of some aspects of entrepreneurial behaviours across countries. Even though the frequency of representation of the competency areas differed between countries, the findings indicated that all nine competency areas were perceived by participants to be associated with their business success.

However, it was also noteworthy that the specific behaviours reflecting Strategic, Conceptual, Organising and Leading, and Relationship competencies showed inter-country differences. Two marked differences were identified in regards to Strategic Competency. Firstly, outsourcing non-core business activities was reported by Australian participants but not by Malaysian participants. Secondly, consistent with the first difference, Australians stressed specialising in one business portfolio, whereas Malaysians emphasised diversifying as a way to create the firm's competitive edge. In terms of Conceptual Competency, Australians indicated a reliance on their own "gut instincts" for operating their business, while Malaysians demonstrated a more cautious attitude towards risk, as reflected in their greater tendency to rely on research before proceeding with any action. With respect to the Organising and Leading Competency, Australians focused on maintaining low overheads while Malaysians emphasised the importance of credit control and debt collection. Finally, with regard to the Relationship Competency, Australians expressed a more "formal" and "task-oriented relationship" with customers while Malaysians indicated a more "informal" and "person-oriented relationship". As suggested, these differences may be explained by the individualism and collectivism orientations held by Australian and Malaysian entrepreneurs respectively.

It is also important to note that the present study identified some specific behaviours that, although consistent with Man's (2001) model, were not specifically incorporated in this model. These included: create a competitive edge (Strategic); be proactive and manage ambiguity (Conceptual); respond and take action on opportunities (Opportunity); build teamwork and identify and recruit staff (Organising and Leading); discuss and share to create a positive working climate (Relationship); and a cluster representing Personal Competency, namely, being organised and systematic. These competency clusters, however, were identified in other models of managerial and entrepreneurial competencies. For clarity, the frequency with which interviewees mentioned at least one of the behaviours that constituted each of the nine broad competency areas or domains is summarised in Figure 12.

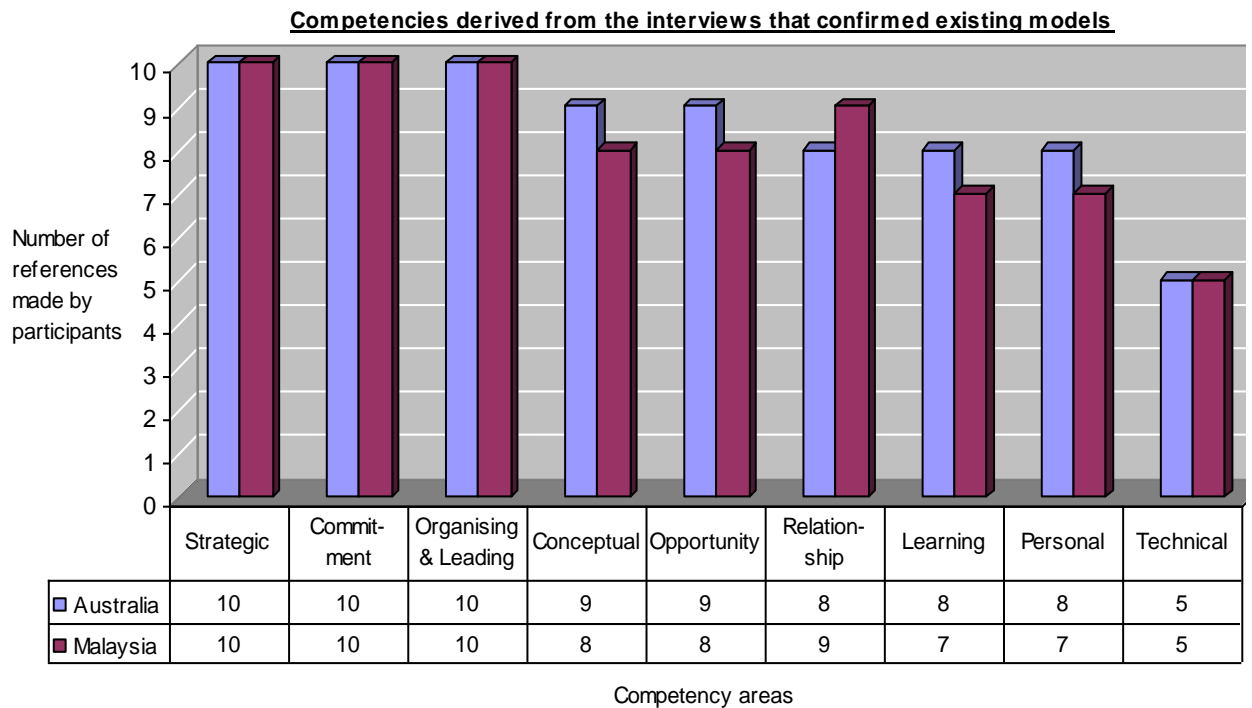


Figure 12. Competencies that confirmed the existing models derived from Australian and Malaysian data.

As shown in Figure 12 above, of the nine competencies, it is evident that the best represented competencies in the presented study were Strategic, Commitment, and Organising and Leading. These were followed by the Conceptual, Opportunity, and Relationship domains. Technical Competency domain appeared to be the least well represented for both Australia and Malaysia.

4.6.2 New competency domains themes identified

Importantly, the content analysis of the interview transcripts revealed three new themes concerned with behaviours not highlighted in previous competency models. These competency areas were labelled Ethical, Social Responsibility, and Familism. The point can be made that these domains, particularly the Ethical and Social Responsibility domains, reflect issues that have emerged in the contemporary management literature and that have been associated with good practice in large firms (Morris, Schindehutte, Walton, & Allen, 2002). It is only recently that their relevance to smaller firms has been acknowledged (Hatten, 2006; Luken & Stares, 2005), although not in models of entrepreneurial competencies (i.e., Chandler & Jansen, 1992; Man, 2001; Salomo et al., 2006). The Familism Competency, conceived as behaviours that reflect a strong commitment to family, is generally conceived of as a values concept in the management literature. This study is the first to attempt to integrate these three new competency domains into a theory that links entrepreneurial behaviour to business performance.

4.6.2.1 Ethical Competency

Based on the qualitative data gathered, a number of behaviours that were related to ethical practices in business dealings, but which could not be easily fitted to any of the existing competency domains, were identified. Accordingly, a new competency area labelled “Ethical Competency” was formed to represent these new behaviours.

The management literature generally is increasingly highlighting the importance of ethical management behaviours and the researcher made reference to this literature when defining this competency domain (e.g., Fülöp, Hisrich, & Szegedi, 2000; Hornsby, Kuratko, Naffziger, LaFollette, & Hodgetts, 1994; Jones, 2000; Milton-Smith, 1997). Specifically, the definition of ethical business behaviour proposed by Lewis (1985) was used to define Ethical Competency as behaviours that indicate the use of “rules, standards, codes, or principles which provide guidelines for morally right behaviour and truthfulness in specific situations” (p. 381). In the present study, comments suggesting that participants demonstrated the application of ethical rules and principles within a commercial context and considered them important in running a business were categorised as Ethical Competency. Generally, this was reflected in comments about “what ought to be done or what ought not to be done” or “what is right and good for humans” (c.f., Jones, 2000). As indicated in Table 21, eleven specific behaviours were identified as being associated with the Ethical Competency domain and these were grouped into three clusters.

Table 21 *Ethical Competency Domain: Clusters and Examples of Ethical Behaviours*

Cluster	Examples of behaviours
Concern for ethical business practices	<ul style="list-style-type: none"> • Handle business based on ethical standard and philosophical consideration • Avoid being too greedy or money-oriented • Handle business based on corporate governance • Engage in fair, open, and honest marketing practices • Be committed to offering products/services at fair prices
Maintain honesty and integrity*	<ul style="list-style-type: none"> • Be honest and transparent in business dealings • Be trustworthy • Keep promises • Hold on to integrity⁷
Take responsibility and be accountable	<ul style="list-style-type: none"> • Take responsibility and be accountable for own actions • Admit mistakes and inform the affected party that they have occurred

Note. *Of all behaviours representing “maintain honesty and integrity” cluster, only “honesty when dealing with people” was identified by Martin and Staines (1994) and proposed by Winterton (2002) to be included as a behaviour representing Personal Competency.

Thirteen participants (6 from Australia and 7 from Malaysia) highlighted the importance of ethical practice in business. Entrepreneur D (the owner of a computer and

⁷ It is important to note that Man (2001) identified ‘honesty’ in the interview conducted among 19 business owners; however, this behaviour was not included in his subsequent quantitative study.

related services company, Australia) commented that ethical considerations outweighed material or financial considerations. He indicated that that business people should not be caught up in the “culture of greed and materialism” and should hold to ethical standards in their business dealings. This entrepreneur also conveyed his frustration that some business owners refused to pay taxes:

I've got no time for somebody that sort of rips somebody else off or rips the government off by saying they didn't pay their taxes, I don't like that. Entrepreneurs should pay their fair dues to the society by conducting their business in an ethical manner.

Similarly, Entrepreneur F (the owner of a public relations consulting firm, Australia) indicated that she had an unquestioning belief in the importance of being honest, open, and transparent in business dealings, and in relationships with customers and staff. For her, absolute openness and integrity were hugely important, and she argued that “...anything less than absolute honesty and absolute ethical behaviour will hinder you in the long run”. She added:

I think ethics is becoming a real issue for business. There's much more emphasis on corporate governance. There's much more interest in how directors behave and how executives behave. So I strongly believe that ethics goes without question.

It is also interesting to note that, while a majority of participant talked about maintaining honesty and integrity as a crucial aspect of work values, one participant (Entrepreneur E, the owner of an air-conditioning service company, Australia) suggested that the over-regulated tax system faced by small business owners may lead them to conceal their taxable income. He stated:

The national obsession seems to be cheating on their tax these days. Seriously, it's turning into this game all the time. The new tax is almost encouraging it. The thing that's really interesting in this country is small business is so over regulated; the national obsession is trying to cut corners and cheat on their tax to maintain some sort of profitability. Because if everyone was incredibly honest with what they did, no one would survive in a small business. It's so over regulated and so draconian. The whole way the government expects you to operate, you would never get anything done. Even to the point where, I resent it when the new tax system came out doing BAS (Business Activity Statements).

The impression conveyed in the above excerpt is that a stressful business environment, such as one in which entrepreneurs face (i.e., strict tax regulation), might lead entrepreneurs to act unethically.

Others (2 Australians and 3 Malaysians) argued that entrepreneurs should admit their mistakes and tell the truth, especially if there are any product quality or safety implications. Two quotes illustrate this:

The decisions I've made is that, I've had to make some customers upset that I don't have laptops but at the same time I believe it's criminal for me even to sell a laptop (second hand) at \$600 knowing full well they can buy a brand new one for \$1200 or

\$1100. So I've got to make sure that I can sleep at nights and also I would feel that let other companies sell them (second hand laptops), and if they have problems, I'll look after them (Entrepreneur D, the owner of a computer and related services company, Australia).

The toughest thing is when you are making mistakes and having to tell the customer that they have occurred. But you have to do it no matter what...no compromise on that (Entrepreneur F, the owner of a public relations consulting firm, Australia).

The importance of being transparent in business dealings was also highlighted by one participant from Malaysia (Entrepreneur K, the owner of a cosmetics manufacturing company):

It is a common practice in my business that during consultation sessions with the customers and potential dealers I will explain in detail the effects of each of the products and how the products could help solve the problems that customers have, and at the same time explain the side-effects of using the products. I would also disclose to my customers the potential hazards for those who have specific medical problems (translation).

This participant added that her first priority in business was to be transparent to her customers during a consultation session, not risking the customers' safety simply to gain more profit.

Similarly, Entrepreneur M (the owner of a steel trading company, Malaysia) admitted that he first started a humble "two-dollar" company, and that over 10 years of operation, he had dealt with his suppliers and financial institutions with honesty. It was because of this that he had not faced any problems with the reliability of supply or finance. He suggested that the most important thing was to be honest and sincere in business dealings, and if money was the prime motivation, one would not last long in business.

Being trustworthy was another area that participants highlighted during the interviews. Entrepreneur N (the owner of a motor trading and insurance company, Malaysia) believed that the most important thing in business was to be trustworthy and to keep promises, and that ethical considerations should outweigh personal and financial motives.

In sum, participants from both countries demonstrated concern for ethical business practices in managing their business. Behaviours revolving around maintaining honesty and integrity, being trustworthy, engaging in fair commercial practices, not being too "money-oriented", and taking responsibility as well as being accountable for one's own actions were seen as important by participants. This finding is seen as consistent with a statement made by Fülöp et al. (2000, p. 5) that "ethical business behaviour is becoming increasingly important and starting to arise in the global economy", even in smaller firms. Figure 13 shows the number of references that participants from each country made to behaviours associated with each of the Ethical Competency clusters.

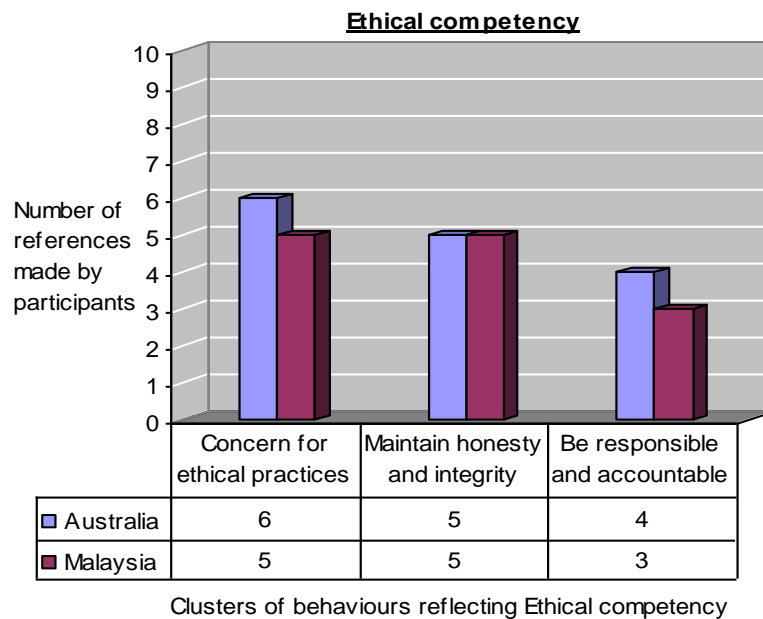


Figure 13. Clusters of Behaviours that define Ethical Competency in Australia and Malaysia.

4.6.2.2 Social Responsibility Competency

Comments that related to the social responsibility theme were also extracted from the interviews. A new area of competency was defined to represent these behaviours, with literature on social responsibility being used as a basis for the proposed definition (refer to Fülöp et al., 2000). As indicated, existing competency models do not specifically include social responsibility as an aspect of the competencies required by entrepreneurs. Social responsibility has been referred to as “the positive activities a company undertakes in the society in which it operates” including responsibility towards customers, employees, and the public (Fülöp et al., 2000). In the present study, behaviours and comments by the participants that demonstrated these “positive activities” were categorised as Social Responsibility Competency. Closely related to social responsibility is the concept of “Triple Bottom Line”, a philosophy which suggests that for a firm to be sustainable, it should incorporate not only economic, but social and environmental considerations in its decision making (Norman & MacDonald, 2004). As indicated in Table 22, ten behaviours associated with the Social Responsibility domain were identified and these were grouped into three clusters.

Among 20 entrepreneurs who participated in the interviews, 11 (6 from Australia and 5 from Malaysia) pointed out the relevance of being socially responsible in handling a business. Entrepreneur D (the owner of a computer and related service company, Australia) argued that “entrepreneurs could achieve far more by helping the people around them to achieve their dreams”. Explicit in his statement was the argument that entrepreneurs should

consider helping the local community rather than simply using people around them to achieve their personal goals.

Table 22 *Social Responsibility Competency Domain: Clusters and Examples of Social Responsibility Behaviours*

Cluster	Examples of behaviours
Responsibility towards society*	<ul style="list-style-type: none"> • Engage in community activities • Concern for social welfare – “serving others” • Create job opportunities for local communities
Responsibility towards staff*	<ul style="list-style-type: none"> • Concern for staff welfare • Provide staff with training or send them for training
Responsibility towards customers*	<ul style="list-style-type: none"> • Provide extra services to people/customers • Give customers value for their money • Offer good product/services at good price • React to customers complain immediately • Demonstrate the willingness to add value to customers well being

Note. * Categories developed by Fülöp et al. (2000).

He also added that he could find what he wanted in life by making people around him happy.

I have to make others happy, so in a sense, I don't do it for myself only but if I were to make everybody else happy, and give them what they want in life, I in turn get what I want in life. That is how I see it.

Another example of social responsibility was provided in the following comments from Entrepreneur Q (the owner of a catering service company and a restaurant, Malaysia):

In business it is not always about us...how much profit we want to achieve, how to improve our business, and how to get more customers. We have to consider people around us, the society. We should consider their welfare and how we can help them improve their well being (translation).

Other aspects of social responsibility that were highlighted by participants from both countries were: being socially responsible to customers by providing extra services to them; giving customers value for their money; offering good products or services at good prices; responding to customer complaints immediately; and also, demonstrating a willingness to add value to customers' well being. Compared to Australian participants, Malaysian participants showed more concern for staff welfare including offering fair salaries and organising training and development programs that could improve staff knowledge and skills. As mentioned by Entrepreneur T (the owner of an ice cube manufacturing company, Malaysia):

To manage 26 people is not an easy task but the one thing that I know for sure is that if you take good care of your staff, they will in turn take good care of your business. So give them fair salaries and treat them well... For me, it is important that the staff welfare is taken care of and that they are happy working with me (translation).

It is important to note that the concept of social responsibility is not new and has been discussed predominantly in the context of large firms (Spence & Rutherford, 2001).

Business leaders in large multinationals are increasingly acknowledging the importance of social responsibility in business affairs, both implicitly, through their culture, and explicitly, through their business goals. Moreover, research by Fülöp et al. (2000) has indicated that there is a growing social commitment among smaller firms, which is comparable to that of larger firms. The categories of socially responsible behaviours identified in Fülöp et al.'s (2000) study are shown in Table 23. The findings are noteworthy for their overlap with behaviours highlighted in the current interviews.

Table 23 *Categories of Companies' Social Responsibility*

Category	Its application in small sized companies (behaviours)
Responsibility towards customers	Quality products and services Fair advertising Consumer relations Fair prices Customer protection
Responsibility towards employees	Fair salaries Education and training Equal chances
Responsibility towards the public	Sensibility towards social problems Legal operation Satisfaction of local needs Efficient resource management Environmental protection Fair information

Source. Adapted from Fülöp et al. (2000).

In general, entrepreneurs from both countries demonstrated concern about, and an awareness of, the need to act in a socially responsible manner. Malaysian participants however expressed greatest concern for the welfare of their employees. In addition, while those who exhibited behaviours reflecting social responsibility indicated a more “outward-focus” as the motivation for this behaviour (i.e., for the sake of the society rather than themselves), two interviewees pointed out that being socially responsible, especially towards customers, was beneficial for their business in the long run. The following excerpts illustrate:

I'll go to the same old thing, if you're doing the right thing, if you're giving people the value for their dollar, they'll come back to you and you keep them. When you keep them you can't go wrong, you build your business to a certain level (Entrepreneur B, the owner of a tailoring and dry cleaning business, Australia).

If you treat somebody well and they know they got a good deal from you, they will tell ten people. If you upset somebody, then they will tell fifty people (translation) (Entrepreneur N, the owner of a motor trading company, Malaysia).

Determining what motivates behaviour associated with the Social Responsibility Competency domain is not possible on the basis of the interviews conducted for this study. However, this is an interesting issue for future research. Figure 14 illustrates the number of

interviewees from each country who made a reference to a behaviour reflecting the Social Responsibility Competency.

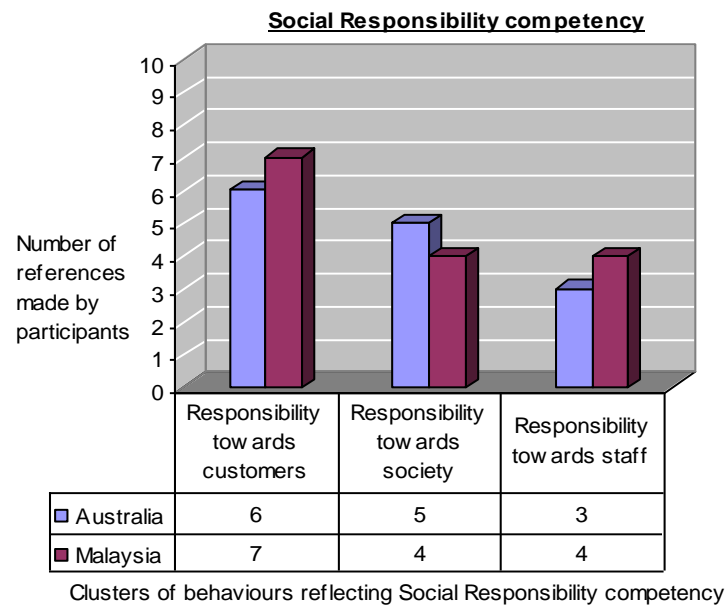


Figure 14. Clusters of Behaviours that define Social Responsibility Competency in Australia and Malaysia.

4.6.2.3 Familism Competency

Behaviours which were subsequently defined as Familism (a concept that shares significant overlap with behaviours that demonstrate collectivism) were also identified in this study. Familism was defined as “affection and concern for family that is dominant and drives action and daily life”; it is manifested in behaviours in which a “family supports its members by sharing resources and cooperates with each other to achieve their common goals” (Park, 2003, p. 8-9). According to Park, “interpersonal trust” is a strong element of Familism. Harrell (1985) suggests that there is an entrepreneurial value that encourages people to work hard and be successful in their business (particularly among collectivist societies, eg., China) that is strongly related to the search for “familial security” and to show concern for those who belong “in the group”. In the present study, the demonstration of behaviours that reflect Familism, among the participants, in managing their business was categorised as Familism Competency.

It was observed that behaviours related to Familism were mentioned only by participants from Malaysia; no comparable behaviours were described by the Australian participants, suggesting the potential influence of a collectivist value on Malaysian entrepreneurs. As indicated in Table 24, seven behaviours associated with Familism were identified and these were grouped into three clusters.

Table 24 *Familism Competency Domain: Clusters and Example of Familism Behaviours*⁸

Cluster	Examples of behaviours
Concern for family members	<ul style="list-style-type: none"> • Get advice and support from family members • Build a platform for the children in business • Cultivate entrepreneurial culture in family
Trust the in-group	<ul style="list-style-type: none"> • Allow people who can be trusted to help in business • Identify and seek help from employees I that one trusts
Cooperate with and support the in-group	<ul style="list-style-type: none"> • Cooperate with and help others in business (especially close associates) • Share knowledge and resources (with close associates)

Six of 10 participants from Malaysia commented on the importance of getting family support and advice in business, especially advice from one's spouse and close friends. Clearly, Malaysian entrepreneurs trusted and relied on these people for support and advice. Two examples are worth highlighting:

My previous business has been less successful that requires me to come up with new business concepts. My wife has given me a lot of support in terms of ways to improve my business...and I always get back to her for business advice (translation) (Entrepreneur Q, the owner of a catering service company and a restaurant).

I normally consult my close friends for ideas. 60% is my own and 40% comes from them. It's good to have friends that could offer you good business advice. But make sure you got friends that can really be trusted (translation) (Entrepreneur P, the owner of a motor trading company).

The participants also expressed their concern about their obligation to their children. They believed that by starting up a business, their children could have a base for the future. The idea of building a strong base for business that the children could inherit when they were ready reflected a strong commitment placed by these entrepreneurs to provide a better life for their family. Cultivating an entrepreneurial culture among their children was their major concern. As mentioned by Entrepreneur M (the owner of a steel trading company, Malaysia):

The other thing that I'm looking forward to is... hopefully one day, when my children have finished their studies; they will take over the company in terms of making it bigger. What I'm trying to do now is to build a platform for them. Teach them how to do business.... I'm trying hard to encourage and provide the culture of doing business to my children (translation).

Five participants indicated they shared knowledge and resources with close associates to overcome difficulties in managing their business. Entrepreneur O (the owner of a transportation and logistic company, Malaysia) indicated his willingness to help others by sharing resources with them. Strong cooperation with others, especially close associates, was also reported by other participants. Entrepreneur K (the owner of a cosmetics manufacturing company, Malaysia) expressed her gratitude towards some of her close

⁸ The behaviours representing Familism Competency were aggregated, on a logical basis based on the interview data, to form three different clusters. It is debatable however, that one cluster is equally different to another cluster, however, these clusters were formed to enhance descriptions of the data.

friends for their readiness to provide support and assistance, including introducing new customers to her business. Similarly, Entrepreneur T (the owner of an ice cube manufacturing company, Malaysia) said that he felt indebted to some close friends who had helped him access new customers and obtain loans and machinery.

In addition, three participants stated they would only ask family members to assist in managing their business, and two participants mentioned that they would delegate important tasks only to employees in whom they had strong trust.

It is important to note that Familism, as a concept, has been referred to as a cultural variable (Man & Lau, 2000; Park, 2003), related to collectivism, rather than as an area of competency. Individuals who demonstrate Familism believe that family is a crucial support for a business. Family members ensure business success by sharing resources and helping each other achieve the goals of the business (Park, 2003). Family can extend beyond those with whom one has blood ties to include others outside of the family who one trusts and with whom one shares strong personal ties (Park, 2003).

Familism promotes interpersonal trust among the “insiders” and consequently increases interpersonal cooperation among members (Park, 2003). Following evidence of a link between the familism value and the development of interpersonal trust, it is predicted that familism could affect people’s attitudes and behaviours towards general business practices. For example, those who hold strong familism values may be more willing than those who do not to help and share resources with others in business who have family-like status (i.e., “in-group” membership). Figure 15 illustrates the number of references that participants from each country made to behaviours reflecting the Familism Competency clusters.

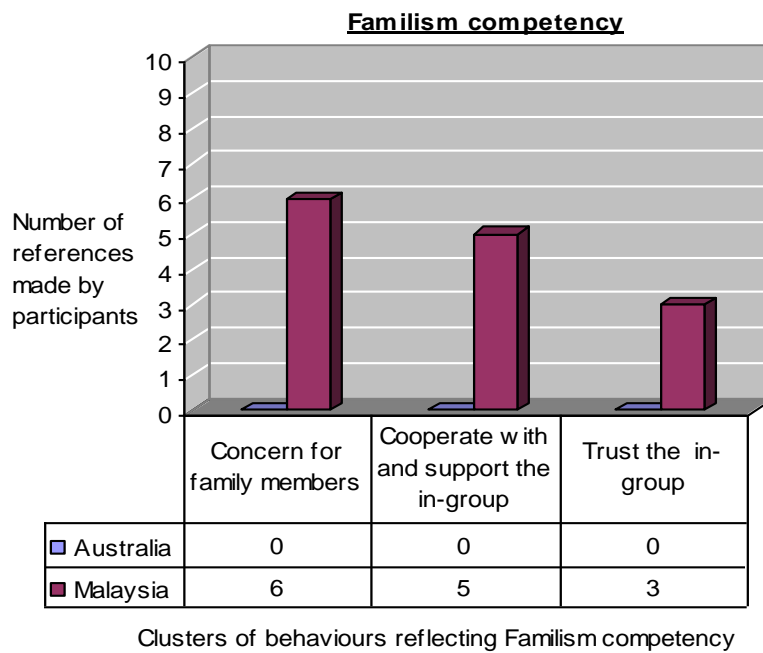


Figure 15. Clusters of Behaviours that define Familism Competency in Australia and Malaysia.

4.6.2.4 Concluding remarks

The identification of three new competency domains, namely, Ethical, Social Responsibility, and Familism, indicated that the existing models, even though applicable, require modification (see Section 4.7.2). Even though entrepreneurs in both countries expressed a commitment to ethical and socially responsible behaviours, it was noted that Malaysians focused more on the welfare of those who were close to them compared to their Australian counterparts who were more focused on the society in general. This can be explained by the collectivist orientation of Malaysian national culture established in previous research (Hofstede & Bond, 1988). As stated by Hofstede (1980, p. 45), “collectivism is characterised by a tight social network in which people distinguish between in-groups and out-groups; they expect their in-group to look after them, and in exchange they feel they owe absolute loyalty to it”.

In addition, it was found that behaviours reflecting Familism were unique to Malaysian participants. As discussed, this can also be explained by the strong collectivism orientation of Malaysian national culture, which may serve to highlight the importance of “family” and the “in-group”, even to business outcomes. Behaviours associated with Familism that were perceived as being related to business success were: getting family support and advice in business; building a platform for the children to take over the business; and cultivating an entrepreneurial culture in the family. The clusters of behaviours elicited from the interviews reflecting these new competency domains are

shown in Figure 16. It can be seen that the best represented new areas were Ethical and Social Responsibility Competencies. Familism was unique to Malaysian entrepreneurs.

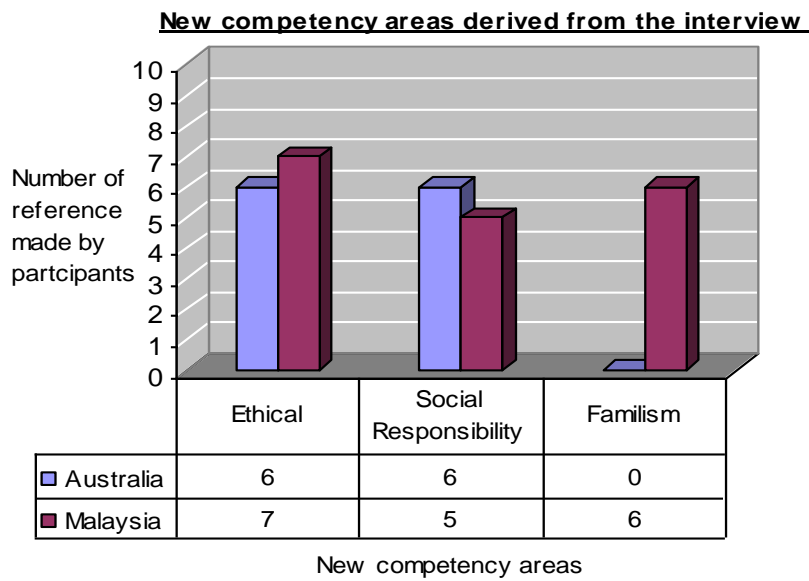


Figure 16. New competencies derived from Australian and Malaysian data.

4.6.3 Behaviours perceived to be associated with business failure—Validation of behaviours delineating entrepreneurial competencies

Included in the interview was a question that asked about the entrepreneur’s previous experience, if any, in setting up a business. If the entrepreneur had such experience, (s) he was encouraged to talk about it, especially if it had been unsuccessful. Other “challenging events” were also discussed. The aim was to provide some convergent validation of behaviours linked to success by identifying the inverse, that is, behaviours associated with business failure. On that basis, behaviours that might impact negatively on business success were identified. From the 20 cases, nine participants (4 Australians and 5 Malaysians) reported incidents that had caused financial loss to their companies or resulted in ineffectiveness in their business operations, or incidents that had led them to cease previous business operations. From these incidents, behaviours perceived to be associated with business failure were distilled. Altogether, 21 behaviours perceived to be linked to business failure were identified. As indicated in Table 25, these behaviours corresponded to five competency areas: Strategic; Organising and Leading; Relationship; Opportunity; and Conceptual.

Table 25 *Behaviours Perceived to be Associated with Business Failure*

Corresponding competency domain	Clusters of ineffective behaviours associated with business failure	Examples of behaviours
Strategic	<ul style="list-style-type: none"> • Fail to have clear business direction • Fail to conduct research 	<ul style="list-style-type: none"> • Do not have specific plans and direction which have led the business to losing focus • Overestimating customer demands • Failing to conduct research before proceeding with any investments
Organising and Leading	<ul style="list-style-type: none"> • Fail to select reliable business partner • Fail to select reliable supplier • Fail to select competent staff • Lack of organising skill 	<ul style="list-style-type: none"> • Fail to select a business partner that is trustworthy and reliable • Purchase stock from unreliable supplier that does not meet the standard required • Failing to select competent people • Unable to manage large number of employees • Inability to manage spending (inefficient financial management) • Failing to lead employees effectively
Relationship	<ul style="list-style-type: none"> • Select wrong people for advice • Lack of personal contacts • Fail to maintain close personal relationship with customers 	<ul style="list-style-type: none"> • Listen to wrong people for advice • Get bad advice from people • Failing to establish good contact with the right people which resulted in loss of opportunity • Failing to pick the appropriate professional people to support in making decisions • Failing to secure a big project due to lack of contacts • Fail o maintain close relationship with customers
Opportunity	<ul style="list-style-type: none"> • Fail to recognise and respond to opportunity 	<ul style="list-style-type: none"> • Misread opportunity due to lack of awareness of the industry • Failing to grab high quality opportunities • Failing to take action on opportunity • Spending too much time on analysing which result in loss of opportunity
Conceptual	<ul style="list-style-type: none"> • Lack the ability to make good business judgment 	<ul style="list-style-type: none"> • Failing to make quick decision • Being under prepared that resulted in poor decision making

Ineffective behaviours that resulted in business failure were also extracted from the interviews. Those corresponding to Strategic Competency included failing to formulate strategic plans, thereby losing direction, and failing to conduct market research. These behaviours were the most frequently highlighted behaviours by participants from both countries (4 Australians and 5 Malaysians). Entrepreneur C (the owner of a software development and computer related service company, Australia) reported that his failure to make a strategic plan had resulted in the business losing focus and being involved in work he did not want to do. He commented:

You need to be able to change... as circumstance change you need to be able to change direction, but if you haven't got a clear idea of where you expect to be you won't get there, and you will end up wandering off in all sorts of different directions. And that's what we did for a period of a couple of years; a number of years actually. We didn't have a clear idea of where we were heading, we picked up and we started doing, working a number of different areas and we lost our focus on what we were really doing and we went nowhere for a number of years.

Another example of behaviour that could be associated with business failure was a lack of thorough customer research. As argued by Stokes and Blackburn (2002), research is crucial insofar as it helps entrepreneurs to gauge market demand, and should occur before financial commitments are made. Entrepreneur G (the owner of an electrical goods and furniture retail store, Australia) indicated that he had misinterpreted the market demand when he purchased a container load of air conditioners from overseas – far more than he would usually purchase – expecting that he could sell more air conditioners during the summer of that year. Unfortunately, he did not manage to sell a large number of the air conditioners and suffered a financial loss.

The second most commonly reported ineffective behaviour corresponded to behaviours consistent with the Organising and Leading Competency. Specifically, the inability to find suitable and trustworthy business partners, the inability to select reliable suppliers, and a failure to employ competent staff all resulted in business difficulties. Finding suitable business partners was seen as crucial by Entrepreneur C (the owner of a software development and computer related service company, Australia). He discussed his experience of restarting the business because of the failure of his business partnership:

The period I went through where I had a business partner involved with me was hard and that ended up with major issues between us and I got to the point where to be able to separate us as business partners, pretty much meant pulling down the company and restarting again. So it was tough because there were a couple of additional employees that we had at that stage who had to go... and virtually restructured and started from scratch.

The importance of selecting a reliable partner has been highlighted in previous research by Stokes and Blackburn (2002). In their study of 306 unsuccessful small business owners in the UK, 20% of the participants reported that a particular experience they would like to avoid if they started another business was selecting a suitable and trustworthy business partner.

Selecting reliable suppliers was seen as equally important. In the current study, it was reported that trusting the wrong supplier had major financial implications for the business. For example, failure to purchase stock from a reliable supplier had caused major financial loss to Entrepreneur D (the owner of a computer and related services company, Australia) when he was provided with 30 poor quality laptops. To avoid disappointing his customers, he ended up using them for spare parts to recoup some of his costs.

In another case, one of the entrepreneurs reported that reason he had failed in his first business was his inability to manage a large number of employees. This limitation was illustrated in the following excerpt:

The first business got to the point where it grew far and above what I expected to do. The firm was a fairly reasonable size where we had about 40 odd employees. It got to the point where it was out of control...I have learnt since that I'm a useless administrator. I'm a very good tradesman but I'm a hopeless administrator. To manage such a big firm you really need to be good at managing your employees (Entrepreneur E, the owner of an air-conditioning service company, Australia).

Similarly, Entrepreneur F (the owner of a public relations consulting firm, Australia) indicated that one of the reasons that she had sold her earlier business was because of her inability to manage a large number of employees.

Ineffective behaviours associated with the Relationship Competency were also reported. This included receiving bad advice and a failure to establish sufficient personal contacts. Receiving bad advice from unreliable people ("experts") was found to be one of the negative experiences that led to business failure among small business owners in the UK (Stokes & Blackburn, 2002). Participants in the present study, particularly those from Australia, indicated that listening to the "wrong" people was a reason for the failure of their previous business. Moreover, participants argued that small businesses were very vulnerable to bad advice. Entrepreneur E (the owner of an air-conditioning service company, Australia) mentioned that he had to struggle with debt for several years due to his failure to get the right advice. He stated:

To make things worse, I've also received some incredibly poor advice from my accountant at that time...so it's important to actually pick the appropriate professional people to support you in making decision.

Failure to establish good personal contacts was mainly highlighted by Malaysian participants. For example, Entrepreneur L (the owner of a software development and computer service company, Malaysia) indicated that a lack of the required support networks meant that she failed in a bid to tender for a project that involved installing computer system in schools in the Northern Region of Malaysia. Closely related to the ability to establish personal contacts is the ability to maintain close personal relationships with customers. Although this may be less relevant for Australian entrepreneurs (none of whom made reference to this behaviour), it was seen as vital by Malaysian participants who argued that close personal relationships with customers encouraged customers to remain loyal. This belief is consistent with the emerging marketing focus on "customer relationship management" (Kotorov, 2003). The following excerpt from Entrepreneur S (the owner of a printing service company, Malaysia) clearly illustrates the importance of this competency:

When I meet my customers for debt collection, I'll make sure that I spend at least a half an hour talking with them, sometimes we went for a cup of coffee. I basically ask them about their business and some other things that are even unrelated to the business, just to maintain a close personal relationship with them. It's a must. I have

experienced once when I did not see some of my customers for more than 3 months and later I found out that they dealt with a new supplier. At that time I had many customers so I did not manage to get in touch with each of them. It turned out that some of my customers, because they did not see me so often, started to purchase toner from a new supplier. When I asked they said, we have not seen you for so long and there's a new salesman who come and visit us, so we buy from him (translation).

The inability to recognise and respond to high quality opportunities (Opportunity Competency) was also reported to be harmful to a business. Entrepreneur J (the owner of a business consulting firm, Australia) indicated that, in her experience, many businesses failed because of a failure to read market opportunities, a failure to take quick action when opportunities were recognised, and being under-prepared. Entrepreneur T (the owner of an ice cube manufacturing company, Malaysia) added that too much analysing could result in the loss of opportunities.

Finally, attention was drawn to ineffective behaviours that corresponded to the Conceptual Competency. These behaviours included failing to make quick business decisions and displaying poor business judgment. These results were consistent with those reported in a study by Gaskill et al. (1993) in which poor decision making was identified as the cause of failure. The authors regarded the poor decisions as arising from inadequate skills, leading to financial problems. Another study conducted by Stokes and Blackburn (2002) reported that the inability to make difficult decisions quickly was identified as the reason for the failure of 14% of their sample of 306 failed businesses. In addition, interviewees in the current study made reference to problems associated with a lack of good business acumen, specifically a lack of knowledge about the business, a lack of business experience, and being unaware of changes occurring in the industry (2 Malaysians).

In general, the behaviours perceived to be associated with business failure provided validation of the behaviours hypothesized to reflect competencies. In both countries, business failure was associated with failing to have a clear business direction, failing to conduct research, lacking organising skills, failing to recognise opportunities, and lacking the ability to make good business judgments. Besides these commonalities, some reasons for business failure were given more emphasis in one country than in the other. For example, Australian participants attributed their failure to reasons such as the inability to manage large number of employees, the inability to manage the fast growing firm, and the inability to adequately administer the business. This may provide an insight into why these participants preferred to “stay small” in business, as highlighted in Section 4.6.4.1.

Malaysian participants, by contrast, highlighted a lack of personal contacts and failing to maintain close personal relationship with customers as leading to failure.

4.6.4 Other between-country differences in the issues discussed

4.6.4.1 Australian participants

During the interviews, there were several unique issues that were identified as being important by Australian entrepreneurs. First, they demonstrated a high internal attribution for outcomes, perceiving both success and failure as arising from their own behaviour. Examples include: “I failed because I am a bad administrator”; “I was unable to manage too many staff”; and “it is my abilities that have led me to where I am now”. They were also willing to discuss openly their good and bad experiences while conducting business in Australia, as well as mistakes they had made and the consequences of these mistakes for their business. Entrepreneur F (the owner of a public relations consulting firm, Australia) also mentioned the importance of internal factors relative to external factors as determinants of business failure or success. She said:

There was a huge economic crisis here but those things happen and if you provide good service at a good price, life goes on. It all depends on yourself...and how you manage the business. So I don't think external factors have affected my business at all and I think that people do use it as a bit of an excuse.

Six of the 10 interviewees mentioned that they had no intention of growing the business because of concerns about maintaining control. In fact, one of the entrepreneurs admitted that he was a “control freak”. Only two participants (Entrepreneur H and Entrepreneur J) demonstrated any interest in growing the business. Others mentioned that they were happy with a small business because they want to have a balance between work and family. As indicated by Entrepreneur E (the owner of an air-conditioning service company, Australia): “I don't want to be the biggest or the best thing ever, just to be reasonably happy with what I'm achieving”. This is in line with Switzer's (2004) argument that most small business in Australia prefer to stay small to avoid the hassles of growth - tax payment, workload, and staff payroll.

Another interesting remark made by Entrepreneur A (the owner of a handbag designing and manufacturing company, Australia) concerned the Australian culture and the extent to which it could inhibit “entrepreneurial spirit”. Colloquially, this is known as the “tall poppy syndrome”. She said:

Australia has this culture called tall poppy. It is very much about Australians kind of being down on people who are successful; they don't like people bragging or telling others about their success. Yeah, people don't like others who stand out too much, so when you know, with me I've had some sort of media feature and some attention and you tend to get others who go, oh, why... and all other negative perceptions about my success.

She believed that Australians should learn from Americans who are willing to discuss their success openly; such a practice, she thought, would cultivate a more entrepreneurial spirit among Australians.

Australian participants also agreed that there were many opportunities for business in Australia. Entrepreneur E (the owner of an air conditioning service company, Australia) commented that the business environment in Australia, although quite competitive, offered numerous advantages especially in terms of the availability of professionals and associated expertise.

This country is still an incredible country of opportunity, regardless of all the whingers and all that want to carry on. This is still one of the greatest places in the world where if you want to hang a shingle outside your door and say, I'm going to make money doing this, you can do it. There are opportunities in this country, which I'm sure aren't there in other countries. There are different levels of opportunity. Access and equity in this country is truly amazing.

In sum, it was observed that Australians demonstrated a high internal locus of control and a willingness to discuss their failure and success openly. The prospect of growing a business further was seen as relatively unimportant. Participants also believed that the Australian business environment offered many advantages to those wanting to start a new business.

4.6.4.2 Malaysian participants

As with the Australian entrepreneurs, all of the Malaysian entrepreneurs demonstrated a high internal attribution, in the sense that they believed that success or failure depended heavily on the entrepreneur. They demonstrated an internal locus of control such that “whether we fail or succeed, that comes from ourselves” (Entrepreneur Q, the owner of a catering service company and a restaurant). Interestingly however, despite exhibiting an internal locus of control and strong confidence that their own efforts would influence the success of the business, some participants appeared to simultaneously believe in the importance of “luck”. This was especially the case for the Chinese entrepreneurs. Moreover, they combined the concept of “luck” with their belief in God. For example, Entrepreneur T (the owner of an ice cube manufacturing company) said:

To be successful in business, it actually depends on your own effort. If you are willing to put more (effort), you will get more (profit). Otherwise, you will not last long in business. However, I cannot deny that sometimes, it depends on your luck too. If you are destined by God to be successful in business, then you will be...(translation).

This observation is consistent with research by Hui, Csete, and Raftery (2006) showing that Chinese entrepreneurs in Hong Kong believed that their success was also due to “luck”. However, according to the authors, the tendency to acknowledge the influence of

external factors (i.e., luck) in determining success was a reflection of their humility, while in reality, they worked hard and put a lot of effort into trying to advance their business. Other interpretations of what constitutes “luck” in businesses have been suggested. Lado et al. (1992) defined luck as “stochastic opportunity”, coinciding with a firm’s resource capabilities. They suggested that the “belief in luck” could be replaced with the concept of “strategic selection”, which recognises the ability of entrepreneurs to create and grasp opportunities by focusing on their own capabilities; in other words, to “create their own luck”.

Among the Malays, there was evidence of the incorporation of religious belief in their approaches to business. They demonstrated a strong belief in the concept of perseverance and “God-reliance” (referred to as the concept of *tawakkal*). This concept states that every individual has to persistently pursue what he/she desires and at the same time, put trust in God for God will help those who work hard for their success. Others have identified *tawakkal* as important with Lim (2001) indicating that the concept has had an influence on the work values of Malay managers. The belief in God’s Will is intertwined with the concept of perseverance and diligence. The belief in God’s Will also protects against frustration with failure by encouraging entrepreneurs to try again. Believers are also aware that God will help those who help themselves (Lim, 2001). Thus, to be successful, the Malays believe that they have to strive hard for the things that they desire and, at the same time, they should put their trust in God. The importance of working hard and belief in God’s Will was highlighted by Entrepreneur Q (the owner of a catering service company and a restaurant), who said:

I have always worked hard to grow my business. From 3 employees, I have now 11 people to help me in this business. I believe that success will never come easy. Along the way, we will encounter various challenges and obstacles. So the most important thing is to be persistent in whatever you do and at the same time put your trust in God’s Will and ‘tawakkal’. I believe that God will help those who work hard for their success (translation).

The above statement signifies that for most Malay entrepreneurs, two elements were seen as important for managing one’s own business. First, success requires effort and hard work on the part of the entrepreneur himself or herself. Second, it is important to believe and trust in God and God’s Will. Rao (2004) acknowledged the critical role of God in the life of Malay entrepreneurs:

Invocation to God for the continuous success of entrepreneurship seems to be a phenomenon more commonly found in collectivist societies such as Malaysia where entrepreneurial success is attributed to deity (p. 122).

To illustrate the role of God in encouraging wealth accumulation among the Malays, Rao (2004) quoted a speech by the ex-Prime Minister of Malaysia, who is reported to have said:

The people who work hard towards progress are usually rewarded more than those who do not. While this leaves the ultimate decision about who will be rich and who will be poor in the agency of Allah (God), my informants generally stated that Allah (God) does not like poverty, for which it adheres a taint of laziness, passivity, and irresponsibility that allows time for sin. It is now generally agreed upon that Malays must work hard to honour Allah's (God's) abundant worldly gift, which include enormous advances provided to them (p. 122, quoted in Sloane, 1999, p. 64).

This quote summarises the spiritual values, and philosophy of life, that encourage wealth accumulation among the Malays.

Interestingly, in contrast with some of their Australian counterparts, all Malaysian entrepreneurs expressed their intentions to grow their business by venturing into new areas, setting up another branch for their firm, and exporting their products to other Asian countries. It is evident that some entrepreneurs had already commenced their expansion plans. For example, Entrepreneur K (the owner of a cosmetics manufacturing company, Malaysia) had just set up a factory to produce her own product as well as competitors' products; Entrepreneur R (the owner of an optometry service company, Malaysia) had opened up his third branch in other states in Peninsular Malaysia, and Entrepreneur T (the owner of an ice cube manufacturing company, Malaysia) had bought a new machine to help him satisfy the demand for ice cubes from new customers.

Malaysian entrepreneurs were aware of the various opportunities available for SMEs, despite the intense competition in a specific industry. However, some viewed competition as an opportunity to rise above the status quo and improve their business performance. Entrepreneur T stated, "We always welcome competition...no competition means no improvement" (translation).

Interviewees also demonstrated an awareness of the availability of various support mechanisms provided by the government to assist entrepreneurs, including training schemes, expert advice, and "soft loans" (loans with generous repayment terms). However, they also pointed out that strict rules applied. Banks and other financial institutions for example, look at the experience and qualifications of the business owners before approving loans. This often posed a serious problem for SME owners because they rarely had the long history or successful track record that financial institutions sought. According to Entrepreneur M (the owner of a steel trading company, Malaysia):

To deal with the banks for loan applications, you need a lot of things. They will ask for your experience, qualification and a lot more...the process is tedious and frustrating, and sometimes it's better that I use my own saving (translation).

Wang (2003) has pointed out that many SME owners in Malaysia rely on their personal savings or those of their family, rather than bank loans to fund their business. This fact may indicate why the Familism concept was deemed so important in Malaysia, but was not mentioned in Australia. In Australia, business funding is largely sourced predominantly from financial institutions. By contrast, the SME Census undertaken by the Central Bank of Malaysia (2006) reported that 84% of SMEs relied on funds they generated themselves because of difficulties in obtaining financing from financial institutions. Haron and Shanmugam (1994) have described the loan application process in Malaysia as extremely tedious and including: (1) a preliminary interview; (2) a second interview; (3) a pre-decision visit; (4) a loan decision; (5) loan documentation; and (6) loan disbursement. Reasons leading to rejection of a loan application are lack of knowledge of capital management and overall business management, or no proper business plan. Similarly, Saleh and Ndubisi (2006b) report that there have been numerous complaints from SMEs owners about the tough qualifications criteria and the high level of bureaucracy associated with the loan application process.

Despite this difficulty, some interviewees had taken out loans, in particular, to fund their expansion plans. Nonetheless, they realised the danger of depending solely on loans and other external sources of financial support. They recognised the importance of generating their own capital from business operations and suggested that prior planning is also important to deal with problems such as a sudden decrease in demand, or economic crisis, and an increase in interest rates.

It is worth noting that one female participant from Malaysia stated that one of the major obstacles she faced with regard to managing her business was “gender stereotyping”. Operating in a male-dominated business area (IT services), she was often questioned about her ability in relation to the business service that she offered. Existing research confirms that gender stereotyping is seen as a major obstacle facing female entrepreneurs (Still & Timms, 2000), especially those operating in male-dominated business (E. McClelland, Swail, Bell, & Ibbotson, 2005).

4.6.5 Additional insights from the qualitative data

The interview data provided a number of important additional insights. Two areas particularly worth highlighting are the participants’ interpretations of business success and participants’ motivations for starting up a business.

4.6.5.1 Definition of business success

The measurement of business success, particularly in SMEs, is a vexed and controversial issue. Although some definitions focus solely on financial indicators, more recent studies have found evidence of the relevance of non-financial aspects of business success (Buttner & Moore, 1997; Simpson et al., 2004; Walker & Brown, 2004; J. Watson et al., 2000). Financial indicators include profitability, sales turnover, sales growth, and return on investment whereas non-financial indicators include personal satisfaction, personal growth, skill improvement, flexible lifestyle, business survival, customer satisfaction, customer retention, and career progress (Buttner & Moore, 1997; A. C. Cooper, 1993; Walker & Brown, 2004; J. Watson et al., 2000).

A number of observations related to how entrepreneurs define business success were extracted from the interviews. The answer to the question “How do you define success in business?” was examined for each case. Responses were compared with those in the literature (see for example, Buttner & Moore, 1997; Cooper, 1993; Haber & Reichel, 2005; Walker & Brown, 2004; Watson et al., 2000). To provide a clearer picture of what success meant to participants in the present study and to ascertain how definitions might vary between countries, participants’ responses were grouped into four sub-categories, following Walker and Brown (2004): (1) financial criteria; (2) lifestyle criteria; and (3) social responsibility; and (4) from Haber and Reichel (2005), customer satisfaction (see Table 26). According to Walker and Brown (2004), financial criteria are concerned with monetary indicators - income and profitability. Lifestyle criteria include non-financial indicators such as personal satisfaction, pride in the job, a flexible lifestyle, and “being one’s own boss”. Social responsibility success criteria include providing jobs to others and being responsible to the wider community. Haber and Reichel (2005) added customer satisfaction as a success indicator and measured the extent of customer satisfaction and loyalty.

As indicated in Table 26, there was considerable agreement among Australian and Malaysian participants on the definition of success. For both groups, success was defined using both financial and non-financial indicators, with non-financial success indicators (lifestyle criteria, social responsibility, and customer satisfaction) dominating the discussion. The following excerpts serve to illustrate:

Success indicators, you know, in terms of profit and in terms of how many people I employ and the turnover, but for me, it's just the more personal non-tangible indicators ... you know getting something, doing something that's rewarding, and get a lot of satisfaction out of it...(Entrepreneur A, the owner of a handbag designing and manufacturing company, Australia).

It's all about self-satisfaction. Money is also important to ensure that we can survive in the business...but as I told you, the most important thing is self-satisfaction (translation) (Entrepreneur Q, the owner of a catering service and restaurant, Malaysia).

Table 26 *Indices of Business Success identified by Entrepreneurs in Australia and Malaysia*

Indicators of business success	Australia	Malaysia
(1) Financial criteria*	<ul style="list-style-type: none"> • Profitability • Higher income • High sales turnover 	<ul style="list-style-type: none"> • Profitability • Increase in profit • Business growth • Increase in sales • Increase in market share • Low debt levels
(2) Lifestyle criteria* (Non-financial)	<ul style="list-style-type: none"> • Getting something rewarding • Satisfaction • Improved skills and creativity of the owner • Have control over own destiny • Have a sense of direction • Enjoy doing what one is doing • Being recognised by others • Balance in work and life • Having freedom • Survival in business • Achieving goals 	<ul style="list-style-type: none"> • Personal satisfaction - what I'm doing is worth doing • Value of life • Balanced life • Able to control own business • Survival in business • Healthy and happy life • Balance between work and family
(3) Social responsibility* (Non-financial)	<ul style="list-style-type: none"> • Creating good working environment especially for staff 	<ul style="list-style-type: none"> • Creating more jobs for local community
(4) Customer satisfaction** (Non-financial)	<ul style="list-style-type: none"> • Customers trust (constantly refer back to us). • Receiving good feedback 	<ul style="list-style-type: none"> • Gain customer trust and confidence • Customer listen to our advice • Have satisfied customers

Note. *Categories identified by Walker and Brown (2004) and validated through exploratory factor analysis.
 ** Identified by Haber and Reichel (2005).

Despite the emphasis on non-financial indicators, profitability and sales growth were seen as important. It was recognised that, to some extent, both criteria were needed to sustain the business in the long run. As Marlow and Strange (1994) suggest, while non-financial criteria may be important, financial capability is required to ensure that the business remains viable. The following excerpts serve to illustrate:

It's a combination of both. Money is important because I won't be in business if I can't make money but it's not the driving forces because I spent 2 years without making money. I have a big vision that one day we will make money (Entrepreneur I, the owner of a musical instruments manufacturing company, Australia).

Of course income is one of the major factors. Actually income is how you measure your performance. It's the reward that you have. Other thing is like when clients end up being your friends. Then we also look at the percentage of the patients who come back to you. From there you can see where we are. At the end they are actually quite attached to us...I think it's a mixture of all. Financially we have to be independent. We don't have to depend on other source of loans. That's the fundamental thing. Of course we don't

carry a lot of liabilities as well. Once you don't carry a lot of debt, your life will be more relaxed. (Entrepreneur R, the owner of an optometry service company, Malaysia).

Of the non-financial indicators of success, lifestyle criteria were cited by participants most frequently. Participants from both countries indicated that success meant being personally satisfied with their firms' progress and achievements. Because every individual varies with regard to his/her personal goals, satisfaction with the firm's achievement was a very subjective indicator. Some participants indicated that maintaining a flexible lifestyle, having a balanced life (between work and family), and being able to do what they loved doing, gave them satisfaction.

It's satisfaction, and satisfaction with what you're doing, and getting to a position where you're able to maintain the lifestyle that you choose, whatever that lifestyle might be (Entrepreneur C, the owner of a software development and computer related service company, Australia).

If you wake up and think, yes I'm going to work today, then that's surely what success is about. And I think if you really believe in what you're doing and you're passionate about what you're doing then other things, money and recognition may follow, but you have to be passionate about what you're doing. You have to love what you're doing. So I suppose success to me is that sort of, that personal satisfaction (Entrepreneur F, the owner of a public relations company, Australia).

Even though last year's sale was 4 million, slightly lower than the year before, I'm very satisfied. My lifestyle has changed. I have more time for my family. My time is very flexible. The life is there, with my children and my wife (Entrepreneur M, the owner of a steel trading company, Malaysia).

Another indicator of success, closely related to personal satisfaction, was the excitement of having the chance to improve one's skills and learn new things while managing one's own business:

If you are improving and learning in the beginning - that is what I measure success by; the money comes later (Entrepreneur J, the owner of a business consulting firm, Australia).

Consistent with the findings of Beaver (2002), some participants in the present study equated success with survival. These indicators may require the firm to generate some level of income but not necessarily growth or expansion. The following three excerpts illustrate:

I guess successful in the sense that as a small business I have survived for twelve years, which lots of people don't. So yeah I've survived and after I separated from my business partner I have rebuilt and kept going and doing well again. But yeah I've been successful in that sense that I've survived (Entrepreneur C, the owner of a software development and computer related service company, Australia).

The failure rate is quite phenomenally scary. If you can survive for a long period of time and make money, you've achieved something more than what a lot of small businesses achieve (Entrepreneur E, the owner of an air conditioning service company, Australia).

I consider myself successful when the customers actually follow my advice and trust in me. Secondly, I look at profit. Profit is also important to keep my business afloat

(translation) (Entrepreneur K, the owner of a cosmetics manufacturing company, Malaysia).

Creating a good working environment for staff and creating more jobs for the local community were mentioned as indicators of business success. Both were categorised as the “social responsibility” success indicator, as reflected in the following examples:

It (success) is about self-satisfaction. And also creating a work environment where I like to work and people around me like to work as well (Entrepreneur I, the owner of a musical instruments manufacturing company, Australia).

Success for me, besides making money, is helping the local community to improve their well being by creating more job opportunities especially for the young people who have left school and were unemployed (translation) (Entrepreneur Q, the owner of a catering service and restaurant, Malaysia).

Also included in the discussion of success indicators was customer satisfaction.

Getting good feedback from customers, having customers refer back to their business, and having customers that listen to their advice, were regarded as important success markers. Nine participants (5 Australians and 4 Malaysians) believed that an important success indicator was having satisfied customers. According to Entrepreneur C (the owner of a software development and computer related service company, Australia), “success for me is having a bunch of satisfied customers who constantly refer back to us”. The following excerpts demonstrate the emphasis given to customer satisfaction as an indicator of business success.

Probably if anything, getting good feedback from people who even want to take interest in us is more important...Having customers constantly refer us and come back to us and be loyal to us. That all, like that’s all in our plan but that all pretty much gives us really good feedback (Entrepreneur H, the owner of a website development company).

If customers are satisfied with our service, it gives me a feeling of pride and satisfaction. That’s when I know that I can do it...that I’m successful. On the other hand, profit is also important. It indicates that the business is growing (translation) (Entrepreneur L, the owner of a software development and computer service company, Malaysia).

Knowing that the customers are satisfied with my service gives me satisfaction. It means success to me...and also when customers listen to my advice...that is success (translation) (Entrepreneur K, the owner of a cosmetics manufacturing company, Malaysia).

Entrepreneur E (the owner of an air conditioner service company, Australia) made the interesting observation that most people have the “wrong perception” about what constitutes a successful business. According to this participant, although most people regarded bigger businesses as the successful ones, this may not always hold true:

We’re only a little show. I’m quite happy. We do okay; I make a reasonable amount of money. I live pretty well. It depends on what you mark success. I consider myself successful...Absolutely, I’m successful. Everyone looks at huge businesses with large number of employees and the whole thing as being successful. And I find it laughable. I was having this conversation with DJ (a friend) the other day and I said, well you’re earning bugger all money, what are you doing wrong? And in a sense it’s true. The most

successful businesses in this country are the ones that are ... on the outside are not so successful... premises and stuff like that all cost money (Entrepreneur E, the owner of an air conditioner service company, Australia).

The impression conveyed was that some entrepreneurs would rather stay small in order to keep the cost of overheads low. This is not surprising given evidence suggesting that some business owners deliberately refrain from employing staff (Baines, Wheelock, & Abrams, 1997) and that this decision may be related to their initial motivations for starting a business which, in turn, determines how they define success.

In general, there was no major difference between countries with respect to the meaning given to business success; neither was there a difference between the genders. Participants from both countries had similar interpretations of business success, with non-financial goals dominating the discussion. Similarly, men and women viewed business success in both financial and non-financial terms. This is not surprising in the sense that it is consistent with the evidence from previous research (Walker & Brown, 2004). The dominance of non-financial indicators of success in the present study is also consistent with findings reported by Walker and Brown (2004). In their study of small business owners in Australia, the authors found that personal satisfaction, pride in the job, and flexible lifestyles were valued more highly than financial gain. Having said that, the non-financial success indicators were not necessarily substitutes for financial success. Maintaining a certain level of profitability and business growth were also seen as being important by participants from both countries (even though in many cases reported as secondary goals), signifying the relevance of financial indicators of success.

In summary, the findings provided evidence that validated earlier studies. At the same time, for some participants, success was reflected in dollar terms. The findings clearly suggest the applicability of a multidimensional approach to the operationalisation of business success in SMEs. The integration of both “hard” financial and “soft” non-financial outcome measures of non-financial outcomes provides a valid combined indicator for success.

4.6.5.2 Motivation to start a business

Even though this study was not specifically designed to analyse entrepreneurs’ motivation, it was considered important to understand the motivation behind the entrepreneurs’ decisions to start their own business. This is because the motivations of entrepreneurs have been found to correlate with the way in which they measure their business success (Buttner & Moore, 1997). Entrepreneurs are said to be motivated by either internal needs (pull factors) or external circumstances (push factors) (Alstete, 2002).

Pull factors are related to the desire for independence, the desire to “be one’s own boss”, to explore one’s own creative skills, and to do enjoyable work. Push factors, in contrast, are associated with elements of necessity including redundancy, unemployment, frustration with previous employment, and insufficient income.

In the present study, respondents were asked to comment on what motivated them to start their own business. Participants were also asked to provide reasons as to why they preferred to have their own business, as opposed to working for others. The responses to these questions were subsequently divided into two main categories according to whether they were motivated by push factors or pull factors. The pull factors were categorised using the taxonomy developed by Glancey et al. (1998) and Kuratko et al. (1997), as depicted in Table 27. The push factors for Australian and Malaysian participants are presented in Table 28.

Table 27 *Motivation to Start Business among Entrepreneurs in Australia and Malaysia*

Pull Factors	Australia	Malaysia
(1) Extrinsic rewards*	<ul style="list-style-type: none"> • Desire to generate more income 	<ul style="list-style-type: none"> • Desire to generate more income
(2) Intrinsic rewards*	<ul style="list-style-type: none"> • Desire for greater personal development • Personal satisfaction • Sense of self achievement • Pursue one’s own interest (what one loves doing) • Passion of seeing business grow • Prove one’s ability • Desire to help small business sector 	<ul style="list-style-type: none"> • Have passion in this industry • To prove one’s own ability to be successful • Personal satisfaction • Pursue one’s own interest • Love the challenge of managing own business
(3) Independence /Autonomy*	<ul style="list-style-type: none"> • Desire to have control over what one is doing • Desire for the challenge of having own business • Desire to be “own boss” and to make “own rules” • Desire for more flexibility in managing time • Get restless working for other people • Inspired to look for other option in career path 	<ul style="list-style-type: none"> • Desire to own a business • Desire to have control over what one is doing • Desire for more flexibility in managing own time
(4) Family security*	NIL	<ul style="list-style-type: none"> • Provide a platform for children Expose the children to the business
(5) Self actualisation**	<ul style="list-style-type: none"> • Realise own creativity • Realise own potential and capability 	NIL
(6) Spot opportunity**	<ul style="list-style-type: none"> • Recognise opportunity in the market • Interested to explore new ideas • Inspired by other entrepreneurs 	<ul style="list-style-type: none"> • See the opportunity in this sector • See the potential of the business • Inspired by friends and other people success • Introduced and encouraged by a friend
(7) Balanced life**	<ul style="list-style-type: none"> • Develop flexible working life • Desire for a balanced lifestyle • Desire for a balanced between work and family 	<ul style="list-style-type: none"> • Desire for a balanced lifestyle • Desire for a balance between work and family

Note. * Categories of pull factors (personal goals for starting a business) adapted from (Kuratko et al., 1997).

** Items reflecting pull factors identified by Glancey et al. (1998).

Table 28 *Push Factors Described by Entrepreneurs in Australia and Malaysia*

Contexts	Push factors
Australia	<ul style="list-style-type: none"> • Economic depression • Unemployed • Dissatisfaction with former job • Frustrated with the level of income in the former job
Malaysia	<ul style="list-style-type: none"> • Work pressure due to downsizing • Lack of job security in the previous employment

All participants provided more than one motive for starting up a business. It appeared that most entrepreneurs were motivated primarily by pull factors rather than push factors. Even though three participants (2 Australians and 1 Malaysian) indicated that they had been “pushed” into entrepreneurship, these participants also mentioned “pull” motives that had led them to finally leave their previous employment and start out on their own. Common pull factors identified from the interviews were: a desire for autonomy; a desire for a balanced lifestyle, recognition of opportunities, awareness of one’s potential and abilities, motivation from observing the success of other entrepreneurs, and the need for a challenge. Previous research by Glancey et al. (1998) identified similar pull factors, including financial considerations, a desire for greater responsibility and control in decision-making, and a desire for personal development, as being among the most important motives for creating a business.

A motive related to extrinsic rewards - the expectations of generating more income - was mentioned by nine participants (3 Australian and 6 Malaysian). Even though financial gain was identified as being a motivating factor in starting one’s own business, it did not emerge as a particularly strong motive. There was no indication that money was the primary pull factor that resulted in venture creation. When money was mentioned, the desire to generate more income appeared to be a secondary motivating factor, with the stronger emphasis being given to motives related to intrinsic rewards, such as the desire for personal development, personal satisfaction, a sense of self achievement, the opportunity to pursue one’s own interests, and a passion for seeing a business grow. Reference was also made to motives related to independence and autonomy. The following excerpts serve to illustrate:

I think a lot of entrepreneurs have very common experience in that, you know, they do want to control their own destiny and have a sense of direction. At the same time they want to make money as well. So that’s just as important (Entrepreneur A, the owner of a handbag designing and manufacturing company, Australia).

I want to make more money and a good living, but more importantly, having freedom...and yeah, basically to have control over what you are doing is important (Entrepreneur D, the owner of a computer and related service company, Australia).

These observations endorsed Beaver's (2002) finding that money is not a prime motivator, but rather a "pleasant by-product" of being in charge of (one's) own destiny.

Other motives included pursuing the challenge of having one's own business. Two female participants (1 Australian and 1 Malaysian) stated that the challenge of owning and managing their own business was an interesting experience and one that they found exhilarating and inspiring. None of the male participants made a similar comment. Specifically, the women said:

If it was all about money you probably wouldn't do it because there's a long time when you don't make money. It can sometimes take years before you do start to make any money and there are no guarantees. So I don't think you run your own business for money. In the long term you might, it might be successful but it's about the challenge of managing your own business and wanting to do something a little bit different. Whenever I've started my business, I've just been doing something a little bit different and that to me is very fulfilling (Entrepreneur F, the owner of a public relations consulting firm, Australia).

It's the independence, being able to be independent and I like the challenge of, you might make a lot of money, you might not but it's your own effort. I find that very stimulating (translation) (Entrepreneur L, the owner of a software development and computer service company, Malaysia).

Flexibility in relation to time management was also highlighted. A number of participants (2 Australians and 5 Malaysians) mentioned that starting up their own business offered an attractive alternative to working from "9-to-5". It gave them more freedom and flexibility in life. For example, Entrepreneur L (the owner of a software development and computer service company, Malaysia) said:

While many prefer to enjoy the stability of working from 9-to-5, I found myself get easily bored doing the same routine. Having my own business...besides flexibility, it gives me more opportunity to do what I actually love doing (translation).

Similarly, Entrepreneur N (the owner of a motor trading and insurance services, Malaysia) commented:

The main thing I see of working in my own business is having more control of my own life, besides the benefit of having more flexibility in managing my own time (translation).

Seven participants (4 Australians and 3 Malaysians) stated that their passion and strong interest in the industry had motivated them to start their own business. The strong pull factor for them was the excitement of doing something that they really loved doing.

The most interesting part of starting my own business is having the chance to do something that I enjoy doing and actually work hard to improve on things... (Entrepreneur H, the owner of a website development firm, Australia).

For me, being happy with what I'm doing is important. I have always wanted to do things that I love doing. Managing and controlling my own business is what I've wanted for a long time (translation) (Entrepreneur O, the owner of a transportation and logistics service, Malaysia).

One intriguing motive cited by a participant from Australia (Entrepreneur J, the owner of a business consulting firm) was to help other small businesses. This was described as relevant to her because she is involved in a business consulting service in which her main customers are small business owners. Her view was that most business-consulting firms today cater only for large firms that are capable of paying expensive consulting fees. Thus, by setting up the current business and charging lower fees, she could help smaller firms develop their business strategy and plans and charge lower fees.

Besides pull factors, three participants (2 Australians and 1 Malaysian) mentioned that they started their businesses because of factors such as frustration with their present income, the onset of the economic depression, unemployment, work pressure or a lack of job security. For example, Entrepreneur D (the owner of a computer and related services company, Australia) said:

I worked for other companies for quite sometime and then I got to the stage that I was frustrated. I worked for the government for thirteen years too, with E&WS, and I got frustrated with the level of income that they gave. So I found I wanted to smash those, instead of just claiming wages that I was frustrated...I was worth a lot more, so I found in the end I worked for myself.

Similarly, Entrepreneur M (the owner of a steel trading company, Malaysia) mentioned:

It started when I was working with PERWAJA. I was one of the directors there. When the shareholders decided to make a sudden change in the management; all my close friends were transferred to 'cold storage'. But I was a bit lucky that I was being transferred to other company whereby we were asked to set up a company for trading purposes. By 1998, there was a severe economic downturn and I was working under too much pressure and I said I can't take it anymore and decided to resign (translation).

Evidently, even though there were expressions of having been "pushed" into starting a business, these participants also stated other motives such as desire for autonomy and independence, a need for more flexibility in managing their life, and an interest in exploring new ideas.

In summary, there were commonalities with respect to the motives reported by Australian and Malaysian participants. Discussions of the motives of entrepreneurs in both countries were centred on the desire for autonomy and independence and the desire for a flexible and balanced life. Despite this consensus, it appeared that Australians held strong beliefs in their own capabilities and their potential to start their own business, reflecting a need to self-actualisation. This was reflected in the recognition of motives like realising creativity, capabilities, and potential. Interestingly, these motives were not mentioned by the Malaysian participants. These participants, by contrast, demonstrated a strong altruistic desire to create a better environment for their family and to ensure familial security. Motives such as providing a better life for the family, providing a platform for their

children in business, and exposing children to an entrepreneurial culture were unique to Malaysian participants. This finding is consistent with Fontaine and Tan's (2004) finding that creating a legacy for their family and children was an important motive for starting a business among the Malaysian entrepreneurs. Other factors influencing the decision to start a business mentioned by participants from Malaysia included inspiration and facilitation by friends.

While previous research suggests that the motivation for women to start a business is somewhat different from that of men (Still & Timms, 2000), this was not confirmed by the findings of the present study. This may well reflect Buttner and Moore's (1997) suggestion that "entrepreneurship as a career option is gender-blind" (p. 36) and thus, the motivation for starting up a business is also independent of a gender influence.

4.7 Discussion and Implications

4.7.1 Discussion of the findings

The objectives of Study 1 were: (1) to identify a set of competencies perceived to be important for success by entrepreneurs in Australia and Malaysia; and (2) to compare these competencies with the existing models in order to identify any missing competency domains and behaviours that exemplify these domains. The outcomes of this study suggested that: (1) the existing competency frameworks constitute valid descriptions of entrepreneurial behaviours; (2) additional competency domains also exist, suggesting that entrepreneurs are required to be sensitive to issues of ethics and social responsibility; and (3) the familism element identified among Malaysian entrepreneurs suggests that a cultural confound may impact on models of entrepreneurship.

Firstly, the identification of behaviours that were grouped into nine competency domains that shared commonalities with existing models provided evidence that these models offer a reasonable degree of cross-cultural generalisability. Competency domains included Strategic, Conceptual, Commitment, Opportunity, Organising and Leading, Relationship, Learning, Personal, and Technical. All of these domains were reported to be important by participants from Australia and Malaysia, even though some behaviours associated with each competency were reported more frequently by one group than the other. The majority of entrepreneurs agreed that Strategic Competency was crucial for them, specifically the ability to set long-term goals, devise strategies and implement them. In addition, Conceptual Competency, which reflected the ability to stimulate new thinking patterns and develop new ideas or concepts that may sometimes require deviation from the normal way of doing things, were reported to be important by the entrepreneurs in both

countries. Commitment Competency was considered vital because possessing this competency allowed entrepreneurs to strive towards business goals and deal with obstacles and difficulties. Opportunity Competency, as reflected in behaviours that sought, assessed, recognised, and responded to opportunities, was also important as this had major implications for the effectiveness of the firms.

The Organising and Leading Competency was also seen by participants as being important. Participants believed that, as business owners, they had responsibility for planning, organising, leading, motivating, and controlling the staff in their business. Relationship Competency, as reflected in the ability to establish and maintain good relationships with others, was described as crucial for entrepreneurs insofar as establishing good networks, and striving to increase access to resources and opportunities. Another important competency area was the Learning Competency. The findings suggested that entrepreneurs believed that a continuous learning process would enable the organisation to survive through time. Participation in ongoing education was thought to increase the competitiveness of a business by improving the entrepreneurs' approaches to managing the business. Personal competencies and Technical competencies were also found to be relevant to entrepreneurs. Personal Competency, related to personal effectiveness, and Technical Competency, related to actual skills, were both seen as helping to enhance entrepreneurs' professionalism.

Secondly, the identification of new competencies suggested that new challenges might be emerging for entrepreneurs. Among the behaviours that were frequently identified as important for Australian and Malaysian participants were the need to demonstrate ethical practice in business dealings; honesty and integrity; willingness to admit mistakes and to tell the truth; a commitment to social obligation and social welfare; willingness to give extra service to people; to take responsibility; and accountability for one's own action. A possible explanation for the concern with ethical practices and social responsibility is the strong emphasis given to these issues in modern business writings, which can be associated with a growing awareness that these practices "pay off" in the long run (Zairi & Peter, 2002). Increasingly, organisations look to a "Triple-Bottom-Line" (TBL) when conducting business, whereby monetary outcomes are not the only motivation for organisations. TBL is an emerging business philosophy that emphasises on economic, environmental, and social goals, rather than solely on the financial bottom line (Norman & MacDonald, 2004). Moreover, in recent times, the increasing interest in businesses behaving ethically has often been linked to the belief that good ethics is good for business

(Spence & Rutherford, 2001). It is also important to note that an organisation's image and reputation may be influenced by the good ethical behaviour it portrays to the public (Jones, 2000).

Thirdly, the identification of behaviours reflecting Familism among entrepreneurs in Malaysia indicated that, to some extent, Malaysian entrepreneurs identified the family and close associates (the "in-group") as being critical to building business success. As indicated, there was an emphasis on the importance of receiving advice and support from family members, sharing knowledge and resources with close associates to overcome difficulties in managing their businesses, as well as identifying and seeking help from trusted employees. As discussed, this may well reflect the collectivism orientation of Malaysians generally; this is a culture that has been linked to the prioritisation of family and interpersonal trusts (Huff & Kelley, 2005).

In conclusion, the qualitative data reported here provide evidence of the universality of some aspects of entrepreneurial competencies and at the same time generate more evidence about the possible cultural underpinnings of these competencies. In line with expectations, the cultural orientations of the entrepreneurs played a part in determining the competencies they perceived as important, particularly with the extraction of data that reflected the Familism Competency. It should be highlighted that the aim of the qualitative study was not to draw definitive conclusions about the link between competencies and business success in SMEs, but to incorporate the results of the qualitative data into any modification to the survey instrument intended for use in the subsequent quantitative study and into the preliminary framework that has been proposed in Chapter 3.

4.7.2 Implications for quantitative analysis

The identification of additional categories of entrepreneurial competencies suggests that the existing models may need to be revised to further enhance their applicability to the measurement of entrepreneurial competencies in Australia and Malaysia. Furthermore, the qualitative data generated by the present study provide a referencing item pool for modifying and updating the existing instrument. The additional items identified will be incorporated to enhance the measurement of entrepreneurial competencies in Australia and Malaysia.

Given the large number of behaviours reflecting competencies in the present study, further consolidation of these behaviours was undertaken before incorporating them into the measurement scale for entrepreneurial competencies. In the process of consolidating the items that reflected a specific domain of competency, items that were too narrowly

defined, or too specific, were combined to provide a more generic level of behaviour reflecting a particular competency. For example, several behaviours under Strategic Competency – specifically, “conduct research on business premise before setting up a new branch”, “conduct research on potential customers before introducing products/ services”, and “conduct research on the quality of a product” – were combined to make the more generic item, “conduct research before proceeding with an investment”. This process reduced the number of new items generated from the interviews intended for inclusion in the original scale. A similar procedure was utilised by Thompson et al. (1997, p. 64) whereby in their study, “competency domains which were synonymous were merged. Those domains which were analogous were combined within a title and explanation/description”.

Items to be added to the entrepreneurial competencies measures developed by Man (2001) are presented in Table 29. Items reflecting new competency areas, which are to be added into this scale, are outlined in Table 30. Altogether, 37 new items were developed for incorporation into the original scale of entrepreneurial competencies developed by Man (2001).

Table 29 *Items Added to the Measurement of Competencies Identified by Man (2001)*

Competency area	No of items added	Items added to original scale for each competency areas
Strategic	4	<ul style="list-style-type: none"> • Conduct research before proceeding with an investment • Forecast trends and changes in the industry • Create competitive edge to compete effectively • Prepare for the “worst scenario”
Commitment	1	<ul style="list-style-type: none"> • Be committed to producing quality goods and services
Conceptual	4	<ul style="list-style-type: none"> • Innovate and do things differently • Be proactive and responsive to changes • Find ways to commercialise ideas • Be spontaneous and quick in making decision
Opportunity	2	<ul style="list-style-type: none"> • Take a concept and make something out of it • Scan the environment to look for opportunities
Organising and Leading	3	<ul style="list-style-type: none"> • Get the right people on board • Energise team to work towards goal • Build an entrepreneurial culture in which staff is willing to take risks
Relationship	2	<ul style="list-style-type: none"> • Select the right people for advice • Create a positive working climate through discussion and problem sharing
Learning	1	<ul style="list-style-type: none"> • Learn the “ins” and “outs” of the industry
Personal	1	<ul style="list-style-type: none"> • Be physically and emotionally tough
Technical*	3	<ul style="list-style-type: none"> • Use specific techniques/tools relevant to business • Have good basic knowledge in my business area • Utilise technical knowledge relevant to the business

Note. *Technical Competency was identified by Chandler and Jansen (1992) but not included in Man’s (2001) model.

Table 30 *Items Reflecting New Competency Areas That Are Not Identified by Man (2001)*

New competency area	No of items added	Items reflecting new competency areas to be included in the entrepreneurial competencies scale
1. Ethical	6	<ul style="list-style-type: none"> • Keep promises • Admit mistakes and tell the truth • Engage in fair, open, and honest marketing practices • Be honest and transparent in business dealings • Be committed to offering products or services at fair prices • Take responsibility and be accountable for own actions
2. Social responsibility	4	<ul style="list-style-type: none"> • Forge relationship with charitable organisation • Engage voluntarily in community activities • Show concern for the staff welfare • Create job opportunities within the local community
3. Familism	6	<ul style="list-style-type: none"> • Cultivate an entrepreneurial culture in my family • Cooperate with and help others (especially close associates) in business • Identify and seek help from employees I trust • Build a foundation for the family members to continue the business • Get support and advice from family and close associates • Share knowledge and resources with others (especially close associates)

4.8 Conclusion

In conclusion, Study 1 provided a strong basis for contending that an extended model of entrepreneurial competencies was worth testing in both Malaysia and Australia. The next chapter (Chapter 5) seeks to test the psychometric properties of the extended model of entrepreneurial competencies, and to establish the reliability and validity of the dependent and independent variables and the covariates (business environment and individual cultural orientations).

Chapter 5

Study 2 Part 1: Towards a Multidimensional Model of Entrepreneurial Competencies: Data Collection and Preliminary Analyses

5.1 Introduction

The aim of Study 2 was to examine possible causal links between perceptions of entrepreneurial competencies, the business environment, cultural orientations, and business success among a sample of SME entrepreneurs in Australia and Malaysia. As discussed in Chapter 3, Man's (2001) model suggests that entrepreneurial competencies have a significant impact on firm performance. The extension of this model proposed here predicts the direct and moderating effects of the business environment on business success. In addition, it is hypothesised that individual cultural orientations are likely to influence the behaviours that define entrepreneurial competencies. In order to test this extended model, a modified measure of entrepreneurial competencies developed in Study 1 is incorporated into a questionnaire together with the measures of business success, business environment, and individual cultural orientations.

Debates about the way "business success" should be measured have focused on the relative importance of traditional financial indicators compared to non-financial indicators. Walker and Brown (2004) suggest that in the context of SMEs, financial and non-financial measures complement each other and enable a richer description of actual performance. In line with this, the present study incorporates both financial and non-financial measures. The financial measures include: profitability; sales turnover; sales growth; return on investment; and market share. These are measured by self-report and also include relative indices (e.g., performance of the firm relative to its competitors in the areas of sales growth, return on sales, cash flow, net profits, growth in market share, and return on investment, *and* business growth; Chandler & Hanks, 1993). Non-financial indicators of success include: owner self-satisfaction; customer satisfaction; employee satisfaction; relationship with suppliers; and workplace industrial relations, items identified by Hoque (2004) and those identified in the qualitative study. These measures can be brought together to provide four indices of business success; (1) satisfaction with financial performance, (2) satisfaction with non-financial performance, (3) performance relative to competitors, and (4) business growth.

Past research has indicated that the way the business environment is perceived does not always accurately reflect the true nature of the environment (Boyd et al., 1993). In conceptualising the business environment, some scholars advocate the use of objective

measures of the business environment (e.g., Goll & Rasheed, 2004), whereas others contend that perceptions are more important, particularly in the context of SMEs because it is perceptions that influence the way people act (Sawyer, 1993; Shane & Kolvereid, 1995). Moreover, Duncan (1972) argues that the overall amount of uncertainty present in the environment is actually largely determined by managerial perceptions of that environment. Consistent with these observations, Tsai et al. (1991) conclude:

Objective conditions are important because they determine the quality of opportunity. However, perceptions are also important because they are the basis for entrepreneurial action (p. 11).

Research further suggests that the focus of these perceptions is largely in terms of how “difficult” and “competitive” the environment is to operate in (i.e., its position on a scale from Benign to Hostile; Covin et al. 1999) and how “changeable” it appears to be (i.e., its position on a scale from Stable to Dynamic; Miller & Friesen, 1983; Naman & Slevin, 1993). Accordingly, this study measures entrepreneurs’ perceptions of the relative Hostility and Dynamism of their current business environment.

The focus on two diverse cultures in the current research, one Western and one Eastern, highlights the potential importance of culture as an influence on the relationship between individual competencies and business success. Hofstede and Bond (1988) have argued that cultural values influence how people define “good” business and how they interpret individual practices including important competencies, skills, and behaviours. In a similar vein, Pearson and Chatterjee (2001) suggest that, even if the personal competencies of successful entrepreneurs are the same in two different settings, the specific behavioural content of entrepreneurial competencies may vary with context. The cultural values assumed to be of most importance in influencing both the actual competencies associated with success and the behaviours that define these competencies are Hofstede’s dimensions of Individualism versus Collectivism and Uncertainty Avoidance versus Tolerance for Ambiguity. These two dimensions are included in the current research because research by Mueller and Thomas (2001) has linked them to the behaviour of entrepreneurs in nine countries.

The account of Study 2 is presented in two chapters. This chapter (Study 2 Part 1) describes the sample, survey instruments, and data collection procedure. In addition, the psychometric properties of each instrument including reliability, validity, and goodness of fit indices are detailed. The results of the model testing are reported in Chapter 7 (Study 2 Part 2).

5.2 Method

5.2.1 Sample

For the purpose of this study, entrepreneurs were defined as individuals who had established and actively managed a business. The definitions of SMEs provided by the Australian Bureau of Statistics (ABS) and Small and Medium Industries Development Corporation (SMIDEC) Malaysia were used to identify appropriate businesses for inclusion in the study. According to the Australian Bureau of Statistics (ABS) (2002), in Australia, an SME is an organisation with less than 200 employees. In Malaysia, an SME is an organisation having not more than 150 full-time employees (Small and Medium Industries Development Corporation (SMIDEC), 2004). Together, these definitions resulted in the following specifications for inclusion:

1. individuals who started up their own business;
2. individuals who were actively participating in the management of the business;
3. the business must have less than 200 employees for Australia and less than 150 employees for Malaysia; and
4. the business must be a stand-alone firm, not a franchise or part of a larger organisation⁹.

In Australia, data were collected from SME business owners operating in all states and territories. The sample was selected from the Kompas Australia 2005 database. This online database, available through the University of Adelaide library, allows the user to identify firms that match specified selection criteria. From this database, a pool of 987 SME business owners who could potentially be approached was identified.

In Malaysia, the official SMI (Small and Medium Industries) Business Directory contained mainly SMEs operating in manufacturing sector. There is no detailed and up-to-date database available for the service sector¹⁰. To obtain a more representative sample of SMEs (where more than 80% of SMEs in Malaysia are operating in service sector), the National Productivity Council (NPC) Malaysia was contacted and a database of SME business owners in Malaysia consisting of SMEs in both the manufacturing and service sectors was obtained. A list of 1520 companies was available in the database but the

⁹ SMEs that are franchises or part of a larger firm were excluded for the reasons identified in Chapter 4, Section 4.3.

¹⁰ Selecting the sampling frame for SMEs, especially those in the service sector is problematic since there is no detailed and up-to-date database available for that sector (Baharun, Abdul Hamid, & Hashim, 2004). Earlier, Abdullah (1999) pointed out a similar frustration; "Data on SMEs in Malaysia are not easily available and quite inadequate. Official data and records are scanty and still fragmented and not consistent since no institution or individual in the government and outside government has the resources to collect comprehensive data on SMEs" (p. xv in preface).

screening process undertaken by the researcher eliminated 498 firms that did not meet the specified criteria or did not have complete contact details. This resulted in a pool of 1022 SMEs. This large pool provided the initial access to potential participants from the manufacturing and service sectors. These sectors were selected because they provide a range of diverse contexts and experiences (Choueke & Armstrong, 2000). A detailed description of the individuals who subsequently participated in the study and their businesses is presented in the following sections.

5.2.1.1 The Respondents

The final sample of respondents in this study included 391 SME business owners: 179 from Australia and 212 from Malaysia. A detailed description of the demographic profile of the respondents is presented in Table 31. It can be seen from Table 31 that there were many more men than women in the sample for each country. This is consistent with the gender breakdown of entrepreneurs in Australia and Malaysia. Nearly 80% of the Australian participants were born in Australia. In Malaysia, racial group rather than place of birth was viewed as a more meaningful variable with Malays being the largest group represented (69.3%). This result is comparable to that of Osman and Hashim (2003) who reported that 64.9% of the entrepreneurs in their study were Malays. More Australian entrepreneurs, compared to Malaysian held a postgraduate degree, and approximately two-third of all entrepreneurs, irrespective of country, started up their business between the ages of 21 and 40 years.

It is also important to note that a majority of the Australian (67.6%) and Malaysian (58.5%) entrepreneurs had no prior entrepreneurial experience. These respondents could therefore be regarded as “novice” entrepreneurs (Westhead & Wright, 1998). Approximately 32% of the Australian and 41% of the Malaysian entrepreneurs were “serial” entrepreneurs, that is, entrepreneurs with some prior start-up experiences (Westhead & Wright, 1998). Most participants had no prior business training. However, the pattern was somewhat different in regards to attending training after business start up, with almost half of the Australian entrepreneurs (45.8%) indicating that they had attended training, while more than half of the Malaysian entrepreneurs (71.2%) indicated that they had either management or technical training or both after the business start-up. This difference in emphasis on the importance of training is consistent with Simpson et al.’s (2004) finding that the entrepreneurs in their study had conflicting views about the value of training versus experience among small business owners.

Table 31 *Demographic Breakdown of Respondents*

Demographic profile	Category	Australia		Malaysia	
		Respondents	%	Respondents	%
Position in the company	Business owner	125	69.8	119	56.1
	Business partner	54	30.2	93	43.9
No of years in the current company	2-5 years	54	30.2	92	43.4
	6-10 years	46	25.7	74	34.9
	11-20 years	44	24.6	37	17.5
	21 years and more	35	19.5	9	4.2
Current Age	20 or under	2	1.1	1	0.5
	21-30	15	8.4	40	18.9
	31-40	42	23.5	80	37.7
	41-50	55	30.7	59	27.8
	51-60	37	20.7	27	12.0
	61 or above	28	15.6	5	2.4
Gender	Male	122	68.2	160	75.5
	Female	57	31.8	52	24.5
Place of birth	Australia	141	78.7	NA	NA
	Europe	22	12.3		
	Asia	7	3.9		
	Africa/Middle east	2	1.1		
	Latin America	0	0.0		
	USA	6	3.4		
	Other	1	.6		
Race	Malay	NA	NA	147	69.3
	Chinese			46	21.7
	Indian			17	9.0
Educational Background	High School	42	23.5	66	31.1
	Certificate Level	35	19.6	28	13.2
	Diploma	39	21.7	41	19.3
	Bachelor degree	45	25.1	68	32.2
	Postgraduate degree	18	10.1	9	4.2
Marital status	Married	125	69.8	164	77.4
	Single	34	19.0	48	22.6
	Other	20	11.2	0	0.0
Age when started the business	20 or under	14	7.8	24	11.3
	21-30	81	45.2	81	38.2
	31-40	45	25.1	69	32.5
	41-50	25	14.0	33	15.6
	51-60	13	7.3	5	2.4
	61 or above	1	0.6	0	0.0
Had previous work experience	Yes	162	90.5	175	82.5
	No	17	9.5	37	15.5
Duration working in the previous job / Tenure with the organisations	No experience	17	9.5	37	17.5
	2 years or less	19	10.6	31	14.5
	3-5 years	33	18.4	62	29.2
	6-10 years	36	20.1	44	20.8
	11-20 years	47	26.3	26	12.3
	21 years and more	27	15.1	12	5.7
Work experience relevant to business	Yes	106	59.2	109	51.4
	No	73	40.8	103	48.6
Prior business start up / Entrepreneurial experience	Yes	58	32.4	88	41.5
	No	121	67.6	124	58.5
Duration in the previous business	No experience	121	67.6	124	58.5
	2 years or less	15	8.4	22	10.4
	3-5 years	23	12.8	37	17.5
	6-10 years	8	4.5	19	9.0
	11-20 years	10	5.6	7	3.2
	21 years and more	2	1.1	3	1.4

Demographic profile	Category	Australia		Malaysia	
		Respondents	%	Respondents	%
Hours spent in business per week	20 hours or less	9	5.0	11	5.2
	21-40 hours	35	19.6	53	25.0
	41-60 hours	101	56.4	91	42.9
	More than 60 hours	34	19.0	57	26.9
Receive formal training before	Management only	34	19.0	34	16.0
	Technical only	25	14.0	33	15.6
	Both of them	32	17.9	64	30.2
	None of them	88	49.1	81	38.2
Attend formal training after	Management only	32	17.9	33	15.6
	Technical only	12	6.7	22	10.4
	Both of them	38	21.2	96	45.2
	None of them	97	54.2	61	28.8

Note. "NA" indicates Not Applicable.

5.2.1.2 The Businesses

The profile of participating firms in the Australian and Malaysian sample is presented in Table 32.

Table 32 *Profile of Firms in the Australian and Malaysian Sample*

Firm's profile	Category	Australia		Malaysia	
		Respondents	%	Respondents	%
No of employees	Less than 50	130	72.6	150	70.8
	51-100	36	20.1	51	24.0
	101-200 (Aus)/101-150 (Mal)	13	7.3	11	5.2
Business area	Manufacturing	50	27.9	32	15.1
	Service	129	72.1	180	84.9
	Categories for service sector:				
	Construction	23	12.8	26	12.3
	Import and export trade	8	4.5	3	1.4
	Tourism and travel	1	.6	5	2.4
	Restaurant and catering	0	.0	21	9.9
	Education and training	8	4.5	5	2.4
	Computer and related service	14	7.8	17	8.0
	Real estate	4	2.2	6	2.8
	Arts and entertainment	3	1.7	3	1.4
	Insurance service	1	.6	7	3.3
	Transportation and logistic	3	1.7	6	2.8
	Technical and engineering	3	1.7	11	5.2
	Wholesale and retail trade	24	13.4	27	12.7
	Telecommunication	4	2.2	7	3.3
	Accommodation	4	2.2	6	2.8
	Finance and investment	7	3.9	4	1.9
	Health and beauty services	7	3.9	11	5.2
	Other	15	8.4	15	7.1
Business Stage	Introduction stage	10	5.6	29	13.7
	Growth stage	74	41.4	98	46.2
	Maturity stage	91	50.8	81	38.2
	Decline stage	4	2.2	4	1.9
Firm's Location (Australia)	SA	106	59.2	NA	NA
	NSW	26	14.5		
	VIC	29	16.2		
	QLD	7	3.9		
	WA	9	5.0		
	NT	0	0.0		
	TAS	2	1.1		
	ACT	0	0.0		

Firm's profile	Category	Australia		Malaysia	
		Respondents	%	Respondents	%
Firm's Location (Malaysia)	Perlis	NA	NA	4	1.9
	Kedah			50	23.6
	Penang			54	25.5
	Perak			18	8.5
	KL			25	11.8
	Selangor			29	13.7
	Melaka			6	2.8
	Johor			12	5.7
	Kelantan			2	0.9
	Terengganu			1	0.5
	Pahang			3	1.4
	N. Sembilan			8	3.8

Note. "NA" indicates Not Applicable.

A majority of businesses in the study had less than 50 employees (72.6% for Australia and 70.8% for Malaysia) and were in the service sector (72.1% for Australia and 84.9% for Malaysia). Among the service sector firms, those operating in construction and wholesale and retail trade were best represented. Approximately half (50.8%) of the Australian entrepreneurs indicated that their firm was "mature" whereas approximately half (46.2%) of the Malaysian entrepreneurs reported that their firm was at the "growth" stage. In the Australian sample, South Australian firms were best represented, comprising 59.2% of the sample. In the Malaysian sample, most businesses operated in four states: Kedah, Penang, Kuala Lumpur, and Selangor.

5.2.2 Survey instruments

5.2.2.1 Entrepreneurial competencies

The major part of the scale (Part A) utilised in this study was a measure of entrepreneurial competency developed and validated by Man (2001). The author reported internal consistencies for all areas that ranged from .78 to .94. In the current investigation, 37 new items were incorporated into the original scale making a total of 90 items measuring entrepreneurial competencies (refer to Appendix E1). Participants rated each item in terms of the importance they attached to the behaviour described for managing their own business. A 7-point Likert scale was used, allowing ratings from 1 (*very unimportant*) to 7 (*very important*).

5.2.2.2 Business success

Satisfaction with financial success including profitability, sales turnover, sales growth, and return on investment was assessed using items adopted from Chandler and Hanks (1993) who reported high overall internal consistency for their measure of .77. Evaluation of non-financial success took the form of ratings of customer satisfaction, employee satisfaction, relationship with suppliers, and workplace industrial relations

(Hoque, 2004). Hoque reported high internal consistency with a Cronbach's alpha value of .75. Five items were added to this measure in order to capture definitions of success obtained from the interview data in Study 1. These asked about overall satisfaction, career progress, customer retention, business image, and balance between work and family life.

Self-report of performance on "objective" financial indicators included estimates of the firm's performance relative to its competitors. This 6-item scale, which consists of sales growth, return on sales, cash flow, net profits, growth in market share, and return on investment, has reported a moderate internal reliability value of .53 (Chandler & Hanks, 1993). Haber and Reichel (2005) used similar measure in their study and reported a high internal consistency of .92. Business growth was also measured by examining changes in sales, market share, and cash flow growth. The scale has reported a good Cronbach's alpha value of .72 (Chandler & Hanks, 1993).

Items measuring business success were incorporated into Part B of the questionnaire. In Part B1, participants evaluated their satisfaction with the performance of their business in 14 areas on a 5-point Likert scale ranging from 1 (*not at all satisfied*) to 5 (*very satisfied*). Part B2 consisted of six items that asked participants to compare the performance of their business with that of their major competitors over the past 12 months. A 5-point Likert scale was used to describe this comparison with 1 representing *significantly lower* and 5 *significantly higher*. Part B3 comprised three items that asked participants about their firm's business growth over the past 12 months. A 6-point Likert scale was used ranging from 1 (*decreasing*) to 6 (*increasing rapidly*).

5.2.2.3 Perceived business environment

The measurement of business environment involved two scales, an 8-item scale of Benign versus Hostile Environment adopted from Covin et al. (1999), and a 5-item scale of Stable versus Dynamic Environment adopted from Naman and Slevin (1993). Both scales showed good internal consistencies; .63 and .70 respectively in the previous studies. In this part of the questionnaire—Part C—participants were asked to indicate on a 5-point Likert scale the extent to which each of the items was *very true* (1) or *very untrue* (5) insofar as it reflected the business environment in which their firm was operating.

5.2.2.4 Individual cultural orientations

To measure Individualism versus Collectivism, which is incorporated into Part D of the questionnaire, an 8-item scale developed by Oyserman et al. (2002) was utilised. Degree of Uncertainty Avoidance versus Tolerance for Ambiguity was measured using the 10-item scale of "Personal Uncertainty" developed by Clampitt and Williams (2000). As

reported in their studies, both measures had adequate internal consistency with Cronbach's alpha values above .70. Both scales used a 7-point Likert response scale with anchors from 1 (*strongly disagree*) to 7 (*strongly agree*).

5.2.2.5 Demographic variables

Part E and Part F of the questionnaire asked about a number of demographic variables and firm's information, including the entrepreneur's age, the firm's age and size, the industry sector in which the firm operated, and the stage of the firm's business development. The entrepreneur's age (including current age and start-up age) was measured using an interval scale. The firm's age was determined by the number of years the respondent had managed the company. The firm's size was represented by the number of employees. The stage of the firm's business development was represented by one of the following four categories: introductory stage, growth stage, maturity stage, or declining stage. To avoid confusion with the terms used, a brief description of each stage of business development was provided, following Covin and Slevin (1988). Other demographic and firm profile information collected in the survey included gender, marital status, number of children, place of birth and race, educational level, general work experience, entrepreneurial experience, training before and after start up, firm location, respondent's position in the firm, number of years in the firm, firm size, the average time spent on the business per week, and business category (see Tables 31 and 32).

Altogether, the questionnaire comprised 6 parts (Part A to Part F). The measurement of key variables, number of items, sources, and the previously established reliabilities are presented in Appendices E2 and E3.

5.2.2.6 Pilot test and survey refinement

Following the operationalisation of all key constructs, a pilot test of the questionnaire was conducted during September 2005. The purpose was to refine the instrument and highlight possible problems with the questionnaire (D. R. Cooper & Schindler, 2003). Altogether, questionnaires (that comprised 6 parts: Part A to Part F) were distributed by referrals and by snowball sampling to 20 entrepreneurs in both Australia and Malaysia. The participants were owner-managers of SMEs in either the service or manufacturing sectors. Participants were asked to complete the questionnaire and comment on ambiguous statements or instructions and difficulties they faced during the process. They were also asked to indicate the time taken to complete the survey.

In response to this pilot test, some of the Australian entrepreneurs commented on the excessive length of the survey. However, because the researcher believed that it was

important to include all of the items in the questionnaire based on the findings of the qualitative study, none of the items was omitted but efforts were made to ensure that the wording of items was short and precise. Several minor changes were also recommended by the Malaysian entrepreneurs pertaining to the word selection for and sentence construction of items the Malay version. More appropriate wording, relevant to the context of Malaysia, was identified with the assistance of a professional bi-lingual translator. The average time taken to complete the survey was approximately 30 minutes. Due to the small sample size, exploratory factor analysis was not conducted to analyse the loading pattern of each measure. Because the majority of items were derived from the existing literature and had already been examined for validity and reliability (refer to Section 5.2.2), this was not seen as a major limitation.

5.2.3 Data collection procedure

Following the refinement of the questionnaire, data collection was carried out between October 2005 and May 2006.¹¹ The treatment of participants was in accordance with the Ethical Standards of the University of Adelaide Human Research Ethics Committee (2004). Questionnaires were distributed to the business owners of the selected firms (refer to Appendices G1 and G2). For the Australian sample, the questionnaire took the form of a web-based survey which was developed by the University of Adelaide Online Media, Marketing and Strategic Communications Office. Emails were sent to potential participants, inviting them to respond to the survey following the link provided (<https://www.adelaide.edu.au/surveys/agsb-sme.html>). In each email, the purpose of the research was described and the researcher's contact details were provided. The web-based survey was designed in such a way that respondents could stop in the middle of the survey, if they wished, by utilising the "postpone" and "resume later" buttons. This function was to allow respondents to complete the survey at their own convenience.

As indicated, a total of 987 firms that met the specified criteria were selected from the Kompas Australia 2005 database. Forty-three emails "bounced" and were treated as dead-lists, thereby reducing the sample pool of potential respondents to 944. Five months

¹¹ A survey method was deemed appropriate for this study for several reasons; Firstly, surveys are cost effective method of collecting data from a large number of respondents (Page & Meyer, 2000). This allows for the quantification of information about the population (Zikmund, 2003) and the use of statistical data analysis (Lukas, Hair, Brush, & Ortinau, 2004). Secondly, surveys are perceived to be valuable for sensitive issues (Aaker, Kumar, & Day, 2004). In the current study, questions pertaining to business performance were likely to be viewed as sensitive information and utilisation of surveys could help facilitate disclosure. Thirdly, due to the length of the questionnaire, surveys are appropriate because they offer a degree of flexibility for the respondents, enabling them to complete the questionnaire at their own time and pace (Aaker et al., 2004).

after the initial mail-out, only 38 completed surveys had been received, even though courtesy reminders had been sent. One possible reason for the low response rate was that the email address listed in the Kompas 2005 database was in most cases the general email address of the company and not the personal email address of the business owner. The emails were therefore directed to administrative assistants or other staff, rather than directly to the business owners. This may have caused a break-down in communications.

To obtain more data, contacts were subsequently established with organisations and agencies that had membership-based networks with SMEs in Australia. Of those contacted, there were two, the Executive Director of the Australian-Malaysian Business Council¹² (AMBC) and the Managing Director of the Dynamic Small Business Network (DSBN) Pty Ltd Australia who agreed to assist by inviting the business owners in their membership lists to participate in the survey. This generated a further 11 responses, giving 49 completed online surveys.

Given the unsatisfactory response rate, a change of strategy was deemed appropriate. Accordingly, the researcher opted to use a mail-out survey because some respondents had indicated that, due to their limited access to computer facilities, they preferred a hard copy questionnaire. A total of 130 completed surveys were received after a mail-out of 350 questionnaires (200 in stage 2 and 150 in stage 3), yielding a total response rate of 37.1%. A response rate for the web-based survey (stage 1) could not be generated because the total number of emails forwarded by the contact persons at the AMBC and DSBN was unknown. Altogether, 179 useable responses were obtained from Australian participants.

In the case of Malaysia, questionnaires were designed in two languages—English and Malay. Participants were invited to respond to the questionnaire in the language that they were most comfortable with and that they commonly used in their daily work life. For the Malay version, questionnaires were translated, and the back-translated, to ensure that the meaning of each question was as consistent as possible with the English version. A professional bi-lingual translator was appointed to translate from English to Malay. A sample of 978 firms that matched the selection criteria was selected and mail-out surveys were sent on October 2005. For purely pragmatic reasons, it was decided not to use a web-based survey for Malaysian participants due to the difficulties associated with accessing the email address of SME owners in Malaysia.

¹² Australia Malaysia Business Council (AMBC) is a non-profit organisation that was formed to facilitate the Australian business practitioners in promoting trade and developing commercial activities with business people, particularly those in Malaysia.

By January 2006, only 114 completed surveys had been received from Malaysian entrepreneurs, even though reminders had been sent. With this low response rate, the researcher undertook convenience sampling in an effort to obtain more data. Contacts were established with several commercial lawyers in various states in Peninsular Malaysia to obtain access to potential respondents. Of 200 surveys distributed using this method, 98 completed surveys were obtained, giving a total of 212 useable data sets. This led to a total response rate of 18% (212 of 1178). This response rate was considered satisfactory because it compared well with similar studies of entrepreneurs across cultures (see for example, J. R. Baum et al., 1993; McGrath & MacMillan, 1992; McGrath, MacMillan, Yang et al., 1992; Mueller & Thomas, 2001; Thomas & Mueller, 2000).

The point should be made that the present study is not unusual in terms of the difficulty experienced in obtaining responses from SME business owners. Previous researchers studying small firms have reported similar problems. Reid, Dunn, Cromie, and Adams (1999) stated that a major difficulty in any research that involves surveying small businesses is achieving an adequate response rate, with many studies reporting rates as low as 10%.

5.3 Results—Preliminary Analyses

5.3.1 *Non-response bias*

A major concern with the survey method of data collection is the degree to which the validity of the results may be compromised by non-response bias. This bias can be tested but it is difficult to do so when details about non-respondents are slight. Miller and Smith (1983) suggest that late respondents can be used as substitutes for non-respondents. Depending on the types of the data (categorical or continuous), Chi-square tests and independent sample *t* tests were conducted to identify differences between two groups differentiated by return date for both Australian and Malaysian respondents separately. These analyses compared the initial 50 responses with the last 50 responses (Coakes & Steed, 2003). The results indicated that, for both Australian and Malaysian cohorts, there were no significant differences between early and late respondents in terms of their respective demographic profiles and other variables including competency areas, perceived business environment, and individual cultural orientations (refer to Appendices H1, H2, I1, and I2). Thus, although the second (Malaysia) and the third (Australia) stages of data collection used convenience sampling techniques, respondent characteristics did not vary with stage of data collection. Therefore, it was concluded that the present data were likely to be free from non-response bias.

In addition, Chi-square tests were conducted to check if there was a significant difference between the Australian respondents who completed the web-based survey and those who completed the mail-out survey. The two groups were compared in terms of selected demographic variables and the results indicated that there were no significant differences in this regard (see Appendix J).

5.3.2 Data preparation and assumption testing

Prior to data analysis, the data were subjected to data preparation and assumption testing. Firstly, all reverse-coded items were recoded and missing values were checked. Next, data were tested for outliers and normality using SPSS 11.5. The application of multivariate analysis, including structural equation modeling (SEM), depends heavily on the assumption of normality; it is sensitive to extreme observations (outliers) and data non-normality (Kline, 2005). Thus, all variables to be used in the measurement and structural modeling processes were screened for outliers and univariate and multivariate normality. This was achieved by observing the skewness and kurtosis indices (Hair, Anderson, Tatham, & Black, 1998; Kline, 2005), with a skew index of above 3, or less than -3, and a kurtosis index of above 10 indicating problems with the data. Adopting a less stringent measure, Tabachnick and Fidell (2001, p. 122) define outliers as “those with standardised residual values above 3.3 or less than -3.3”. From the analysis, it was observed that items C1, C12, and C39, all measures of entrepreneurial competencies, had skewness above 3 and kurtosis above 10 for both Australian and Malaysian data. Given evidence of the non-normality of these three items, they were excluded from subsequent analyses. Multicollinearity is another important problem for multivariate analysis. In this study, it was observed that all competency areas and the four dimensions of business success were highly correlated indicating a problem with multicollinearity (as discussed in Sections 5.3.3.2 and 5.3.3.3). Hair et al. (1998) argue that multicollinearity does not contribute to a good regression model. This problem was dealt with by establishing a higher-order structure for both constructs using AMOS 5, as suggested by Byrne (2001). The procedure undertaken to establish higher-order structures for entrepreneurial competencies and business success is provided in Sections 5.3.3.2 and 5.3.3.3.

Another assumption of multivariate analysis concerns the issue of sample size. Hair et al. (1998) argue that the maximum likelihood estimation procedure in SEM may require a sample size of greater than 50, with a generally recommended sample size of between 100 and 200. Clearly, the Australian sample ($N = 179$) and Malaysian sample ($N = 212$) obtained for this study met the minimum requirement for sample size for SEM.

5.3.3 Psychometric properties of the dependent and independent variables and constructs

The present study used confirmatory factor analysis (CFA) to validate and confirm (rather than explore) the dimensionality of the dependent and independent variables because CFA is suitable in situations where the dimensionality of a set of variables for a given population is already known based on previous research (Kline, 2005). Such knowledge existed here because of extensive previous research (see, for example, Chandler & Hanks, 1994; Chandler & Jansen, 1992; Man, 2001; Naman & Slevin, 1993). A further rationale for utilising CFA in this study was that the technique has been shown to be useful for investigating the extent to which the established dimensionality of a particular construct fits with a new sample (Muthen & Muthen, 2006).

It is also the case that the various advantages offered by CFA can overcome the limitations of exploratory factor analysis (EFA). For example, CFA offers a mechanism for analysing the goodness of fit of the data, and it provides useful indices that point out the source of model misfit (e.g., modification index; Byrne, 2001). CFA examines the extent to which the obtained factor structure adequately represents the covariation among items and it allows for the removal of subscales that do not represent a latent construct of interest. In this study, it maximises the interpretability of the final model (Hair et al., 1998). CFA is an important preliminary step to test the validity of the measurement model before proceeding with the structural equation modeling. Confirming the measurement model before proceeding with the structural model – a two-step approach – overcomes the problem of a single-step approach (assessing measurement and structural models simultaneously) that means the researcher is unable to localise the source of poor model fit, if poor fit is evident (Kline, 1998). Once the measurement model is validated, the assessment of the structural model can be performed with greater confidence. The details of the steps in the CFA and the goodness of fit indices are provided in Appendix K.

5.3.3.1 Measurement model for entrepreneurial competencies—a replication of Man’s (2001) model

Measurement model. An evaluation of the eight competency areas proposed by Man (2001) was conducted by building one-factor congeneric models for the eight competency areas in order to estimate the factor loadings of each item (refer to Appendix L). As mentioned earlier, item retention in the scales was based upon the significant factor loadings and the goodness of fit indices. As depicted in Table 33, the findings indicated that the Malaysian data fitted better to Man’s (2001) model than the Australian data. Thirteen items had to be removed from the Australian model compared to seven for the

Malaysian due to their weak representation of the data. All items for Commitment and Relationship competencies were retained for both models. Items measuring Conceptual and Learning competencies fitted the Malaysian data better than the Australian.

Table 33 *Factor Loadings for Man's (2001) Model of Entrepreneurial Competencies*

Competency area and the items	Item	AUS	MAL
		λ	λ
<u>1. Strategic</u>			
C7- Monitor progress toward strategic goals	C7	.69	-
C14-Prioritise work in alignment with business goals	C14	.54	.57
C28-Identify long term issues, problems or opportunities	C28	-	.71
C32-Align current actions with strategic goals	C32	.89	.81
C35-Evaluate results against strategic goals	C35	.95	.83
C71-Redesign business to better meet long term objectives	C71	.76	.53
C74-Be aware of the projected directions and how changes might impact my business	C74	-	.65
C82-Assess and link short term, day to day tasks in the context of long term direction	C82	-	.55
C89-Determine strategic actions by weighing costs and benefits	C89	.83	-
<u>2. Commitment</u>			
C37-Dedicate to make the business work	C37	.68	.79
C38-Refuse to let the business fail	C38	.80	.88
C39-Have an extremely strong internal drive to succeed	C39	.90	.74
C42-Commit to long term business goals	C42	.55	.58
<u>3. Conceptual</u>			
C3-Explore new ideas	C3	.67	.53
C10-Take reasonable job-related risks	C10	.60	.71
C15-Look at old problems in new ways	C15	.80	.65
C17-Treat new problems as opportunities	C17	.71	.69
C30-Monitor progress toward objectives in risky actions	C30	.66	.68
C72-Understand the broader business implications of ideas, issues and observations	C72	.63	.71
C85-Translate ideas and observations into the business context	C85	-	.71
<u>4. Opportunity</u>			
C2-Perceive unmet consumer needs	C2	.67	.51
C22-Seize high quality business opportunities	C22	-	-
C66-Actively look for products or services that provide real benefit to customers	C66	.70	.80
C76-Identify goods or services that the customer wants	C76	.75	.54
<u>5. Organising</u>			
C5-Organise resources	C5	.80	.60
C8-Lead subordinates	C8	-	.77
C11-Organise people	C11	.83	.79
C13-Motivate people	C13	-	.81
C16-Supervise subordinates	C16	.78	.66
C18-Plan the operations of the business	C18	.78	.55
C19-Plan the organisation of different resources	C19	-	-
C20-Keep the organisation running smoothly	C20	-	-
C26-Delegate effectively	C26	.84	-
C53-Coordinate tasks	C53	.80	.53
<u>6. Relationship</u>			
C6-Negotiate with others	C6	.74	.57
C24-Maintain a personal network of work contacts	C24	.80	.73
C27-Interact effectively with others	C27	.78	.80
C77-Develop long term trusting relationships with others	C77	.61	.65
<u>7. Learning</u>			
C9-Learn as much as I can in my field	C9	.89	.56
C25-Learn from a variety of means	C25	.87	.69
C33-Learn proactively	C33	.71	.68
C41-Keep up to date in my field	C41	.84	.70
C44-Apply learned skills and knowledge to actual practices	C44	-	.78

Competency area and the items	Item	AUS	MAL
		λ	λ
8. Personal			
C40-Recognise and work on own shortcomings	C40	.84	.53
C43-Maintain a high level of energy	C43	.69	.73
C48-Respond to constructive criticism	C48	.78	.72
C49-Maintain a positive attitude	C49	-	-
C50-Prioritise tasks to manage time	C50	-	.76
C52-Manage own career development	C52	-	.68
C81-Motivate myself to function at an optimum level of performance	C81	.75	.65
C87-Identify strengths and weaknesses and match them with opportunities and threats	C87	.60	.73

Note. “ λ ” indicates factor loadings. Substantial and significant factor loadings provide evidence of convergent validity; “-” indicates items that were removed through the model estimation procedure. “AUS” refers to Australia; “MAL” refers to Malaysia.

Reliability and validity assessment. In order to ascertain the internal consistency of the constructs, Cronbach’s alpha was computed for each factor, with a value of $>.60$ considered to be acceptable and a value of $>.70$ good (Nunnally & Bernstein, 1994). As depicted in Table 34, with the exception of Opportunity Competency in the Malaysian model ($\alpha = .64$), the Cronbach’s alpha value for all competency areas was good (i.e., above $.70$). The reliability of the scale was also ascertained by estimating composite reliability ($P\eta$; Fornell & Larcker, 1981)¹³. As shown in Table 34, with the exception of Opportunity Competency for the Malaysian model ($P\eta = .66$), the “ $P\eta$ ” values of the competency areas were well above $.70$.

In addition, substantial and significant factor loadings provide evidence of convergent validity (Steenkamp & Trijp, 1991), with the recommended value of $>.50$ (Hildebrandt, 1987). As can be seen from Table 33, all of the items loadings were significant and well above the acceptable cut-off-point of $>.50$, signifying the convergent validity of the entrepreneurial competencies construct. The convergent validity was also calculated using Average Variance Extracted (AVE or “ $Pvc(\eta)$ ”)¹⁴. The results indicated that seven of 16 AVE values for Man’s (2001) competency model were below $.50$ (refer to Table 34), indicating a slightly low AVE.

Goodness of fit. Following the removal of problematic items as identified by the modification index, good model fits were established for both Australian and Malaysian data. As shown in Table 35, observed χ^2/df values are situated below the acceptable value of 3 (Kline, 2005), however several values also lie below the value of 1, reflecting model overfit. Due to the known effect of sample size on the χ^2 and χ^2/df statistics (Hair et al, 1998), a slight overfit of measurement models is acceptable for this study.

¹³ The description of composite reliability and its formula are provided in Appendix K.

¹⁴ The description of Average Variance Extracted and its formula are provided in Appendix K.

Table 34 *Reliability and Validity Assessment for Man's (2001) Model of Entrepreneurial Competencies*

Competency Area	α	P η	Pvc (η)	Competency Area	α	P η	Pvc (η)
1. Strategic				5. Organising			
Australia	.91	.90	.60	Australia	.91	.90	.61
Malaysia	.85	.85	.46	Malaysia	.85	.85	.45
2. Commitment				6. Relationship			
Australia	.79	.81	.53	Australia	.82	.82	.54
Malaysia	.83	.87	.63	Malaysia	.78	.81	.53
3. Conceptual				7. Learning			
Australia	.83	.80	.41	Australia	.90	.89	.68
Malaysia	.86	.84	.42	Malaysia	.81	.82	.48
4. Opportunity				8. Personal			
Australia	.74	.75	.50	Australia	.84	.86	.56
Malaysia	.64	.66	.41	Malaysia	.86	.86	.48

Note. " α " = Cronbach alpha value; "P η " = Composite reliability; "Pvc (η)" or Average Variance Extracted (AVE) = Convergent validity.

Table 35 *Goodness of Fit Statistics for Man's (2001) Model of Entrepreneurial Competencies*

Competency Area	χ^2	df	p	χ^2/df	GFI	CFI	TLI	RMSEA
1. Strategic								
Australia	10.18	7	.179	1.45	.981	.991	.996	.050
Malaysia	13.64	13	.400	1.05	.982	.999	.998	.015
2. Commitment								
Australia	.023	1	.879	.023	1.00	1.00	1.02	.000
Malaysia	2.79	2	.248	1.39	.994	.998	.993	.043
3. Conceptual								
Australia	9.09	9	.429	1.01	.984	1.00	1.00	.007
Malaysia	17.63	13	.172	1.36	.977	.991	.986	.041
4. Opportunity								
Australia	.128	1	.720	.128	1.00	1.00	1.02	.000
Malaysia	1.36	1	.243	1.36	.996	.996	.987	.042
5. Organising								
Australia	11.65	8	.168	1.46	.980	.995	.990	.051
Malaysia	13.56	13	.405	1.04	.982	.999	.998	.014
6. Relationship								
Australia	1.12	2	.572	.559	.997	1.00	1.01	.000
Malaysia	1.34	2	.511	.671	.997	1.00	1.01	.000
7. Learning								
Australia	.105	1	.746	.105	1.00	1.00	1.01	.000
Malaysia	7.87	5	.164	1.57	.985	.991	.982	.052
8. Personal								
Australia	4.80	4	.309	1.20	.990	.998	.994	.033
Malaysia	14.04	13	.371	1.08	.983	.998	.997	.019

5.3.3.2 Measurement model for the extended model of entrepreneurial competencies

Measurement model. The extended model of entrepreneurial competencies derived from the results of Study 1 consisting of twelve competency areas was subjected to a one-factor congeneric model measurement testing procedure (see Appendix M). As depicted in Table 36, Organising and Leading as well as Familism competencies appeared to be measured by a slightly different collection of behaviours in the Australian and Malaysian

samples. Specifically, item “C13-motivate people”, representing Organising and Leading Competency, did not fit the Australian model but fitted the Malaysian data well.

Table 36 *Factor Loadings for the Extended Model of Entrepreneurial Competencies*

Competency area and the items	Item	AUS	MAL
		λ	λ
<u>1. Strategic</u>			
C7- Monitor progress toward strategic goals	C7	-	-
C14-Prioritise work in alignment with business goals	C14	.57	.56
C28-Identify long term issues, problems or opportunities	C28	-	-
C32-Align current actions with strategic goals	C32	-	-
C35-Evaluate results against strategic goals	C35	-	-
C45-Forecast trends in business	C45	.68	.68
C54-Develop strategy to prepare for the “worst scenario”	C54	.65	.63
C67-Create a competitive edge	C67	-	-
C68-Conduct research before proceeding with an investment	C68	.82	.69
C71-Redesign business to better meet long term objectives	C71	-	-
C74-Be aware of the projected directions and how changes might impact my business	C74	.82	.74
C82-Assess and link short term, day to day tasks in the context of long term direction	C82	.81	.71
C89-Determine strategic actions by weighing costs and benefits	C89	.77	.80
<u>2. Commitment</u>			
C37-Dedicate to make the business work	C37	.68	.79
C38-Refuse to let the business fail	C38	.80	.88
C39-Have an extremely strong internal drive to succeed	C39	.90	.74
C42-Commit to long term business goals	C42	.55	.58
C55-Be committed to producing quality goods or services	C55	-	-
<u>3. Conceptual</u>			
C3-Explore new ideas	C3	.72	.58
C10-Take reasonable job-related risks	C10	.57	.69
C15-Look at old problems in new ways	C15	-	-
C17-Treat new problems as opportunities	C17	-	-
C30-Monitor progress toward objectives in risky actions	C30	.69	.68
C56-Innovate and do things differently	C56	.85	.72
C57-Be proactive and responsive to changes	C57	.80	.56
C58-Find ways to commercialise ideas	C58	-	-
C59-Be spontaneous and quick in making decisions	C59	-	-
C72-Understand the broader implications of ideas, issues and observations	C72	.60	.69
C85-Translate ideas and observations into the business context	C85	-	-
<u>4. Opportunity</u>			
C2-Perceive unmet consumer needs	C2	.68	.51
C22-Seize high quality business opportunities	C22	-	-
C60-Take an idea and make something out of it	C60	.53	.89
C61-Scan the environment to look for opportunities	C61	.59	.77
C66-Look for products or services that provide real benefit to customers	C66	.73	.56
C76-Identify goods or services that the customer wants	C76	.70	.60
<u>5. Organising and Leading</u>			
C4-Energise the team to work towards goals	C4	-	-
C5-Organise resources	C5	.77	.59
C8-Lead subordinates	C8	.79	.77
C11-Organise people	C11	.80	.78
C13-Motivate people	C13	-	.83
C16-Supervise subordinates	C16	.79	.65
C18-Plan the operations of the business	C18	-	-
C19-Plan the organisation of different resources	C19	-	-
C20-Keep the organisation running smoothly	C20	-	-
C26-Delegate effectively	C26	.86	.60
C53-Coordinate tasks	C53	.80	.53
C62-Get the right people on board	C62	-	-
C78-Build an entrepreneurial culture in which staff are willing to take risks	C78	-	-

Competency area and the items	Item	AUS	MAL
		λ	λ
<u>6. Relationship</u>			
C6-Negotiate with others	C6	.72	.58
C24-Maintain a personal network of work contacts	C24	.81	.72
C27-Interact effectively with others	C27	.78	.79
C34-Select the right people for advice	C34	.70	.60
C77-Develop long term trusting relationships with others	C77	.61	.67
C86-Create a positive work climate through discussion and problem- sharing	C86	-	-
<u>7. Learning</u>			
C9-Learn as much as I can in my field	C9	.88	.55
C25-Learn from a variety of means	C25	.87	.73
C33-Learn proactively	C33	-	-
C41-Keep up to date in my field	C41	.84	.73
C44-Apply learned skills and knowledge to actual practices	C44	.65	.72
C46-Learn the “ins” and “outs” of the industry	C46	-	-
<u>8. Personal</u>			
C40-Recognise and work on own shortcomings	C40	-	-
C43-Maintain a high level of energy	C43	.68	.70
C48-Respond to constructive criticism	C48	-	-
C49-Maintain a positive attitude	C49	.80	.66
C50-Prioritise tasks to manage time	C50	-	-
C52-Manage own career development	C52	.59	.67
C70-Be physically and emotionally tough	C70	-	-
C81-Motivate myself to function at an optimum level of performance	C81	.76	.68
C87-Identify strengths and weaknesses and match them with opportunities and threats	C87	.65	.75
<u>9. Technical</u>			
C51-Possess expertise in technical or functional areas	C51	.66	.65
C79-Use specific techniques/tools relevant to the business	C79	.89	.70
C80-Have good basic knowledge in my business area	C80	-	-
C88-Utilise technical knowledge relevant to the business	C88	.79	.87
<u>10. Ethical</u>			
C12-Keep promises	C12	-	-
C29-Admit mistakes and tell the truth	C29	.79	.42
C47-Engage in fair, open, and honest marketing practices	C47	-	-
C63-Be honest and transparent in business dealings	C63	.83	.68
C64-Be committed to offering products/services at fair prices	C64	.79	.80
C73-Take responsibility and be accountable for own actions	C73	.80	.72
<u>11. Social responsibility</u>			
C21-Forge relationships with charitable organisations	C21	.92	.84
C23-Engage voluntarily in community activities	C23	.78	.83
C65-Show concern for the welfare of my staff	C65	-	-
C75-Create job opportunities within the local community	C75	.66	.50
<u>12. Supporting and Cooperating (AUS)/Familism (MAL)</u>			
C31-Cultivate an entrepreneurial culture in my family	C31	-	.56
C36-Cooperate with and help others (especially close associates) in business	C36	.55	.68
C69-Identify and seek help from employees I trust	C69	.72	.65
C83-Build a foundation for the next generation to continue the business	C83	-	.60
C84-Get support and advice from family and close associates	C84	.50	.66
C90-Share knowledge and resources with others (especially close associates)	C90	.87	.82

Note. “ λ ” indicates factor loadings. Substantial and significant factor loadings provide evidence of convergent validity; “-” indicates items that were removed through the model estimation procedure. “AUS” refers to Australia; “MAL” refers to Malaysia.

In addition, items “C31- cultivate an entrepreneurial culture in my family” and “C83- build a foundation for the next generation to continue the business” representing the Familism Competency were omitted from the Australian model due to their weak representation of the data; however, they represented the Malaysian data well. Given that

Familism in Australia does not capture items reflecting the importance of family in terms of cultivating an entrepreneurial culture and building a strong base of business for the family, this competency was renamed “Supporting and Cooperating” in this country, thereby more accurately describing the items remaining in the Australian model. Accordingly, the subsequent analysis assumed model differences between Australia and Malaysia, in that Organising and Leading Competency did not include item “C13-motivate people” and the Familism Competency in Australia was renamed Supporting and Cooperating Competency.

Reliability and validity assessment. As presented in Table 37, the measurement models for all competency areas returned Cronbach’s alpha values greater than .70. The composite reliabilities calculated for the Australian and Malaysian models were above the recommended value of .70. In addition, all factor loadings were statistically significant at $p < .001$ and were above the threshold value of .30, suggesting that convergent validity was established.

Table 37 *Reliability and Validity Assessment for the Extended Model of Entrepreneurial Competencies*

Competency Area	α	$P\eta$	Pvc (η)	Competency Area	α	$P\eta$	Pvc (η)
1. Strategic				7. Learning			
Australia	.88	.89	.54	Australia	.89	.90	.69
Malaysia	.86	.87	.48	Malaysia	.77	.79	.75
2. Commitment				8. Personal			
Australia	.79	.81	.53	Australia	.80	.81	.47
Malaysia	.83	.87	.63	Malaysia	.82	.84	.51
3. Conceptual				9. Technical			
Australia	.84	.83	.45	Australia	.81	.82	.60
Malaysia	.82	.80	.41	Malaysia	.78	.75	.51
4. Opportunity				10. Ethical			
Australia	.79	.79	.44	Australia	.86	.90	.68
Malaysia	.81	.85	.54	Malaysia	.75	.78	.54
5. Organising and Leading				11. Social Responsibility			
Australia	.92	.93	.70	Australia	.82	.78	.54
Malaysia	.86	.93	.66	Malaysia	.76	.91	.79
6. Relationship				12. Supporting and Cooperating (AUS)/ Familism (MAL)			
Australia	.84	.85	.54	Australia	.76	.79	.50
Malaysia	.80	.83	.50	Malaysia	.83	.78	.61

Note. “ α ” = Cronbach alpha value; “ $P\eta$ ” = Composite reliability; “Pvc (η)” = Convergent validity. “AUS” refers to Australia; “MAL” refers to Malaysia.

With the exception of Strategic (Malaysian model), Conceptual (Australian and Malaysian models), Opportunity (Australian model), and Personal Competencies (Australian model), the AVE (“Pvc (η)”) values for all other competency areas were above .50, providing further evidence of convergent validity. Even though five AVE values were

below .50, it was assumed that the competency areas developed were reliable and valid based on the other indicator of construct validity, substantial and significant factor loadings.

Goodness of fit. The goodness-of-fit of all the competency models for both Australian and Malaysian data was subsequently assessed to estimate the overall model fit of each competency area for both Australian and Malaysian data. As can be seen from Table 38, the goodness-of-fit indices generated for the latent factors (competency areas) indicated that both models fit the data well.

Accordingly, the extended model of entrepreneurial competencies was considered appropriate and therefore, the competency areas utilised in the subsequent model testing included: Strategic, Commitment, Conceptual, Opportunity, Organising and Leading, Relationship, Personal (Man's, 2001, competencies), Technical (Chandler & Jansen's, 1992), and Ethical, and Social Responsibility, as well as Supporting and Cooperating (Australia)/Familism (Malaysia) (competencies from the extended model).

Inter-correlation analysis. An inter-correlation analysis between all competency areas was undertaken to determine the relationships (refer to Tables 39 and 40). This analysis was also undertaken to check for multicollinearity and to identify the possible existence of a higher-order structure. Tables 39 and 40 show that there were highly significant correlations among all the competency areas for both Australian and Malaysian data. These relationships were sufficiently large to justify the assumption of a higher-order structure for the entrepreneurial competencies construct (Byrne, 2001). Hair et al. (1998) have also suggested that the existence of high correlations among first-order factors indicates a problem with multicollinearity. Similarly, Tanaka and Huba's (1984) suggest that if the primary level factors were highly correlated, such findings indicate the presence of a higher-order factor. To overcome this problem, the second-order CFA was conducted to model a higher-order structure for the entrepreneurial competencies construct, for both Australian and Malaysia data¹⁵. A similar procedure was utilised by Byrne and Baron (1993) to establish a higher order structure of measures of adolescent depression. The goodness-of-fit statistics were subsequently assessed for the new structure.

¹⁵ To reduce the number of measured variables in the estimation of a higher-order structure, each competency area identified through CFA was converted into composite variables (see, for example, Singh & Smith, 2004). This method provides a means of reducing the number of measured variables and thus, parameters to be estimated (Rowe, 2002). Given the large number of items representing entrepreneurial competencies construct, the calculation of composite score using factor score weights is deemed appropriate. Once composite variables have been computed, the measurement errors and the path loading for each composite variable were corrected based on the scale reliability, standard deviation, and variance (Holmes-Smith & Rowe, 1994). A further description of composite variables is provided in Chapter 6, Section 6.2.1.

Table 38 *Goodness of Fit Statistics for the Extended Model of Entrepreneurial Competencies*

Competency Areas	χ^2	<i>df</i>	<i>p</i>	χ^2/df	GFI	CFI	TLI	RMSEA
1. Strategic								
Australia	17.96	12	.117	1.50	.973	.990	.983	.053
Malaysia	16.21	14	.300	1.16	.973	.987	.981	.048
2. Commitment								
Australia	.023	1	.879	.023	1.00	1.00	1.02	.000
Malaysia	2.18	2	.336	1.09	.995	.999	.998	.021
3. Conceptual								
Australia	12.31	8	.138	1.54	.979	.990	.981	.055
Malaysia	11.68	9	.232	1.30	.981	.993	.989	.038
4. Opportunity								
Australia	6.51	4	.164	1.63	.986	.990	9.74	.059
Malaysia	3.62	4	.460	.905	.993	1.00	1.00	.000
5. Organising and Leading								
Australia	8.00	7	.333	1.14	.986	.999	.997	.028
Malaysia	10.52	9	.310	1.17	.984	.997	.995	.028
6. Relationship								
Australia	3.25	5	.662	.650	.993	1.00	1.01	.000
Malaysia	7.67	5	.175	1.53	.986	.991	.982	.050
7. Learning								
Australia	1.39	2	.500	.693	.996	1.00	1.00	.000
Malaysia	.480	2	.787	.240	.999	1.00	1.02	.000
8. Personal								
Australia	4.68	5	.459	.931	.990	1.00	1.00	.000
Malaysia	6.31	5	.277	1.26	.988	.996	.992	.035
9. Technical								
Australia	1.25	1	.263	1.25	.995	.995	.999	.038
Malaysia	.150	1	.700	.149	1.00	1.01	1.00	.000
10. Ethical								
Australia	3.15	2	.207	1.57	.992	.986	.995	.057
Malaysia	1.77	1	.182	1.77	.996	.996	.979	.060
11. Social Responsibility								
Australia	.400	1	.527	.400	.999	1.00	1.01	.000
Malaysia	.017	1	.878	.017	1.00	1.01	1.00	.000
12. Supporting and Cooperating (AUS)/Familism (MAL)								
Australia	.389	2	.823	.194	.999	1.01	1.03	.000
Malaysia	8.68	8	.370	1.09	.986	.998	.997	.020

Note. "AUS" refers to Australia; "MAL" refers to Malaysia.

Table 39 *Descriptive Statistics and Zero-order Correlations of All Competency Areas for Australian Data*

Competency Area	1	2	3	4	5	6	7	8	9	10	11	12
1. Strategic	-											
2. Commitment	.68**	-										
3. Conceptual	.72**	.80**	-									
4. Opportunity	.71**	.64**	.71**	-								
5. Organising and Leading	.84**	.76**	.83**	.70**	-							
6. Relationship	.67**	.71**	.68**	.71**	.69**	-						
7. Learning	.74**	.80**	.80**	.69**	.81**	.81**	-					
8. Personal	.77**	.81**	.72**	.65**	.76**	.75**	.76**	-				
9. Technical	.72**	.65**	.65**	.71**	.77**	.73**	.75**	.67**	-			
10. Ethical	.62**	.62**	.62**	.66**	.62**	.68**	.65**	.73**	.63**	-		
11. Social Responsibility	.33**	.39**	.40**	.37**	.37**	.35**	.39**	.31**	.30**	.31**	-	
12. Supporting and Cooperating	.64**	.53**	.55**	.73**	.63**	.63**	.53**	.58**	.55**	.68**	.44**	-
<i>M</i>	5.93	6.35	6.04	6.00	6.04	6.15	6.11	6.26	5.99	6.35	4.14	5.73
<i>SD</i>	.84	.88	.83	.77	.92	.82	.96	.71	.85	.76	1.37	.99

Note. ** Correlation is significant at $p < .01$.

Table 40 *Descriptive Statistics and Zero-order Correlations of All Competency Areas for Malaysian Data*

Competency Area	1	2	3	4	5	6	7	8	9	10	11	12
1. Strategic	-											
2. Commitment	.69**	-										
3. Conceptual	.77**	.64**	-									
4. Opportunity	.75**	.66**	.73**	-								
5. Organising and Leading	.58**	.59**	.68**	.59**	-							
6. Relationship	.73**	.72**	.70**	.71**	.70**	-						
7. Learning	.69**	.70**	.74**	.67**	.65**	.73**	-					
8. Personal	.82**	.73**	.76**	.77**	.66**	.78**	.72**	-				
9. Technical	.72**	.51**	.62**	.65**	.53**	.56**	.58**	.69**	-			
10. Ethical	.75**	.72**	.67**	.76**	.57**	.65**	.63**	.78**	.59**	-		
11. Social Responsibility	.54**	.33**	.59**	.48**	.49**	.54**	.57**	.52**	.48**	.42**	-	
12. Familism	.74**	.53**	.67**	.69**	.59**	.58**	.60**	.73**	.66**	.66**	.64**	-
<i>M</i>	6.04	6.30	5.95	5.97	5.98	6.18	6.09	6.09	5.91	6.12	5.51	5.74
<i>SD</i>	.74	.75	.78	.85	.84	.70	.77	.73	.96	.78	1.07	.90

Note. ** Correlation is significant at $p < .01$.

In order to generate the best fit model, several alternative models of entrepreneurial competencies were estimated. It should be noted that in cases where there is a lack of fit of the model, model respecification was undertaken to determine a model that better represented the sample data. Based on theoretical considerations, limited alterations to the model are acceptable (Bollen, 1989). To identify the source of misfits, the modification indices were examined (Byrne, 2001). The model estimation of each of the models suggested that several error terms were correlated. As suggested by Jöreskog and Sörbom

(1996), the options for dealing with correlated error terms are to either co-vary them or to drop one or both of the items, thus, the model respecification undertaken for each alternative model was based on this option.

As can be seen from Table 41, four alternative models were estimated. The goodness of fit statistics showed that Models 1 and 2 did not yield good model fit. The two best models generated from the measurement model estimation procedure were Models 3 and 4; both met the recommended criteria. For simplicity, the models were renamed “Comprehensive” and “Parsimonious” models respectively (for both Australia and Malaysia; see Figures 17, 18, 19, and 20). Given the good model fit of the Comprehensive and Parsimonious models of entrepreneurial competencies, the subsequent structural model estimation to be undertaken will take into consideration both models.

Table 41 *Goodness of Fit Statistics for Alternative Models of Entrepreneurial Competencies*

Alternative Model	Goodness of Fit Statistics								
		χ^2	<i>df</i>	<i>p</i>	χ^2/df	GFI	CFI	TLI	RMSEA
<u>Model 1: Higher-order structure</u>									
1. Entrepreneurial: Strategic, Commitment, Conceptual, Opportunity	AUS	298.70	53	.000	5.64	.792	.882	.853	.161
2. Managerial: Organising and Leading, Relationship, Technical, Ethical, Social Responsibility, Supporting and Cooperating (AUS)/Familism (MAL)	MAL	229.28	54	.000	4.25	.842	.923	.906	.124
<u>Model 2: Higher-order structure</u>									
1. Entrepreneurial: Strategic, Commitment, Conceptual, Opportunity, Learning, Personal	AUS	273.85	51	.000	5.37	.808	.893	.861	.157
2. Managerial: Organising and Leading, Relationship, Technical									
3. Social: Ethical, Social Responsibility, Supporting and Cooperating (Aus)/Familism (Mal)	MAL	227.98	52	.000	4.38	.840	.923	.902	.127
<u>Model 3: Higher-order structure</u>									
1. AUS - Comprehensive Model: 12 competency areas	AUS	76.88	40	.000	1.92	.935	.982	.971	.072
2. MAL – Comprehensive Model: 12 competency areas	MAL	95.97	45	.000	1.97	.933	.981	.972	.068
<u>Model 4: Higher-order structure (Parsimonious Model)</u>									
1. AUS - 7 competency areas: Commitment, Conceptual, Opportunity, Learning, Personal, Ethical, Social Responsibility	AUS	12.01	11	.363	1.09	.982	.999	.998	.023
2. MAL - 8 competency areas: Strategic, Conceptual, Opportunity, Relationship, learning, personal, Ethical, Familism	MAL	25.25	16	.066	1.58	.970	.994	.990	.052

Note. “AUS” refers to Australia; “MAL” refers to Malaysia.

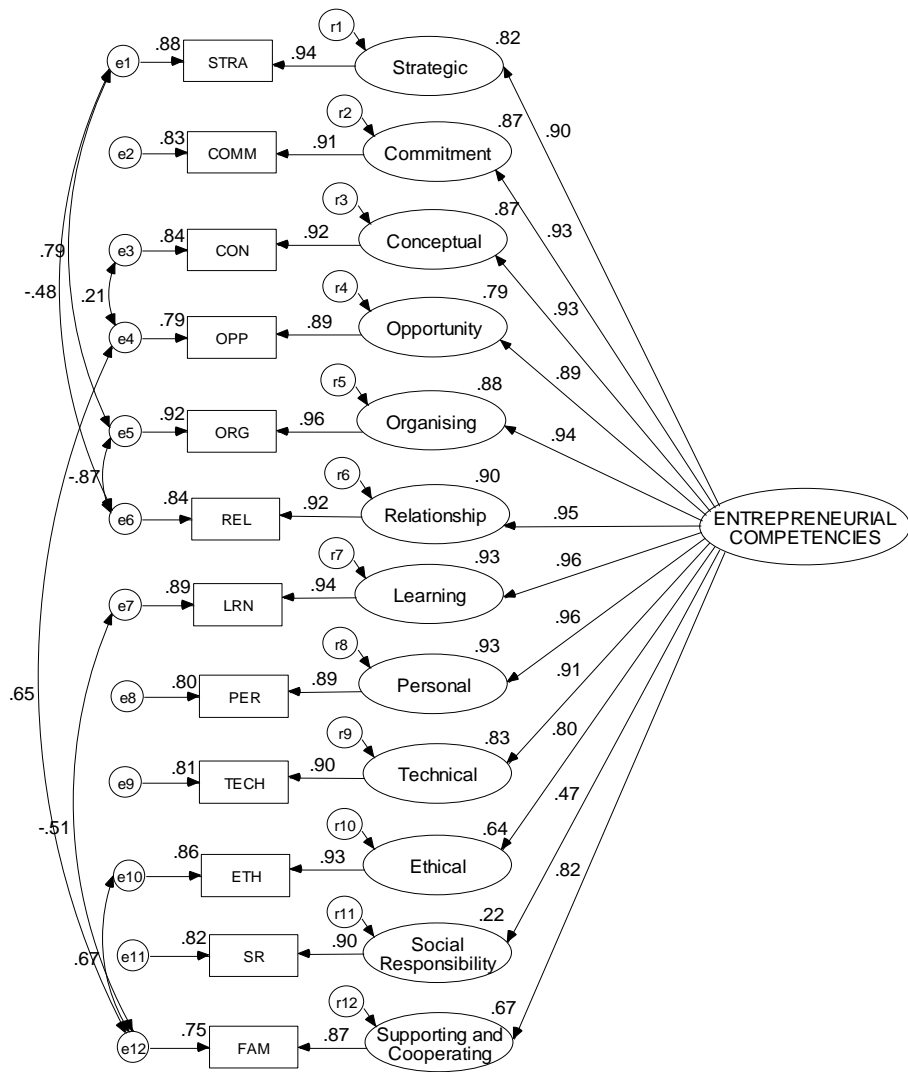


Figure 17. Higher-order structure for the Comprehensive model of entrepreneurial competencies (Australia).

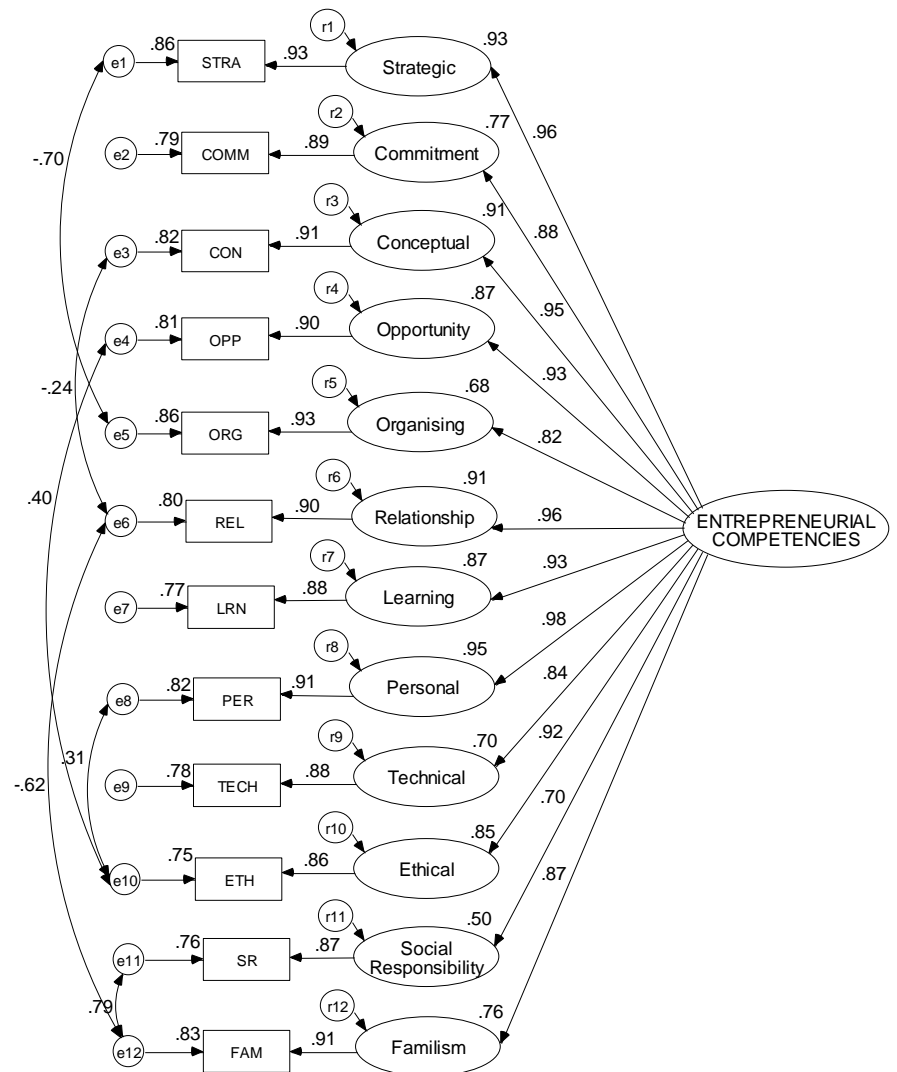


Figure 18. Higher-order structure for the Comprehensive model of entrepreneurial competencies (Malaysia).

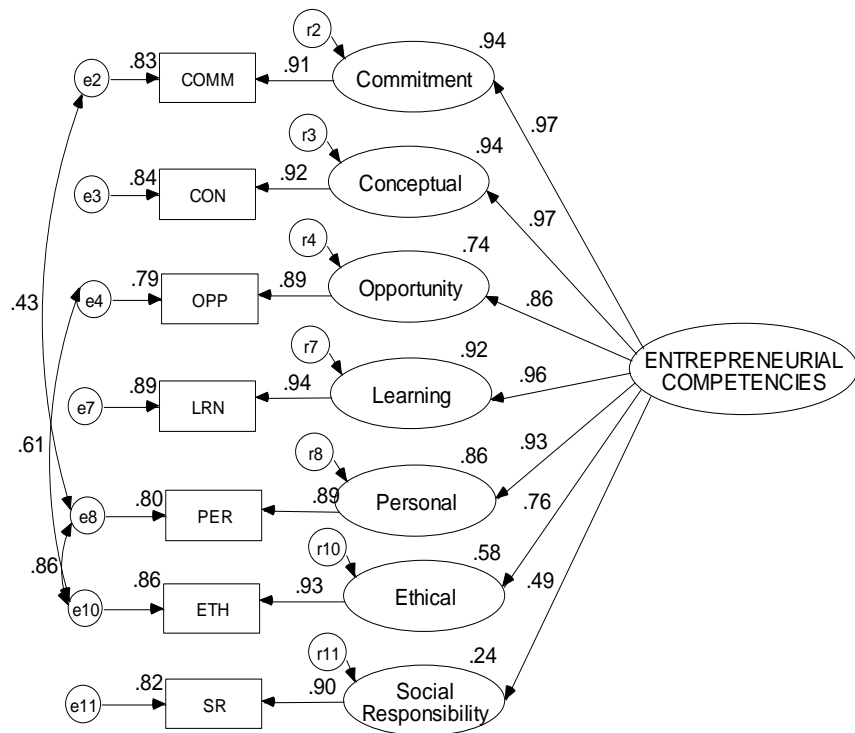


Figure 19. Higher-order structure for the Parsimonious model of entrepreneurial competencies (Australia).

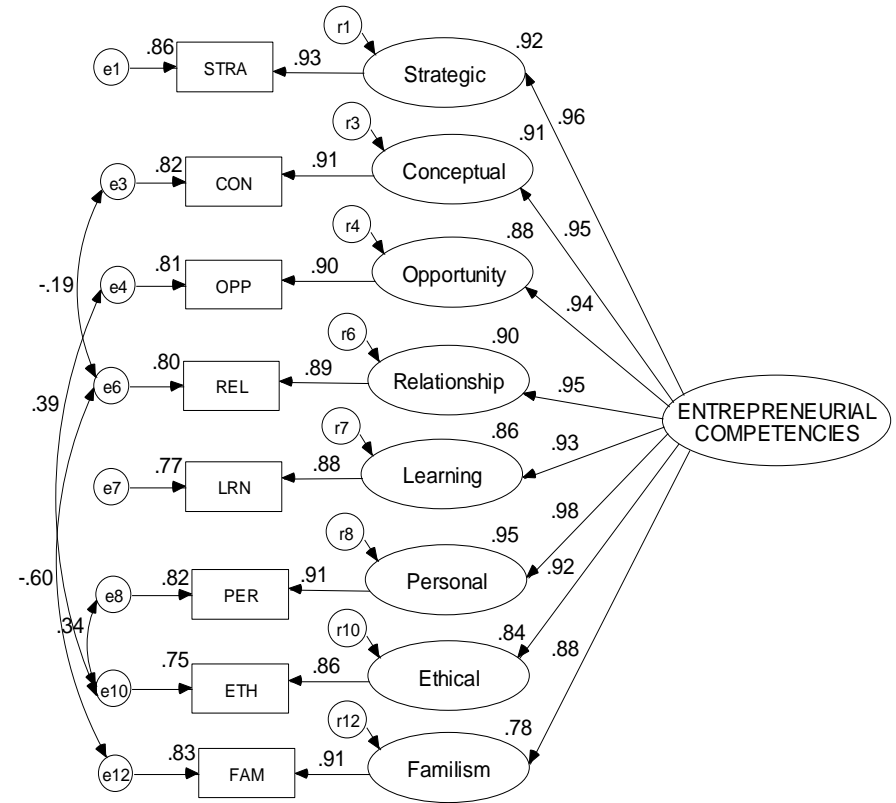


Figure 20. Higher-order structure for the Parsimonious model of entrepreneurial competencies (Malaysia).

To summarise, the two best measurement models supported the existence of a higher-order structure of entrepreneurial competencies; (1) the Comprehensive model and (2) the Parsimonious model. The first higher-order model was labelled as the Comprehensive model of entrepreneurial competencies, supporting the call for a more comprehensive coverage of competencies that are in tune with the recent times (Garavan & McGuire, 2001). This model indicated that entrepreneurial competencies for Australia and Malaysia comprised twelve competency areas: (1) Strategic; (2) Commitment; (3) Conceptual; (4) Opportunity; (5) Organising and Leading; (6) Relationship; (7) Learning; (8) Personal; (9) Technical, (10) Ethical, (11) Social Responsibility (for both Australia and Malaysia); and (12) Supporting and Cooperating (Australia)/Familism (Malaysia). Clearly, this result confirmed the findings of Study 1. The three additional competencies highlighted in Study 1, (Ethical, Social Responsibility, and Supporting and Cooperating (Australia)/Familism (Malaysia) were also confirmed by factor analysis (i.e., CFA). The results also revealed that, in this Comprehensive model, the behaviours representing Organising and Leading and Familism competencies were slightly different in the Australian and Malaysian contexts. Given the omission of items reflecting “family” in the Australian model, Familism was renamed as Supporting and Cooperating.

The second model estimation undertaken generated a more parsimonious model of entrepreneurial competencies for both Australia and Malaysia that produced good model fit. This model, which was then labelled the Parsimonious model of entrepreneurial competencies yielded two different sets of competency models for Australia and Malaysia. Having said that, five domains (Conceptual, Opportunity, Learning, Personal, and Ethical) were comparable in both countries. Specifically in Australia, the Parsimonious model comprised seven competencies: (1) Commitment; (2) Conceptual; (3) Opportunity; (4) Learning; (5) Personal; (6) Ethical; and (7) Social Responsibility. In Malaysia on the other hand, the Parsimonious model comprised eight competencies: (1) Strategic; (2) Conceptual; (3) Opportunity; (4) Relationship; (5) Learning; (6) Personal; (7) Ethical; and (8) Familism.

5.3.3.3 Measurement model for business success

Measurement model. The four dimensions of business success were subjected to the measurement model estimation process adopting the same procedure undertaken for entrepreneurial competencies (see Appendix N). As illustrated in Table 42, the items retained for the four dimensions of business success were the same for both countries. All items except three, “BS6-overall satisfaction”, BS7-career progress”, and “BS10-employee satisfaction” were retained for both Australian and Malaysian models.

Table 42 *Factor Loadings for the Business Success Construct*

Dimensions of business success and the items	AUS	MAL
	λ	λ
<u>1. Satisfaction with financial performance</u>		
BS1-Profitability	.83	.86
BS2-Sales turnover	.85	.87
BS3-Sales growth	.94	.91
BS4-Return on investment	.74	.84
BS5-Market share	.63	.69
<u>2. Satisfaction with non-financial performance</u>		
BS6-Overall self satisfaction	-	-
BS7-Career progress	-	-
BS8-Customer satisfaction	.41	.75
BS9- Customer retention	.49	.77
BS10-Employee satisfaction	-	-
BS11- Relationship with suppliers	.79	.65
BS12- Business image	.84	.82
BS13- Workplace industrial relation	.84	.72
BS14- Work and life balance	.65	.77
<u>3. Performance relative to competitors</u>		
Return on sales	.86	.92
Cash flow	.90	.77
Net profit	.98	.91
Market share	.94	.73
Return on investment	.93	.93
<u>4. Business growth</u>		
Sales	.85	.86
Market Share	.95	.90
Cash Flow	.91	.79

Note. “ λ ” indicates factor loadings. Substantial and significant factor loadings provide evidence of convergent validity; “-” indicates items that were removed through the model estimation procedure. “AUS” refers to Australia; “MAL” refers to Malaysia.

Reliability and validity assessment All dimensions of the business success construct had strong internal consistency of $>.80$ (see Table 43). In addition, the composite reliability values were above $.70$, providing further evidence of the reliability of the business success construct. Substantial and significant factor loadings for all dimensions of business success suggested that the scale had good convergent validity. The AVE values of above $.50$ also verified the convergent validity of the construct. Based on these indicators, all dimensions of business success were considered reliable and valid.

Goodness of fit. As can be seen from Table 44, the overall goodness-of-fit indices established for the latent factors of business success reflected a generally good fit of the model given the sample data, despite there being some slight overfit. Given the results of the reliability and validity assessment, as well as the goodness fit statistics, it was concluded that the four dimensions of business success were suitable for use in the subsequent model testing.

Table 43 *Reliability and Validity Assessment for Business Success Construct*

Business Success	α	P η	Pvc (η)	Business success	α	P η	Pvc (η)
1. Satisfaction with financial performance				3. Performance relative to competitors			
Australia	.90	.94	.78	Australia	.97	.98	.90
Malaysia	.92	.95	.78	Malaysia	.93	.96	.82
2. Satisfaction with non-financial performance				4. Business growth			
Australia	.84	.91	.65	Australia	.93	.84	.94
Malaysia	.89	.93	.68	Malaysia	.88	.75	.90

Note. “ α ” = Cronbach alpha value; “P η ” = Composite reliability; “Pvc (η)” = Convergent validity

Table 44 *Goodness of Fit Statistics for Business Success*

Business Success	χ^2	df	p	χ^2/df	GFI	TLI	CFI	RMSEA
1. Satisfaction with financial performance								
Australia	1.49	3	.684	.497	.997	1.01	1.00	.000
Malaysia	6.01	4	.199	1.502	.989	.994	.997	.049
2. Satisfaction with non-financial performance								
Australia	11.56	8	.172	1.445	.978	.985	.992	.050
Malaysia	9.41	7	.225	1.344	.986	.992	.996	.040
3. Performance relative to competitors								
Australia	5.45	3	.142	1.817	.988	.993	.998	.068
Malaysia	7.40	4	.116	1.849	.986	.990	.996	.063
4. Business growth								
Australia	.062	1	.260	.803	1.00	1.01	1.00	.000
Malaysia	.711	1	.399	.711	.998	1.00	1.00	.000

Inter-correlation analysis. The inter-correlations between all four dimensions of business success were also examined separately for both Australian and Malaysian data. It is clear from Tables 45 and 46 that there were significant correlations among all dimensions of business success for both countries, although these tended to be higher in Malaysia than Australia.

Table 45 *Descriptive Statistics and Zero-order Correlations of Business Success for Australian data*

Dimensions of Business Success	No of items	M	SD	1	2	3	4
1. Satisfaction financial performance	5	4.00	.63	-			
2. Satisfaction- non-financial performance	6	3.82	.61	.48**	-		
3. Performance relative to competitors	5	4.19	.75	.42**	.59**	-	
4. Business growth	3	4.05	.86	.44**	.42**	.57**	-

Note. ** Correlation is significant at $p < .01$.

Table 46 *Descriptive Statistics and Zero-order Correlations of Business Success for Malaysian data*

Dimensions of Business Success	No of items	<i>M</i>	<i>SD</i>	1	2	3	4
1. Satisfaction-financial performance	5	3.72	.74	-			
2. Satisfaction-non-financial performance	6	3.83	.64	.78**	-		
3. Performance relative to competitors	5	3.56	.73	.71**	.57**	-	
4. Business growth	3	4.20	.83	.62**	.54**	.73**	-

Note. ** Correlation is significant at $p < .01$.

As explained earlier, high correlations among the dimensions representing the first-order structure indicates the presence of a higher-order structure. Accordingly, all four dimensions of business success were subjected to a second-order CFA procedure.

Adopting a similar procedure to that undertaken to generate a higher-order factor model of entrepreneurial competencies, the initial run of the business success model for the Australian sample was undertaken. The modification index suggested that several measurement errors were correlated and upon co-varying these errors, the model yielded a good fit given the sample data with $\chi^2(143, N = 179) = 253.42, p = .000, \chi^2/df = 1.77, GFI = .877, TLI = .954, CFI = .962,$ and $RMSEA = .066$ for Australian data. Five of six fit criteria showed good model fit given the sample data.

Similarly, for Malaysian data, the initial run of the lower-order structure suggested that some error terms were correlated. Upon model respecification, the model estimation using a higher-order structure yielded a good model fit of $\chi^2(143, N = 212) = 265.85, p = .000, \chi^2/df = 1.86, GFI = .885, TLI = .954, CFI = .962,$ and $RMSEA = .064,$ meeting five of six fit criteria. In addition, all factor-loading estimates of this model were statistically significant.

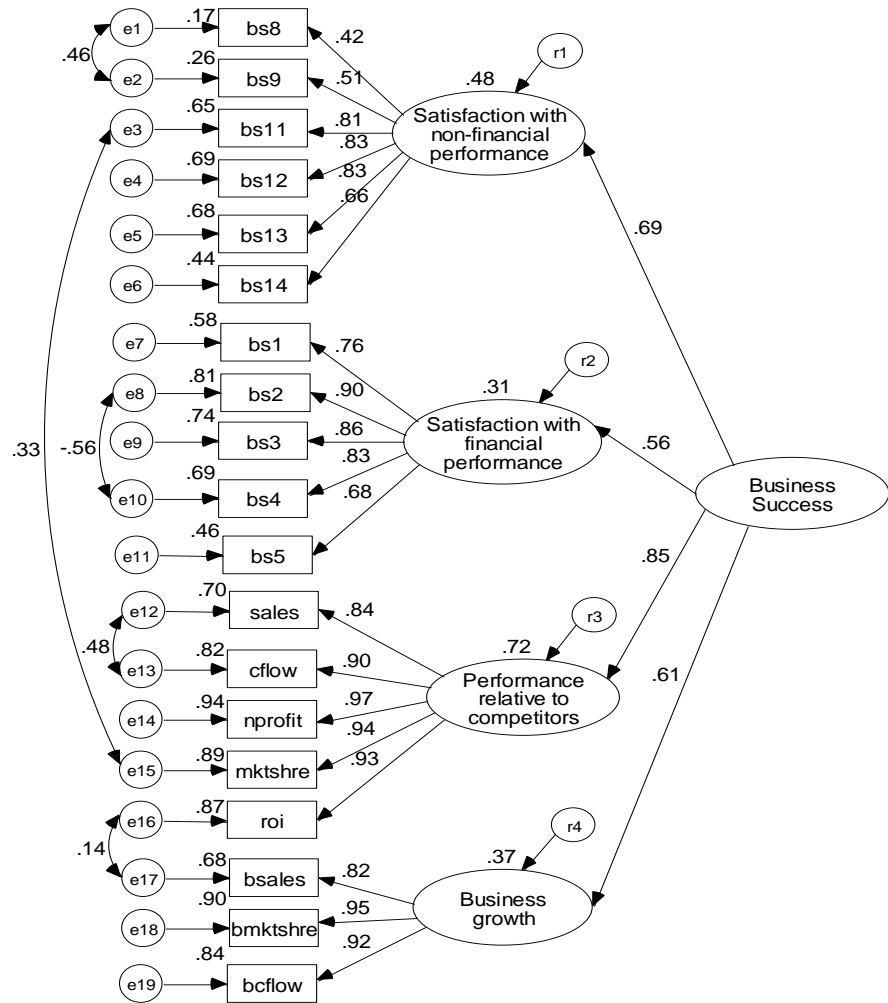


Figure 21. Higher-order structure for business success (Australia).

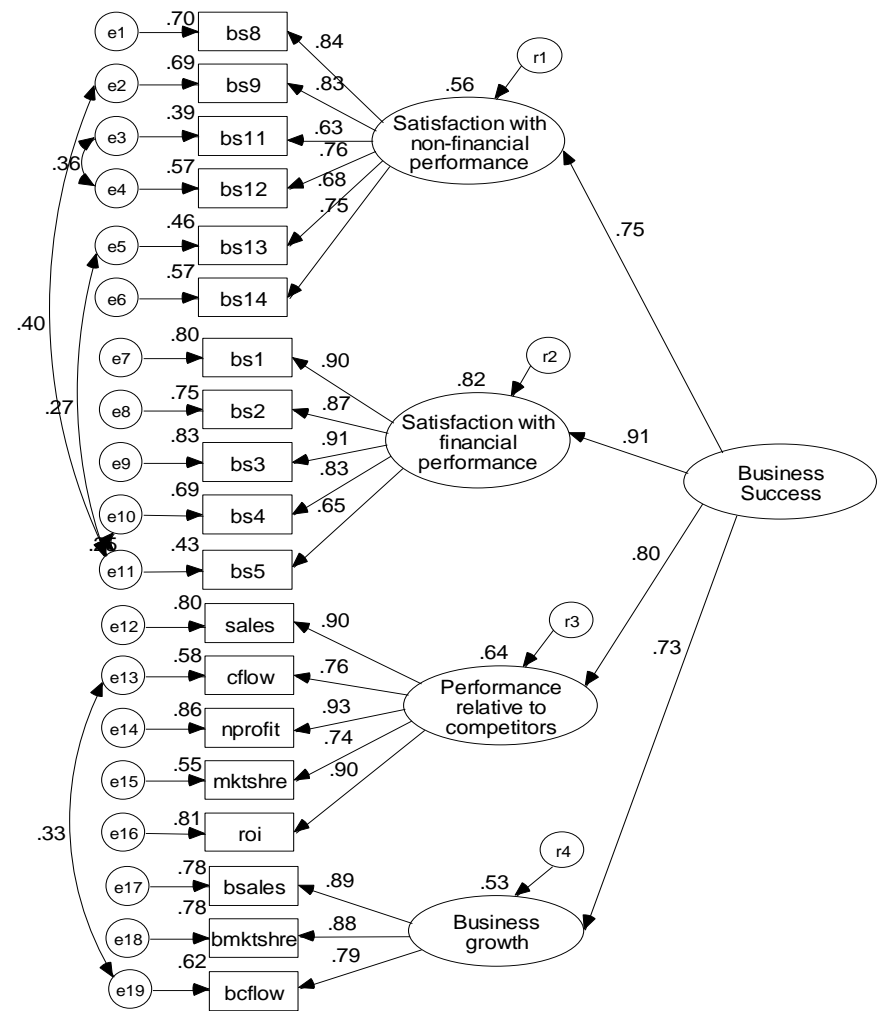


Figure 22. Higher-order structure for business success (Malaysia).

5.3.3.4 Measurement model for business environment

Measurement model. To assess the psychometric properties and to evaluate model fit for the business environment construct, one-factor congeneric models were developed for each dimension (see Appendix O). As depicted in Table 47, for Stable Environment, three items (Env1, Env2, and Env7) were removed from both the Australian and Malaysian models. All items measuring Benign Environment fitted the Australian model well. However, one item (Env9) was omitted from the Malaysian model due to its poor fit to the sample data.

Table 47 *Factor Loadings for Perceived Business Environment*

Perceived business environment and the items	Item	AUS	MAL
		λ	λ
1. Stable Environment			
Env1-Business must frequently change its marketing practices	Env1*	-	-
Env2-The rate of products/services obsolescence is very high	Env2*	-	-
Env3-The actions of competitors are predictable	Env3	.43	.78
Env4-Demand and consumer tastes are fairly easy to forecast	Env4	.72	.86
Env5-The production/service technology is not subjected to very much change	Env5	.71	.73
Env6-There is little threat to the survival and well-being of the business	Env6	.66	.54
Env7-There is rich investment and marketing opportunities	Env7	-	-
Env8-Business can control and manipulate the environment to its own advantage with few hindrances	Env8	.60	.67
2. Benign Environment			
Env9-The failure rate of businesses in this industry is high	Env9*	.52	-
Env10-It is very risky that one bad decision could easily threaten the viability of the business	Env10*	.69	.68
Env11-Competitive intensity is very high	Env11*	.71	.76
Env12-Customer loyalty is low	Env12*	.52	.61
Env13-Severe price wars are characteristics of the industry	Env13*	.57	.71

Note. “ λ ” indicates factor loadings. Substantial and significant factor loadings provide evidence of convergent validity. * Items were reverse-scored. “-” indicates items that were removed through the model estimation procedure. “AUS” refers to Australia; “MAL” refers to Malaysia.

Reliability and validity assessment. Both dimensions of business environment constructs had internal consistency (α) > .70 (see Table 48). In addition, the composite reliability calculated for the Australian and Malaysian models were well above the recommended value of .70, suggesting that the business environment construct was highly reliable. Furthermore, all the factor loadings were statistically significant at $p < .001$ and were above the acceptable cut-off-point of > .30 (Cohen, 1988), thereby establishing the convergent validity of the dimensions. With the exception of the Stable Environment dimension for the Australian model ($Pvc(\eta) = .46$), the AVE values for all other constructs were above .50, providing further evidence of convergent validity. It could therefore be assumed that these variables were reliable and that they could be valid to be utilised in the model testing.

Table 48 *Reliability and Validity Assessment for Perceived Business Environment*

Perceived Business Environment	α	P η	Pvc (η)
1. Stable Environment			
Australia	.76	.80	.46
Malaysia	.84	.84	.58
2. Benign Environment			
Australia	.75	.92	.70
Malaysia	.80	.86	.55

Note. “ α ” = Cronbach alpha value; “P η ” = Composite reliability; “Pvc (η)” = Convergent validity.

Goodness of fit. The goodness-of-fit indices for the two dimensions of business environment showed reasonable fit for both Australian and Malaysian models (see Table 49). Based on these indicators, it was concluded that the two dimensions of business environment adequately described the sample data.

Table 49 *Goodness of Fit Statistics for Perceived Business Environment*

Perceived Business Environment	χ^2	df	p	χ^2/df	GFI	TLI	CFI	RMSEA
1. Stable Environment								
Australia	6.85	4	.144	1.713	.986	.972	9.89	.063
Malaysia	7.93	2	.160	1.585	.985	.986	.993	.053
2. Benign Environment								
Australia	1.70	4	.792	.424	.996	1.03	1.00	.000
Malaysia	.687	1	.407	.687	.998	1.01	1.00	.000

5.3.3.5 *Measurement model for individual cultural orientations*

Measurement model. Finally, one-factor congeneric models were developed for the two dimensions of cultural orientations (see Appendix P). As shown in Table 50, two items from the Collectivism measure were removed for both the Australian and Malaysian models. In the case of Uncertainty Avoidance dimension, only four of the ten items making up this dimension were retained for the Australian model and five were retained for the Malaysian model. The decision to retain or remove this variable from the subsequent analysis was made after examination of the reliability and validity of the construct (see following).

Reliability and validity assessment. As shown in Table 51, the two dimensions of individual cultural orientations had high Cronbach’s alpha values of $> .70$. The composite reliabilities calculated for the Australian and Malaysian models were above the threshold value of $.70$. In addition, all the item loadings corresponding to the latent factors were significant and well above the acceptable cut-off-point of $> .30$, thereby establishing the convergent validity of this construct. The AVE values of above $.50$ provide further evidence of convergent validity. Based on these reliability and validity indicators, it was concluded that both dimensions of cultural orientations were sufficiently reliable and valid to be included in the subsequent model testing even though a significant subset of the Uncertainty Avoidance items failed to load in the hypothesised fashion for both countries.

Table 50 *Factor Loadings for Individual Cultural Orientations*

Individual cultural orientations and the items	Item	AUS	MAL
		λ	λ
1. Individualism vs. Collectivism			
COL1-To understand who I am, you must see me with members of my group	COL1	-	-
COL2-To me, pleasure is spending time with others	COL2	.66	.45
COL3-I would help, within my means, if any relative were in financial difficulty	COL3	-	-
COL4-I make an effort to avoid disagreements with my group members	COL4	.77	.78
COL5-Before making a decision, I always consult with others	COL5	.63	.78
COL6-How I behave depends on who I am with, where I am, or both	COL6	.55	.61
COL7-I have respect for authority figures with whom I interact	COL7	.44	.76
COL8-I would rather do a group tasks than do one alone	COL8	.71	.47
2. Uncertainty Avoidance vs. Tolerance for Ambiguity			
UA1-I am comfortable making decisions on my gut instinct	UA1	-	-
UA2-I am always on the lookout for new ideas to address problems	UA2	-	.44
UA3-I am comfortable deciding on the spur-of-the-moment	UA3	-	-
UA4-When I start a project, I need to know exactly where I'll end up	UA4*	.62	.80
UA5-I need a definite sense of direction for a project	UA5*	.76	.89
UA6-I need to know the specific outcome before starting a project	UA6*	.79	.72
UA7-I don't need a detailed plan when working on a project	UA7	-	-
UA8-I actively try to look at a situation from different perspectives	UA8	-	-
UA9-I am willing to make a decision based on a hunch	UA9	-	-
UA10-I actively look for signs that the situation is changing	UA10	.41	.41

Note. " λ " indicates factor loadings. Substantial and significant factor loadings provide evidence of convergent validity. * Items were reverse-scored. "-" indicates items that were removed through the model estimation procedure. "AUS" refers to Australia; "MAL" refers to Malaysia.

Table 51 *Reliability and Validity Assessment for measures of Individual Cultural Orientation*

Individual Cultural Orientation	α	P η	Pvc (η)
1. Individualism vs. Collectivism			
Australia	.80	.83	.50
Malaysia	.81	.82	.57
2. Uncertainty Avoidance vs. Tolerance for Ambiguity			
Australia	.73	.84	.52
Malaysia	.79	.83	.51

Note. " α " = Cronbach alpha value; "P η " = Composite reliability; "Pvc (η)" = Convergent validity.

Goodness of fit. Following the removal of weak and problematic items, the goodness of fit indices for all models was assessed. As shown in Table 52, the overall goodness-of-fit indices for the individual cultural orientations for both Australian and Malaysian data indicated an acceptable fit of the model given the sample data.

Table 52 *Goodness of Fit Statistics for Individual Cultural Orientation*

Individual Cultural Orientation	χ^2	df	p	χ^2/df	GFI	TLI	CFI	RMSEA
1. Individualism vs. Collectivism								
Australia	14.55	8	.096	1.82	.975	.961	.979	.068
Malaysia	14.18	8	.077	1.77	.978	.971	.985	.061
2. Uncertainty Avoidance vs. Tolerance for Ambiguity								
Australia	.563	1	.453	.563	.998	1.02	1.00	.000
Malaysia	2.212	4	.697	.553	.996	1.01	1.00	.000

5.3.4 Inter-correlations among all constructs

A correlation analysis was undertaken to examine the interrelationships among the variables included in this study for both Australia and Malaysia (see Tables 53 and 54).

5.3.4.1 The Australian data

In the Australian data, there were strong positive correlations among most competency areas ($r > .50$, $p < .01$), with the exception of Social Responsibility and all other competency areas ($r = .30$ to $r = .44$, see Table 53). This finding suggests the possible existence of a higher-order structure (refer to discussion in Sections 5.3.3 and 5.3.3.2). Interestingly, all competency areas have some links to at least two of the four dimensions of business success. Only Strategic and Ethical competencies correlated with all four dimensions of business success. The strongest correlation was found between Strategic Competency and satisfaction with financial performance ($r = .48$, $p < .01$).

Strategic, Commitment, Conceptual, Opportunity, Organising and Leading, Personal, Technical, and Supporting and Cooperating competencies demonstrated positive associations with Stable and Benign environments (refer to Table 53). However, Relationship and Social Responsibility competencies were not correlated with either of the environmental variables, whereas Learning and Ethical competencies were correlated with only Stable Environment.

As indicated in Table 53, the two dimensions of cultural orientation were mostly uncorrelated to the other constructs studied. Individualism was not related to any of the competency areas and nor was it related to either dimension of business success. Tolerance for Ambiguity, however, was found to correlate positively with Strategic Competency ($r = .16$, $p < .05$). Tolerance for Ambiguity also correlated positively with three of four measures of business success.

The results also showed that, for Australian entrepreneurs, there was a positive relationship between Stable Environment and three dimensions of business success: satisfaction with non-financial performance, satisfaction with financial performance, and performance relative to competitors. Benign environment was found to have a positive association with satisfaction with financial performance, performance relative to competitors, and business growth.

Table 53 *Descriptive Statistics and Zero-order Correlations of All Constructs for Australian Data*

Construct	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. Strategic	-																			
2. Commitment	.68**	-																		
3. Conceptual	.72**	.80**	-																	
4. Opportunity	.71**	.64**	.71**	-																
5. Organising and Leading	.84**	.76**	.83**	.70**	-															
6. Relationship	.67**	.71**	.68**	.71**	.69**	-														
7. Learning	.74**	.80**	.80**	.69**	.81**	.81**	-													
8. Personal	.77**	.81**	.72**	.65**	.76**	.75**	.76**	-												
9. Technical	.72**	.65**	.65**	.71**	.77**	.73**	.75**	.67**	-											
10. Ethical	.62**	.62**	.62**	.66**	.62**	.68**	.65**	.73**	.63**	-										
11. Social Responsibility	.33**	.39**	.40**	.37**	.37**	.35**	.39**	.31**	.30**	.31**	-									
12. Supporting and Cooperating	.64**	.53**	.55**	.73**	.63**	.63**	.53**	.58**	.55**	.68**	.45**	-								
13. Individualism	.07	-.03	.01	-.02	-.01	-.01	.07	.00	-.03	-.05	.02	-.04	-							
14. Tolerance for Ambiguity	.16*	.01	.06	.03	.09	.04	.07	.01	.03	-.03	-.01	.06	.19**	-						
15. Benign environment	.32**	.23**	.24**	.18*	.28**	.11	.18*	.27**	.16*	.18*	.01	.17*	-.04	.07	-					
16. Stable environment	.27**	.18*	.19*	.19*	.23**	.10	.15	.22**	.15*	.12	.01	.19**	-.01	.10	.32**	-				
17. Satisfaction -financial performance	.48**	.30**	.32**	.23**	.37**	.28**	.34**	.35**	.27**	.23**	.16*	.28**	.14	.18*	.26**	.22**	-			
18. Satisfaction-non financial performance	.22**	.07	.09	.12	.10	.07	.08	.11	.08	.17*	.04	.12	.06	.19**	.17*	.10	.29**	-		
19. Performance relative to competitors	.33**	.12	.12	.25**	.21**	.14	.19**	.22**	.16*	.24**	.08	.22**	.07	.08	.21**	.22**	.41**	.41**	-	
20. Business growth	.39**	.20**	.18*	.11	.26**	.18*	.21**	.24**	.14	.19**	.16*	.15*	.14	.21**	.08	.17*	.33**	.24**	.43**	-
<i>M</i>	5.93	6.35	6.04	6.00	6.04	6.15	6.11	6.26	5.99	6.35	4.14	5.73	3.99	4.90	3.66	3.33	4.00	3.82	4.19	4.05
<i>SD</i>	.84	.88	.83	.77	.92	.82	.96	.71	.85	.76	1.37	.99	1.10	1.12	.91	.82	.63	.61	.75	.86

Note. **Correlation is significant at $p < .01$; *Correlation is significant at $p < .05$.

Table 54 *Descriptive Statistics and Zero-order Correlations of All Constructs for Malaysian Data*

Construct	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. Strategic	-																			
2. Commitment	.69**	-																		
3. Conceptual	.77**	.64**	-																	
4. Opportunity	.75**	.66**	.73**	-																
5. Organising and Leading	.58**	.59**	.68**	.59**	-															
6. Relationship	.73**	.72**	.70**	.71**	.70**	-														
7. Learning	.69**	.70**	.74**	.67**	.65**	.73**	-													
8. Personal	.82**	.73**	.76**	.77**	.66**	.78**	.72**	-												
9. Technical	.72**	.51**	.62**	.65**	.53**	.56**	.58**	.69**	-											
10. Ethical	.75**	.72**	.67**	.76**	.57**	.65**	.63**	.78**	.59**	-										
11. Social Responsibility	.54**	.33**	.59**	.48**	.49**	.54**	.57**	.52**	.48**	.42**	-									
12. Familism	.74**	.53**	.67**	.69**	.59**	.58**	.60**	.73**	.66**	.66*	.64**	-								
13. Collectivism	.23**	.27**	.20**	.21**	.25**	.23**	.21**	.25**	.20**	.27**	.04	.19*	-							
14. Tolerance for Ambiguity	.27**	.26**	.20**	.29**	.14*	.21**	.17*	.26**	.17*	.23**	.03	.19**	.54**	-						
15. Benign environment	.18**	.10	.12	.18**	.12	.10	.14*	.20**	.14*	.19**	.09	.23**	-.11	-.16*	-					
16. Stable environment	.37**	.29**	.25**	.31**	.16**	.26**	.32**	.35**	.23**	.35**	.20**	.23**	.10	.16*	.26**	-				
17. Satisfaction-financial performance	.25**	.14*	.13	.22**	.10	.12	.12	.21**	.19**	.21**	.17*	.24*	-.01	.08	.14*	.24**	-			
18. Satisfaction-non financial performance	.30**	.27**	.25**	.28**	.16*	.17*	.23**	.29**	.25**	.26**	.11	.19**	.20**	.26**	.10	.28**	.65**			
19. Performance relative to competitors	.32**	.14*	.19**	.29**	.08	.11	.11	.24**	.29**	.25**	.16*	.27**	-.04	.14*	.06	.15*	.65**	.46**	-	
20. Business growth	.23**	.05	.17*	.18**	.06	.12	.08	.14*	.17*	.17*	.18**	.20**	.03	.04	.06	.12	.56**	.45**	.62*	-
<i>M</i>	6.04	6.30	5.95	5.97	5.98	6.18	6.09	6.09	5.91	6.12	5.51	5.74	5.60	5.49	2.51	3.37	3.72	3.83	3.56	4.20
<i>SD</i>	.74	.75	.78	.85	.84	.70	.77	.73	.96	.78	1.07	.90	.89	.98	.83	.79	.74	.64	.73	.83

Note. **Correlation is significant at $p < .01$; *Correlation is significant at $p < .05$.

5.3.4.2 The Malaysian data

In the Malaysian data, almost all competency areas were strongly correlated ($r > .50$, $p < .01$) except for Social Responsibility which had moderate relationships with Organising and Leading ($r = .49$, $p < .01$), Opportunity ($r = .48$, $p < .01$), Technical ($r = .48$, $p < .01$), Ethical ($r = .42$, $p < .01$), and Commitment ($r = .33$, $p < .01$) competencies (see Table 54). Similar to the Australian data, the high correlations among all competency areas suggested the existence of a higher-order structure.

In addition, Strategic, Opportunity, Personal, Technical, Ethical, and Familism competencies were significantly correlated with all dimensions of business success. The strongest correlation was between Strategic Competency and performance relative to competitors ($r = .32$, $p < .01$). All other competency areas had positive relationships with at least one of the business success dimensions.

Benign Environment correlated positively with some competency areas but did not correlate significantly with Commitment, Conceptual, Organising and Leading, Relationship and Social Responsibility competencies. Stable Environment, on the other hand, was found to have significant positive relationships with all competency areas.

Both Collectivism and Tolerance for Ambiguity dimensions correlated positively with all competency areas except for Social Responsibility. In addition, the Collectivism dimension had a positive relationship with only one business success indicator; satisfaction with non-financial performance. Tolerance for Ambiguity on the other hand, was found to have significant positive relationships with satisfaction with non-financial performance and performance relative to competitors.

5.4 Discussion and Implications

From the preceding analyses, several conclusions can be drawn. Firstly, as reflected in the internal consistency results and the composite measures of reliability of entrepreneurial competencies, business success, business environment, and individual cultural orientations, all variables in both countries were reliable. Furthermore, the substantial and significant factor loadings as well as the convergent validity of the studied variables indicated that these variables were appropriate for use in model testing.

Secondly, Man's (2001) model of entrepreneurial competencies provides a good fit to the data obtained in both Australia and Malaysia, however, the extended model incorporating Ethical, Social Responsibility, as well as Supporting and Cooperating (Australia)/Familism (Malaysia) offers a better description of current entrepreneurial competencies possibly because

the revised model includes issues demonstrated to be of concern to contemporary business practice (i.e., Ethical and Social Responsibility). In view of Tett et al.'s (2000) suggestion that a major drawback in most competency models is due to the omission of current concerns of business practice, the extended model of entrepreneurial competencies is seen more relevant to the present investigation.

Thirdly, the Familism Competency, although originating in competencies identified by Malaysian participants, explained significant variance in Australian participants, particularly in terms of “identifying and seeking help from employees that can be trusted”, “getting support and advice from family and close associates”, “cooperate with and help others (especially close associates) in business”, as well as “sharing knowledge and resources with others (especially close associates)”. Because of the exclusion of two items reflecting the importance of “family” in the Australian model (i.e., “cultivating an entrepreneurial culture” and “building a strong base of business for the family”), this competency area was renamed Supporting and Cooperating to reflect the differences in the content of the Familism Competency in both countries.

Fourthly, in light of their theoretical and statistical significance, two models of entrepreneurial competencies were identified—the Comprehensive and Parsimonious models. Theoretically, the Comprehensive model supports the need for an inclusive model of competencies that is sensitive to contemporary concerns about good business practice. The generation of the Parsimonious model, on the other hand, responds to the call for a robust model that could provide a better understanding of the competencies that are considered highly prevalent and relevant to the activities of entrepreneurs in Australia and Malaysia. Statistically, both models met the requirement of a good model fit as identified by the goodness of fit indices, thus, both were included in the subsequent model testing.

Finally, comparison of factor loadings of individual behaviours onto specific competency domains suggests much uniformity in the way these competencies are displayed between countries. Nonetheless, the small number of differences between countries suggests the possibility that a more sensitively devised instrument that is structured to acknowledge behavioural differences between countries may provide a better fit to the data.

5.5 Conclusion

To conclude, tests of model goodness-of-fit and examination of reliability and validity results for all dependent and independent variables established the psychometric rigour of the extended entrepreneurial competencies framework. Moreover, similar analyses with both

outcome variables (business success) and covariates (cultural orientations and environmental variables) established the suitability of these variables for inclusion in the subsequent analyses. In the next chapter, further analyses are reported to confirm the link between entrepreneurial competencies identified in this study and business success in SMEs. The approach taken to this task involves structural equation modeling (SEM) procedure to empirically test the causal relationships among all variables.

Chapter 6

Study 2 Part 2: Model Testing Using Structural Equation Modeling (SEM) Procedure

6.1 Introduction

Chapter 5 (Study 2 Part 1) was concerned with exploring the measurement models and establishing the psychometric properties of the key constructs. Study 2 Part 2 proceeds with testing the main hypotheses using structural equation modeling (SEM), specifically, the hypothesised causal relationships among the variables. These analyses address: (1) the direct effect of entrepreneurial competencies on business success; (2) the direct and moderating effects of the business environment; and (3) the effects of individual cultural orientations on entrepreneurial competencies. Additionally, the chapter also examines whether education, training, and work experience serve as antecedents of entrepreneurial competencies. The final goal of this study is to examine the effects of other variables, including firm age, firm size, and previous entrepreneurial experience on business success.

As indicated in Chapter 3, it is hypothesised that “entrepreneurial competencies” constitute a key construct influencing business success in SMEs. Underpinning this contention is the theory of entrepreneurial competencies proposed by Bird (1995). While there have been a few studies that have linked the two constructs in the SME context, the entrepreneurial competencies frameworks used were western-based or sector-specific (see, for example, Chandler & Jansen, 1992; Man & Lau, 2000; Salomo et al., 2006). The present study attempts to explore this relationship in a cross-cultural context by using both “Comprehensive” and “Parsimonious” models of entrepreneurial competencies, validated in Study 2 Part 1 (Chapter 5) through confirmatory factor analysis procedure, to survey a larger sample of Australian and Malaysian entrepreneurs. As reported in Chapter 5, the scale was slightly different for each country, for both Comprehensive and Parsimonious models of entrepreneurial competencies. The following discussion takes this difference into account.

Some researchers have proposed that organisations are affected by the environment in which they operate (J. Covin et al., 1999; Lindelöf & Löfsten, 2006; Zahra, 1993). In the present study, in order to examine the direct effects of business environment on business success, two dimensions of business environment were considered (Benign or Hostile and Stable or Dynamic). Their relative positions on two bipolar scales highlighted the extent to which the business environment was Benign or Hostile and Stable or Dynamic. It has been

argued that, compared to Hostile and Dynamic environments, Benign and Stable environments are easier to navigate and are therefore more likely to be positively associated with firm performance (J. Covin & Slevin, 1991). Research literature also draws attention to the role of the business environment in moderating the link between individual variables and firm performance (J. Covin & Slevin, 1989; Goll & Rasheed, 2004). Consequently, in the present study, the potential moderating influence of business environment on the link between competencies and business success was examined.

Although the literature on entrepreneurship has largely ignored the possibility that culture might be a variable of significant importance, cross-cultural organisational psychology together with the results from the qualitative study reported in Chapter 4 suggest that culture may serve to help define the nature of the entrepreneurial competencies operationalised in a study of entrepreneurial success. Researchers have generally agreed that cultural orientations have a marked effect on all aspect of management behaviour (Bartlett & Ghoshal, 1997; Berrell et al., 1999; Mead, 1994). According to Adler (1997), the mechanism by which this occurs is via a subtle pervading influence from the cultural orientation of a society, as reflected in societal values, affecting the attitudes of its members, which in turn influences their behaviour. In the present study, it is hypothesised that the behavioural content of entrepreneurial competencies (i.e., the independent variable of interest) will be influenced by the extent to which entrepreneurs espouse values of Individualism versus Collectivism and Uncertainty Avoidance versus Tolerance for Ambiguity.

In addition to the above relationship, the present study also examined the influence of selected demographic variables on entrepreneurial competencies. The theory of entrepreneurial competencies proposed by Bird (1995) suggests that education and work experience influence entrepreneurial competencies. Because there is lack empirical evidence available to validate this proposition, particularly in the context of Australian and Malaysian SMEs, the present study examined the role of educational background, training before and after the start up, and previous work experience as antecedents of entrepreneurial competencies.

A number of possible confounds were also identified for inclusion in the model testing process. Firm size, firm age, and entrepreneurial experience are all likely to influence business performance (J. R. Baum et al., 2001; Wiklund & Shepherd, 2005) so scores on these three variables were control in the analyses reported here.

6.2 Hypotheses Testing Using Structural Equation Model (SEM)

In testing the hypotheses developed for this study, Structural Equation Modeling (SEM) was used because it offers a number of advantages compared to other commonly used techniques. First, SEM takes into account measurement error in the observed variables, resulting in a more accurate estimation of the model. Second, in contrast to other regression procedures, SEM allows for the testing of an entire model simultaneously instead of testing each bivariate relationship in a step-by-step fashion (Schumaker & Lomax, 1996). SEM therefore offers greater precision in model estimation. Third, by taking into account both direct and indirect effects, SEM provides an estimate of the total effect (both direct and indirect) of each independent variable on the dependent variable (Kline, 1998). Fourth, SEM provides an important statistical technique by which to resolve the problem of multicollinearity, which is often difficult to deal with using conventional regression analysis (Rigdon, 1998). In the case of this study, the multicollinearity problem associated with the entrepreneurial competencies construct was resolved through the formation of a higher-order structure.

6.2.1 Composite variables

Prior to performing the structural model estimation, items representing each entrepreneurial competency construct were totalled to provide a score on a composite variable. As suggested by (K. Rowe, 2002), aggregating items that measure behaviours thought to be associated with specific construct into composite variables is a useful method of data reduction; supporting both model parsimony and clarification of construct definition as well as improving model testing power. In the current study, although the usable sample was large enough for empirical testing of the Australian and Malaysian models separately, with $N = 179$ and $N = 212$ respectively, the development of composite variables enabled stable parameter estimation and the evaluation of complicated models by reducing the number of parameters to be analysed (Farris, Parry, & Ailawadi, 1992). Second, the use of composite variables allowed for greater stability, limiting the potentially ambiguous effects of the individual items (Hulin et al., 2001).

A composite score (factor score) was estimated for each multi-item latent variable using the “factor scores weight” generated by AMOS 5 for each congeneric model. Creating composite scores using this method take into account the random measurement error and differing factor loadings, rather than simply averaging each factor score (K. Rowe, 2002). As a

result, each indicator contributes to the final score to a varying degree, providing a high degree of accuracy of data representation (Fleishman & Benson, 1987).

The procedure undertaken to calculate composite scores followed the method proposed by Jöreskog and Sörbom (1989). The factor score regression weights provided by AMOS were added to create a sum of weights for each construct. Next, the factor score weight for each item representing a particular construct was divided by the sum of weights for each construct to generate a proportionally weighted score for each item. Eventually, these scores were computed in SPSS (using “compute” function) by multiplying each weighted score with the score of each item representing a particular construct which were then summed to derive the final composite score for each construct.

6.2.2 Model specification

In SEM, a model has to be specified prior to conducting the model estimation. The model is specified based on the initial theoretical framework that clearly outlines the indirect, direct, and moderating effects of the variables. For this study, the conceptual framework detailing the hypotheses is presented in Figure 23. As indicated previously, the Comprehensive model of entrepreneurial competencies construct comprised twelve competency areas including: Strategic, Commitment, Conceptual, Opportunity, Organising and Leading, Relationship, Learning, Personal, Technical, Ethical, Social Responsibility (for both Australia and Malaysia), and Supporting and Cooperating (Australia)/Familism (Malaysia). On the other hand, the Parsimonious model of entrepreneurial competencies for Australia comprised seven competency areas including Commitment, Conceptual, Opportunity, Learning, Personal, Ethical, and Social Responsibility, whereas for Malaysia, the Parsimonious model of entrepreneurial competencies comprised eight competency areas including Strategic, Conceptual, Opportunity, Relationship, Learning, Personal, Ethical, and Familism. The structural model estimation was undertaken for both Comprehensive and Parsimonious models of entrepreneurial competencies.

The business success construct consists of satisfaction with financial and non-financial performance, performance relative to competitors, and business growth. Perceived business environment comprises two dimensions, namely, Benign versus Hostile and Stable versus Dynamic. Individual cultural orientations comprise Individualism versus Collectivism dimension and Uncertainty Avoidance versus Tolerance for Ambiguity dimension. The antecedents of entrepreneurial competencies that were examined included educational level,

training before and after start-up, and work experience. Finally, variables treated as control variables included firm age, firm size, and entrepreneurial experience.

Based on the conceptual framework depicted in Figure 23, six main hypotheses were developed for further investigation. The directions of the hypotheses to be tested using SEM are illustrated in Table 55.

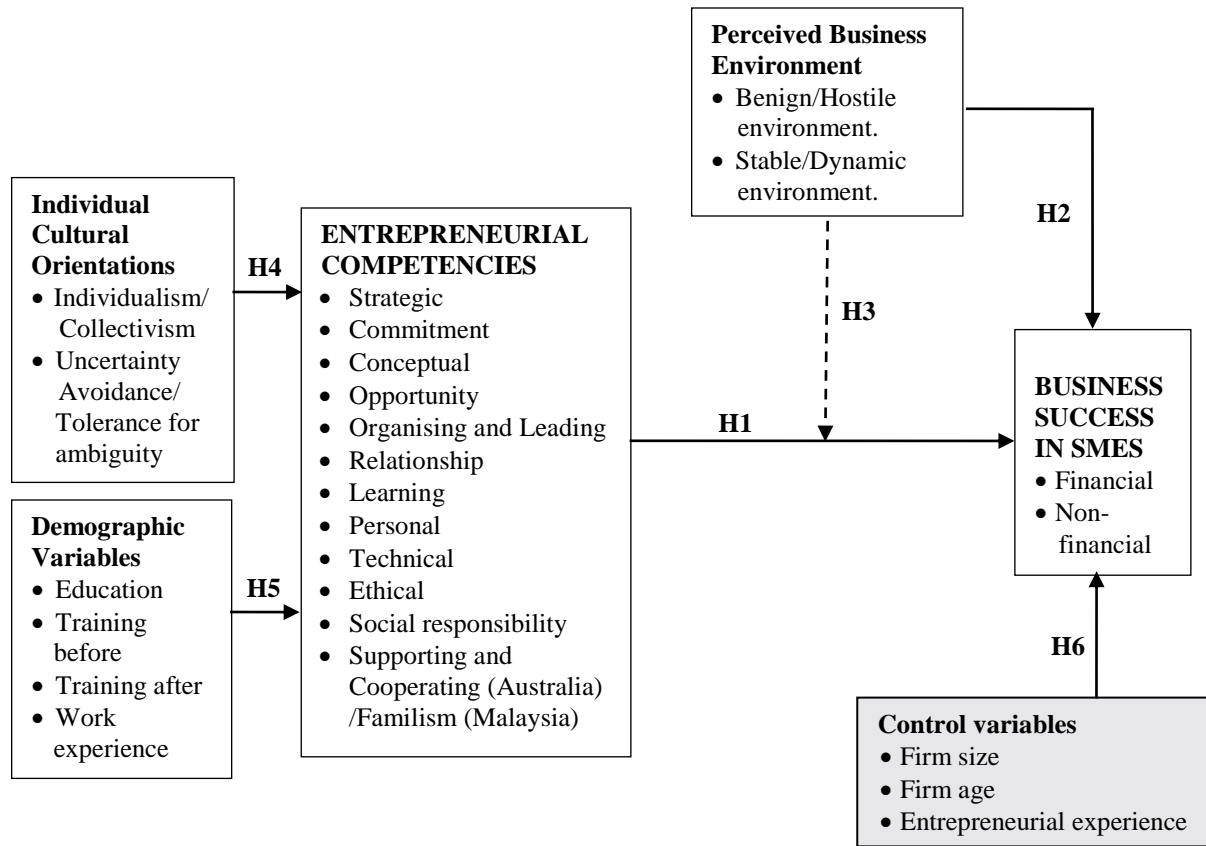


Figure 23. Revised conceptual framework developed for the present study.

Note. —→ indicates direct effect, - - → indicates moderating effect

6.2.3 Model assessment

The central point in analysing structural models is the extent to which the hypothesised model “fits” or adequately describes the sample data. As mentioned in Chapter 5, a model fit can be evaluated by examining several goodness of fit indices. Those examined in the present study included: χ^2 , χ^2/df , GFI, TLI, CFI, and RMSEA.

Besides fit statistics, of particular interest is the path significance indicated by the standardised regression estimate (β) that assesses the effect of one variable on another. The significance level was set at $p < .05$. In addition, direct, indirect, and moderating effects of variables in a structural model could also be estimated using AMOS 5.0. All of these

assessment criteria are useful for making inferences about the extent to which the effect of one variable on another is significant.

Table 55 *Hypotheses Developed for this Study*

Hypotheses developed for this study	Predicted direction of the relationship
<u>Direct effects</u>	
H1 Direct effect of entrepreneurial competencies on business success	A higher level of entrepreneurial competencies will be associated with greater business success.
H2a Direct effect of Benign environment on entrepreneurial competencies	A more Benign (less Hostile) environment will be associated with greater business success.
H2b Direct effect of Stable business environment on entrepreneurial competencies	A more Stable (less Dynamic) environment will be associated with greater business success.
<u>Moderating effects</u>	
H3a Moderating effect of Benign vs. Hostile business environment	The association between a higher level of competencies and business success will be more strongly evident in a Hostile (less Benign) environment.
H3b Moderating effect of Stable vs. Dynamic business environment	The association between a higher level of competencies and business success will be more strongly evident in a Dynamic (less Stable) environment.
<u>Antecedents of entrepreneurial competencies</u>	
H4a Direct effect of Individualism vs. Collectivism orientation on entrepreneurial competencies	Higher Individualism will have a positive significant impact on entrepreneurial competencies among Australian entrepreneurs whereas higher Collectivism will have a significant positive impact on entrepreneurial competencies among Malaysian entrepreneurs.
H4b Direct effect of Uncertainty Avoidance vs. Tolerance for Ambiguity on entrepreneurial competencies	Entrepreneurs with greater Tolerance for Ambiguity will report possessing greater competencies in both countries.
H5a Direct effect of education on entrepreneurial competencies	Entrepreneurs with more education will report possessing greater competencies.
H5b Direct effect of training before start up on entrepreneurial competencies*	Entrepreneurs with more training before start up will report possessing greater competencies
H5c Direct effect of training after start up on entrepreneurial competencies*	Entrepreneurs with more training after start up will report possessing greater competencies
H5d Direct effect of previous work experience on entrepreneurial competencies*	Entrepreneurs who report more work experience will report possessing greater competencies.
<u>Control variables</u>	
H6a Direct effect of firm age on business success	The older the firm, the greater the level of self-reported business success.
H6b Direct effect of firm size on business success	The bigger the firm, the greater the level of self-reported business success
H6c Direct effect of entrepreneurial experience on business success*	The more experience the entrepreneur has, the greater the level of self-reported business success

Note. *For the purpose of model estimation, training before start up, training after start up, previous work experience, and entrepreneurial experience were recoded as follows: No (0) and Yes (1).

6.3 Structural model for Australian Data¹⁶

The initial structural model for the Australian data was estimated using the Comprehensive model of entrepreneurial competencies. The modification index for this initial estimation suggested that several error terms in the model were correlated. The options for dealing with correlated error terms are to either co-vary them or to drop one or both of the items (Jöreskog & Sörbom, 1996). In the following analysis error terms were covaried because data for all variables were collected simultaneously using self-report, thereby highlighting the likely systematic nature of the error. Moreover, this approach enhanced model fit. Upon modification (see Figure 24), the respecified model that used a Comprehensive model of entrepreneurial competencies yielded a good model fit of $\chi^2 (310, N = 179) = 551.37, p = .00, \chi^2/df = 1.78, GFI = .83, CFI = .90, TLI = .89$ and $RMSEA = .066$. Even though $p < .05$, it was decided to accept the model in light of problems associated with the χ^2 statistic which is sensitive to the sample size.

Similar procedure was applied in estimating the structural model using the Parsimonious model of entrepreneurial competencies. Upon model respecification (see Figure 25), based on the modification index, the second model estimation yielded a good model fit of $\chi^2 (202, N = 179) = 341.33, p = .00, \chi^2/df = 1.69, GFI = .86, CFI = .89, TLI = .87$ and $RMSEA = .062$. The goodness of fit indices showed that the structural model that used the Parsimonious model of entrepreneurial competencies met all the recommended values. The results of the structural model for Australian data (for both Comprehensive and Parsimonious models of entrepreneurial competencies) are presented in Table 56.

¹⁶ The initial estimation of the model only estimates the direct effects. The estimation of the moderating effect of perceived business environment was undertaken separately and reported in Section 6.3.3.

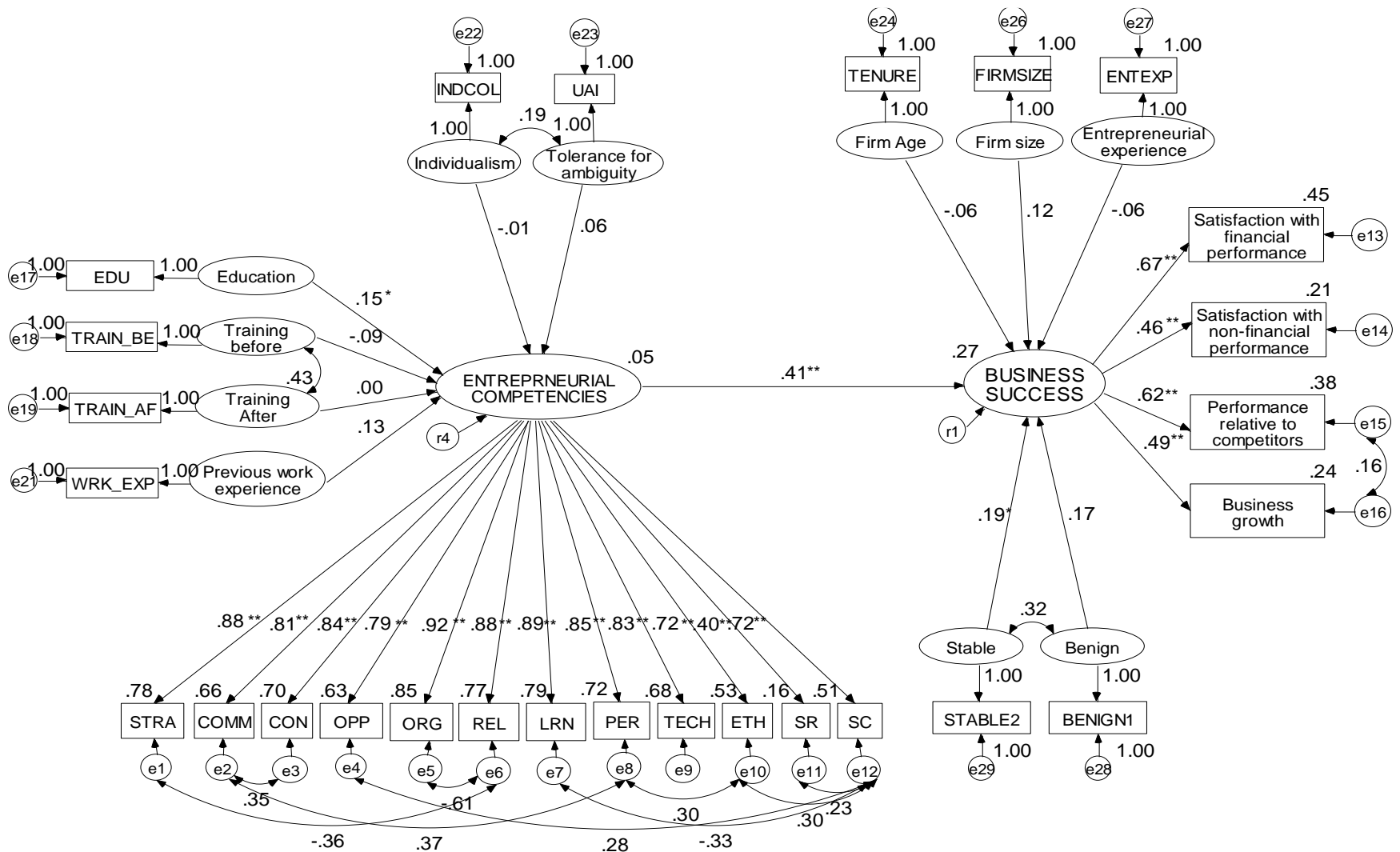


Figure 24. Structural model estimation using Comprehensive model of entrepreneurial competencies (Australia).

Note. STRA = Strategic; COMM = Commitment; CON = Conceptual; OPP = Opportunity; ORG = Organising and Leading; REL = Relationship; LRN = Learning; PER = Personal; TECH = Technical; ETH = Ethical; SR = Social Responsibility; SC = Supporting and Cooperating (replacing Familism). **Significant at $p < .01$;

*Significant at $p < .05$.

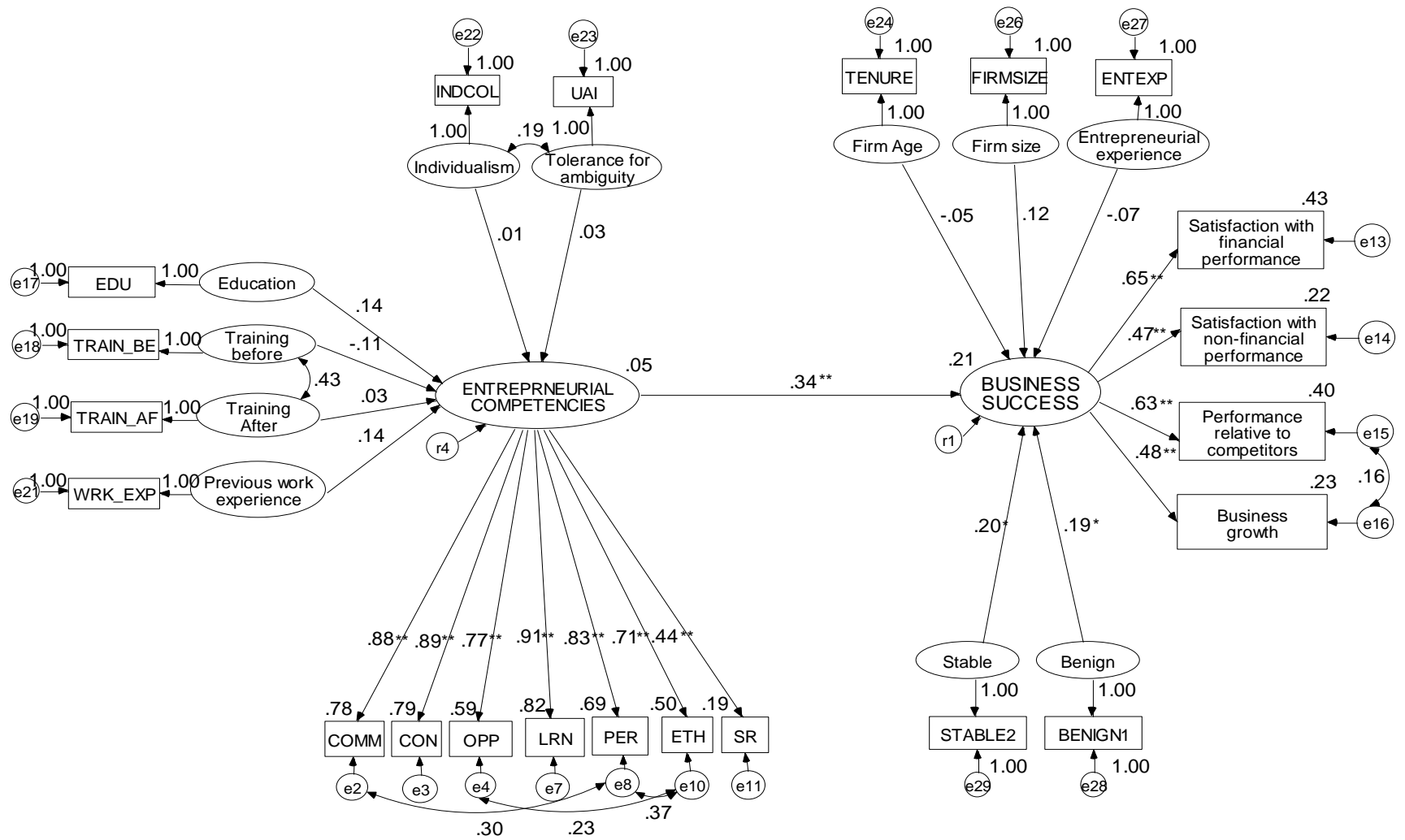


Figure 25. Structural model estimation using Parsimonious model of entrepreneurial competencies (Australia).

Note. COMM = Commitment; CON = Conceptual; OPP = Opportunity; LRN = Learning; PER = Personal; ETH = Ethical; SR = Social Responsibility. **Significant at $p < .01$; * Significant at $p < .05$.

Table 56 Results of the Model Testing Using Structural Equation Modeling Procedure: Comparing Comprehensive and Parsimonious Models of Entrepreneurial Competencies (Australia)

Hypothesised Relationships Between the Studied Variables		Comprehensive Model of Entrepreneurial Competencies			Parsimonious Model of Entrepreneurial Competencies		
		Standardised effect (β)	<i>p</i>	Hypotheses Supported	Standardised effect (β)	<i>p</i>	Hypotheses Supported
H1	Direct effect of entrepreneurial competencies on business success	.41	<.01	Yes	.34	<.01	Yes
H2a	Direct of effect of Benign environment on business success	.17	<.10	No	.19	<.05	Yes
H2b	Direct of effect of Stable environment on business success	.19	<.05	Yes	.20	<.05	Yes
<u>Moderating effect*</u>							
H3a	Moderating effect of Benign environment on the relationship between entrepreneurial competencies and business success	.45	<.05	Yes	.42	<.01	Yes
H3b	Moderating effect of Hostile environment on the relationship between entrepreneurial competencies and business success	.52	<.05	Yes	.47	<.05	Yes
H3c	Moderating effect of Stable environment on the relationship between entrepreneurial competencies and business success	.46	<.01	Yes	.40	<.05	Yes
H3d	Moderating effect of Dynamic environment on the relationship between entrepreneurial competencies and business success	.47	<.01	Yes	.47	<.01	Yes
<u>Antecedents of entrepreneurial competencies</u>							
H4a	Direct effect of Individualism orientation on entrepreneurial competencies	-.01	ns	No	.01	ns	No
H4b	Direct effect of Tolerance for Ambiguity on entrepreneurial competencies	.06	ns	No	.03	ns	No
H5a	Direct effect of educational level on entrepreneurial competencies	.15	<.05	Yes	.14	<.10	No
H5b	Direct effect of training before start up on entrepreneurial competencies	-.09	ns	No	.03	ns	No
H5c	Direct effect of training after start up on entrepreneurial competencies	.00	ns	No	.06	ns	No
H5d	Direct effect of previous work experience on entrepreneurial competencies	.13	<.10	No	.14	<.10	No
<u>Control variables</u>							
H6a	Direct effect of firm age on business success	-.10	ns	No	-.05	ns	No
H6b	Direct effect of firm size on business success	.12	ns	No	.12	ns	No
H6c	Direct effect of entrepreneurial experience on business success	-.11	ns	No	-.07	ns	No

Note. * The model estimation for the moderating effects was undertaken separately and is reported in Section 6.3.3. “ns” indicates nonsignificant.

6.3.1 Hypothesis 1—Testing the direct effects of competencies on business success

Hypothesis 1 was concerned with testing whether self-reported competencies would positively affect business success. As depicted in Table 56, the entrepreneurial competencies construct for both Comprehensive and Parsimonious models was found to have a significant positive relationship with business success as operationalised by self-report of satisfaction with financial performance, non-financial performance, performance relative to competitors, and business growth. As can be seen from Figure 24 that depicted the structural model for Comprehensive model (that comprised all twelve competency areas), entrepreneurial competencies had a direct path to business success with a significant coefficient of .41 ($p < .001$). The effect of entrepreneurial competencies on business success was strongest for satisfaction with financial performance ($\beta = .41 * .67 = .27$), followed by performance relative to competitors ($\beta = .41 * .62 = .25$), business growth ($\beta = .41 * .49 = .20$), and satisfaction with non-financial performance ($\beta = .41 * .46 = .19$).

Similarly, for the Parsimonious model of entrepreneurial competencies (see Figure 25), the effect of competencies on business success was significant ($\beta = .34, p < .001$). The strongest effect of entrepreneurial competencies (that comprised Commitment, Conceptual, Opportunity, Learning, Personal, Ethics, and Social Responsibility) was on satisfaction with financial performance ($\beta = .34 * .65 = .22$), followed by performance relative to competitors ($\beta = .34 * .63 = .21$), business growth ($\beta = .34 * .48 = .16$), and satisfaction with non-financial performance ($\beta = .34 * .47 = .16$).

6.3.2 Hypotheses 2a-2b—Testing the direct effects of the perceived business environment on business success

Hypotheses 2a and 2b were concerned with the direct effects of perceptions of the business environment on business success. As indicated in Table 56, the hypothesised direct effect of the extent to which the environment was Benign or Hostile on business success was not supported when the Comprehensive model of entrepreneurial competencies was used. Interestingly, the relationship appeared to be significant when the Parsimonious model of entrepreneurial competencies was used ($\beta = .19, p < .05$).

On the other hand, Stable Environment was found to have a significant positive effect on business success for both Comprehensive and Parsimonious models of entrepreneurial competencies, with a regression coefficient (β) of .19 ($p < .05$) for the former and .20 ($p < .05$) for the latter (see Table 56). In comparing the effect of entrepreneurial competencies and the environmental on business success, it was evident that entrepreneurial competencies had a stronger effect on business success for both Comprehensive and Parsimonious models of entrepreneurial competencies. This finding supports Baum et al.'s

(2001) observation that the micro aspects of entrepreneurship - in this case, the competencies of the business owner - contribute significantly to venture performance in SMEs. The finding does not support macro theories that advocate the dominance of environment as a factor influencing business performance (J. R. Baum et al., 2001).

6.3.3 Hypotheses 3a-3b—Testing the moderating effects of the perceived business environment on the relationship between competencies and business success

Hypotheses 3a and 3b were concerned with the moderating effects of the business environment on the relationship between entrepreneurial competencies and business success. In particular, these hypotheses suggest that, in situations where the business environment is perceived as Hostile or Dynamic, high entrepreneurial competencies will be associated with higher levels of business success than low entrepreneurial competencies. In other words, the possession of higher level competencies should allow entrepreneurs to deal more effectively with a challenging business environment thereby maximising the differences in business success between high and low competency groups. In testing the moderation effect, a multiple-group analysis within AMOS 5 was utilised (see for example, de Burca, Fynes, & Brannick, 2006; Nachtigall, Kroehne, Funke, & Steyer, 2003; Verreyne & Meyer, 2007; Zweig & Webster, 2003). Following a procedure recommended by Aiken and West (1991), prior to performing the model estimation, two groups were constructed; those entrepreneurs who indicated their business environment was below the group mean in terms of Hostility and those who score above the group mean in terms of Benignity. Comparisons were then made between these two. Similar comparisons were made for groups discriminated by mean score on environmental Stability and Dynamism. In the following discussion these subgroups are labelled Benign versus Hostile and Stable versus Dynamic.

In order to assess the significant effect of the moderators, a two-stage procedure was undertaken. Firstly, the parameter linking entrepreneurial competencies and business success was estimated simultaneously for the two subgroups (Benign vs. Hostile and Stable vs. Dynamic); the resulting model is commonly referred to in the literature as the “baseline” or “unconstrained” model as the estimate of the direct path was allowed to differ across two subgroups (Zweig & Webster, 2003). In the second estimation, the parameters were constrained to be equal across groups. The second model is referred to as “constrained” model in which subgroups was specified as invariant. The models were estimated separately for Benign and Stable Environments using both Comprehensive and Parsimonious models of entrepreneurial competencies. The moderator analyses on the

baseline model of Benign and Stable business environments based on Australian data are shown in Figures 26 and 27.

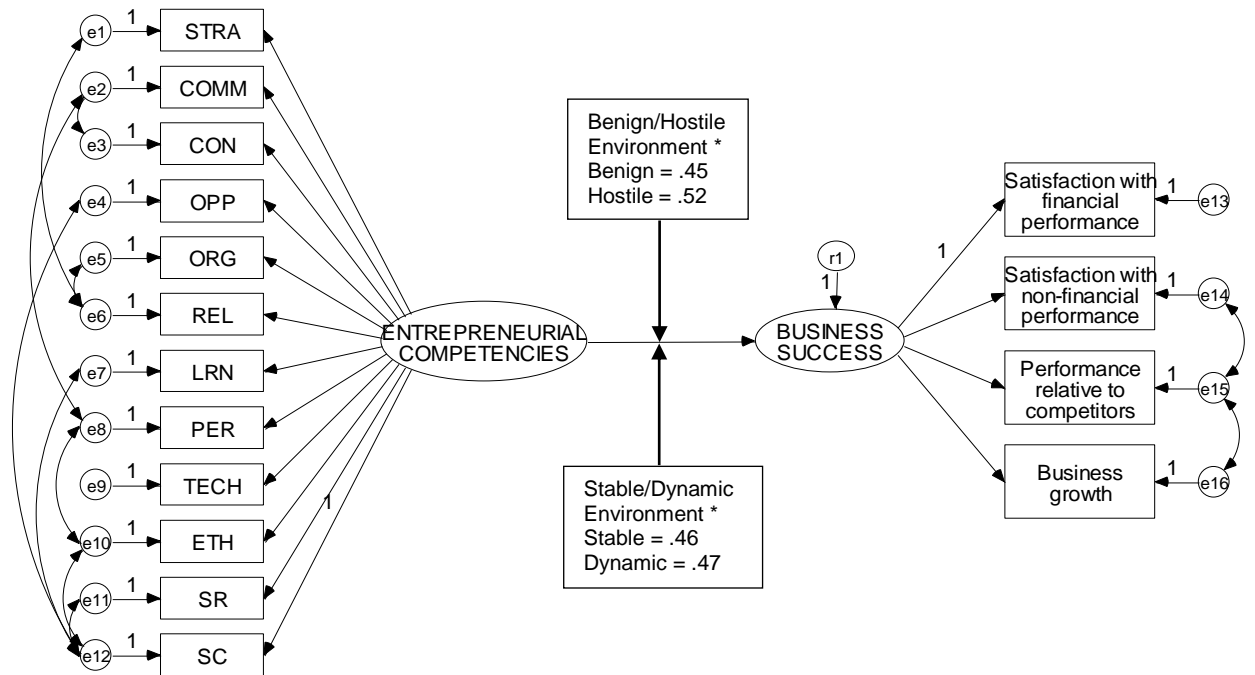


Figure 26. Moderator analyses on the baseline model of business environments using a Comprehensive Model of Entrepreneurial Competencies (Australia).

Note. STRA = Strategic; COMM = Commitment; CON = Conceptual; OPP = Opportunity; ORG = Organising; REL = Relationship; LRN = Learning; PER = Personal; TECH = Technical; ETH = Ethical; SR = Social Responsibility; SC = Supporting and Cooperating. * Chi-square different test is significant at $p < .05$.

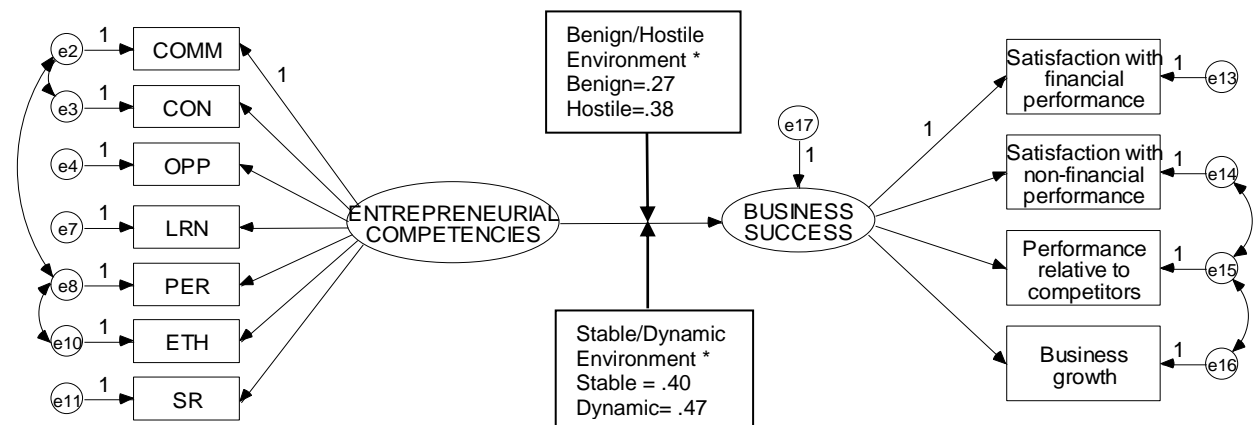


Figure 27. Moderator analyses on the baseline model of business environments using a Parsimonious Model of Entrepreneurial Competencies (Australia).

Note. COMM = Commitment; CON = Conceptual; OPP = Opportunity; LRN = Learning; PER = Personal; ETH = Ethical; SR = Social Responsibility. * Chi-square different test is significant at $p < .05$.

As can be seen from Table 57, the goodness of fit statistics for both “baseline” and “constrained” models show an acceptable fit of the model given the sample data.

Specifically, for the Comprehensive model of entrepreneurial competencies, five of six fit

indices met the recommended values. On the other hand, for the Parsimonious model of entrepreneurial competencies, all six fit indices met the recommended value for the “baseline” model but only five of six for the “constrained” model.

Table 57 *Goodness of Fit Statistics for Baseline and Constrained Models—Comprehensive and Parsimonious Models of Entrepreneurial Competencies (Australia)*

Model	χ^2	df	p	χ^2/df	GFI	CFI	TLI	RMSEA
<u>Comprehensive EC* Model</u>								
1. Benign vs. Hostile environment								
Baseline	336.75	184	.000	1.83	.823	.931	.910	.068
Constrained	369.93	199	.000	1.86	.810	.923	.907	.070
2. Stable vs. Dynamic environment								
Baseline	341.52	184	.000	1.87	.825	.927	.905	.070
Constrained	377.32	199	.000	1.90	.814	.918	.901	.071
<u>Parsimonious EC Model</u>								
1. Benign vs. Hostile environment								
Baseline	96.72	76	.055	1.27	.914	.980	.971	.039
Constrained	122.16	86	.006	1.42	.892	.965	.955	.049
2. Stable vs. Dynamic environment								
Baseline	87.80	76	.167	1.16	.918	.988	.983	.030
Constrained	125.31	86	.004	1.46	.886	.961	.951	.051

Note. * “EC” refers to entrepreneurial competencies.

Subsequently, as depicted in Table 58, the chi-square difference test was undertaken to assess the significance of the observed differences. In doing so a comparison was made between the two models (“baseline” and “constrained”) for both Comprehensive and Parsimonious model of entrepreneurial competencies.

Table 58 *Chi-Square Difference Tests for the Moderating Effects of Benign and Stable Environments —Comprehensive and Parsimonious Models of Entrepreneurial Competencies (Australia)*

Hypothesised moderated path	Baseline model		Constrained model		Chi-square difference test		
	χ^2	df	χ^2	df	$\Delta \chi^2$	Δdf	p
<u>Comprehensive EC* Model</u>							
1. Benign vs. Hostile environment							
EC → Business success	336.75	184	369.93	199	33.18	15	<.05
2. Stable vs. Dynamic environment							
EC → Business success	341.52	184	377.32	199	35.80	15	<.05
<u>Parsimonious EC Model</u>							
1. Benign vs. Hostile environment							
EC → Business success	96.72	76	122.16	86	25.44	10	<.05
2. Stable vs. Dynamic environment							
EC → Business success	87.80	76	125.31	86	37.51	10	<.001

Note. * “EC” refers to entrepreneurial competencies.

Results summarised in Table 58 indicate that there were significant differences across the “baseline” and the “constrained” models for Benign Environment (critical ratio¹⁷ = 33.18/15 = 2.21, $p < .05$) and Stable Environment (critical ratio = 35.80/15 = 2.39, $p <$

¹⁷ The calculation of critical ratio is determined by “the changes in the Chi-Square divided by the changes in the degree of freedom ($\Delta \chi^2 / \Delta df$)”. To determine the p value; z score of $> 3.29 = p < .001$; z score of $> 2.58 = p < .01$; z score of $> 1.96 = p < .05$.

.05) in the Comprehensive model of entrepreneurial competencies. Similarly, in the Parsimonious models of entrepreneurial competencies there were significant differences across the “baseline” and the “constrained” models for Benign Environment (critical ratio = 25.44/10 = 2.54, $p < .05$) and Stable Environment (critical ratio = 37.51/10 = 3.75, $p < .001$). Based on these findings, it can be concluded that the moderating hypotheses were supported for both models of entrepreneurial competencies.

From the regression coefficients illustrated in Figures 26 and 27, it was evident that for both Comprehensive and Parsimonious models, entrepreneurial competencies have stronger effects on business success when situations are characterised as Hostile and Dynamic, compared to Benign and Stable. It can therefore be concluded that when the business environment was perceived as posing a threat to the well being of the business, entrepreneurs with strong entrepreneurial competencies performed better than those with lower level of competencies. The moderating effect of Benign and Stable Environments on each of the dimensions of business success is summarised in Table 59.

For the purpose of clarity, the moderating effects of Benign versus Hostile Environments are illustrated in the graphs presented in Figures 28, 29, 30, and 31 for the Comprehensive model of entrepreneurial competencies and Figures 32, 33, 34, and 35 for the Parsimonious model of entrepreneurial competencies. The moderating effects of Stable versus Dynamic Environments are depicted in Figures 36, 37, 38, and 39 for the Comprehensive model of entrepreneurial competencies and Figures 40, 41, 42, and 43 for the Parsimonious model.

Table 59 *The Regression Coefficients (β) of the Moderating Effects of Business Environments: Comparing Comprehensive and Parsimonious Models of Entrepreneurial Competencies (Australia)*

Model	Moderating effect of business environments on the relationship between:			
	EC*→Satisfaction with financial performance	EC→Satisfaction with non-financial performance	EC→Performance relative to competitors	EC→Business growth
<u>Comprehensive EC Model</u>				
1. Benign vs. Hostile				
Benign Environment	$\beta = .32$	$\beta = .12$	$\beta = .25$	$\beta = .18$
Hostile Environment	$\beta = .37$	$\beta = .32$	$\beta = .19$	$\beta = .32$
2. Stable vs. Dynamic				
Stable Environment	$\beta = .34$	$\beta = .11$	$\beta = .32$	$\beta = .17$
Dynamic Environment	$\beta = .40$	$\beta = .21$	$\beta = .17$	$\beta = .21$
<u>Parsimonious EC Model</u>				
1. Benign vs. Hostile				
Benign Environment	$\beta = .28$	$\beta = .12$	$\beta = .24$	$\beta = .16$
Hostile Environment	$\beta = .34$	$\beta = .32$	$\beta = .16$	$\beta = .29$
2. Stable vs. Dynamic				
Stable Environment	$\beta = .32$	$\beta = .12$	$\beta = .34$	$\beta = .17$
Dynamic Environment	$\beta = .36$	$\beta = .18$	$\beta = .14$	$\beta = .20$

Note. *“EC” refers to entrepreneurial competencies.

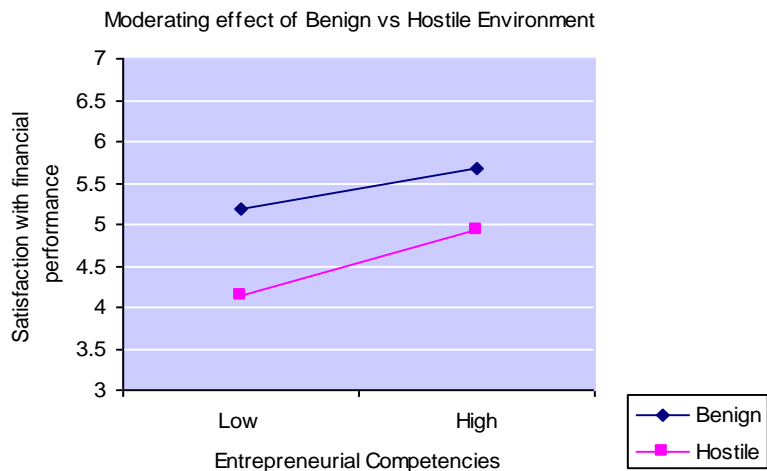


Figure 28. Moderating effects of Benign and Hostile Environments on the relationship between entrepreneurial competencies and satisfaction with financial performance—Comprehensive model (Australia).

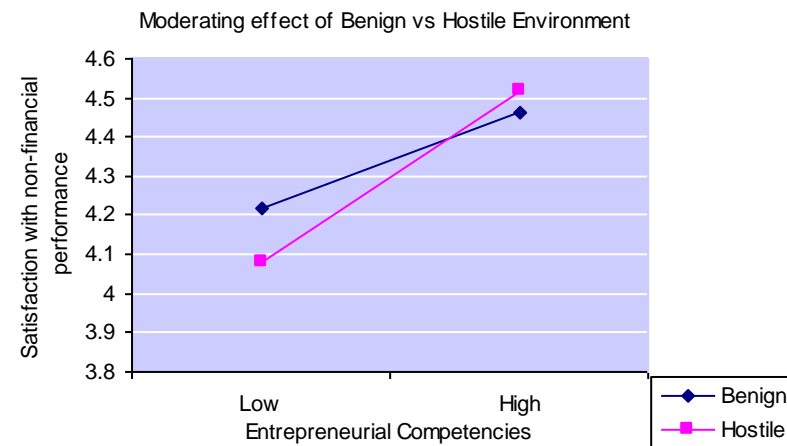


Figure 29. Moderating effects of Benign and Hostile Environments on the relationship between entrepreneurial competencies and satisfaction with non-financial performance—Comprehensive model (Australia).

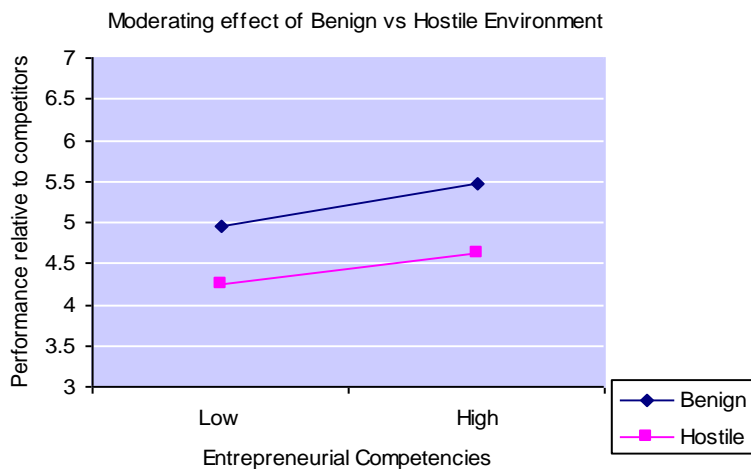


Figure 30. Moderating effects of Benign and Hostile Environments on the relationship between entrepreneurial competencies and performance relative to competitors—Comprehensive model (Australia).

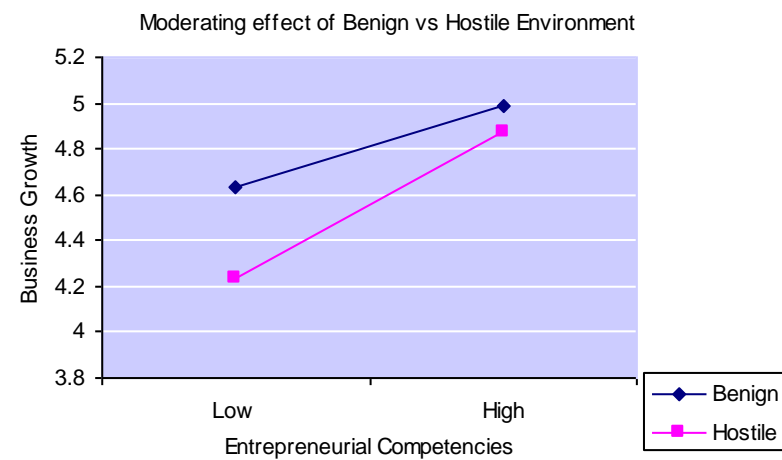


Figure 31. Moderating effects of Benign and Hostile Environments on the relationship between entrepreneurial competencies and business growth —Comprehensive model (Australia).

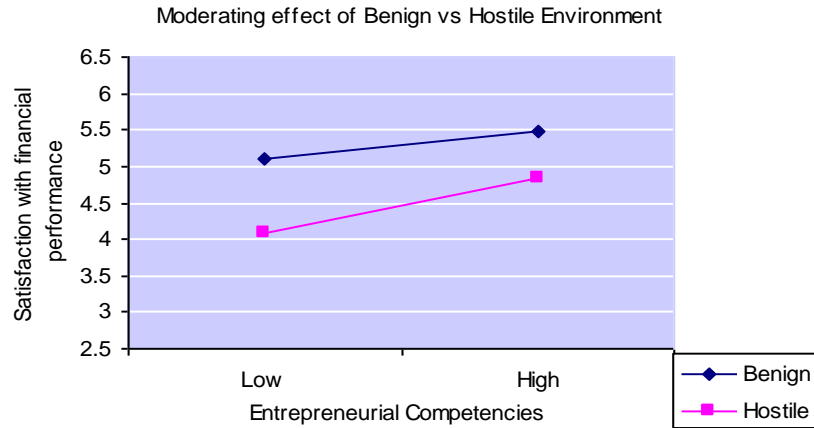


Figure 32. Moderating effects of Benign and Hostile Environments on the relationship between entrepreneurial competencies and satisfaction with financial performance—Parsimonious model (Australia).

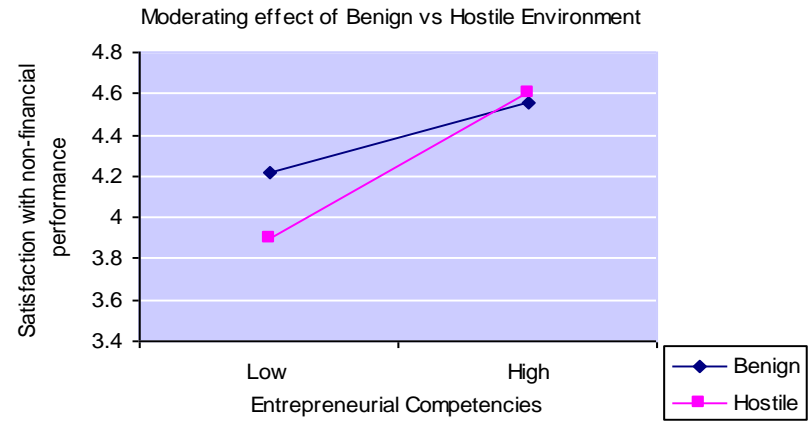


Figure 33. Moderating effects of Benign and Hostile Environments on the relationship between entrepreneurial competencies and satisfaction with non-financial performance—Parsimonious model (Australia).

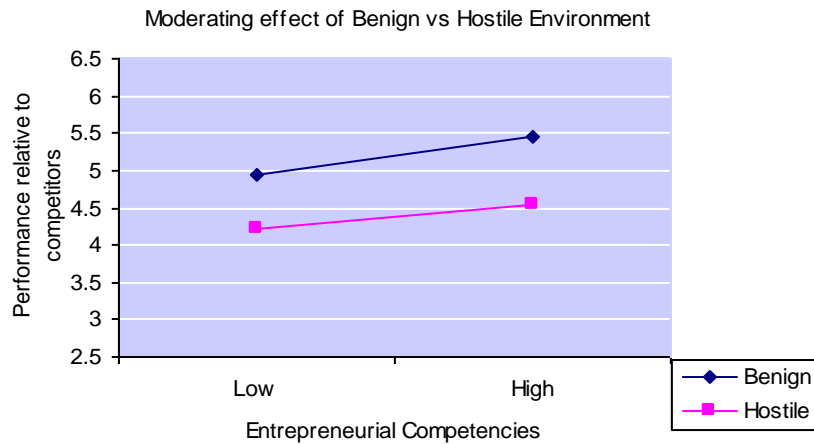


Figure 34. Moderating effects of Benign and Hostile Environments on the relationship between entrepreneurial competencies and performance relative to competitors—Parsimonious model (Australia).

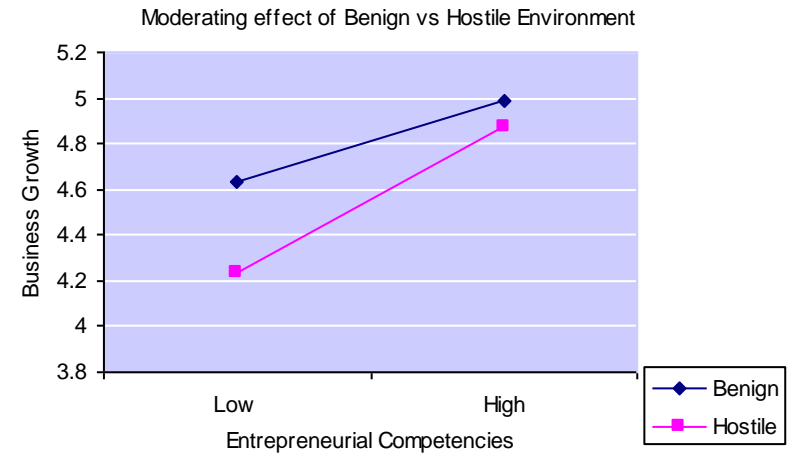


Figure 35. Moderating effects of Benign and Hostile Environments on the relationship between entrepreneurial competencies and business growth —Parsimonious model (Australia).

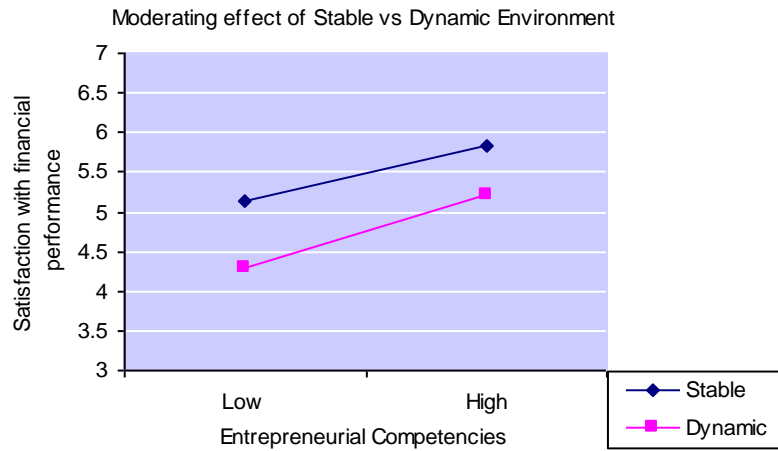


Figure 36. Moderating effects of Stable and Dynamic Environments on the relationship between entrepreneurial competencies and satisfaction with financial performance—Comprehensive model (Australia).

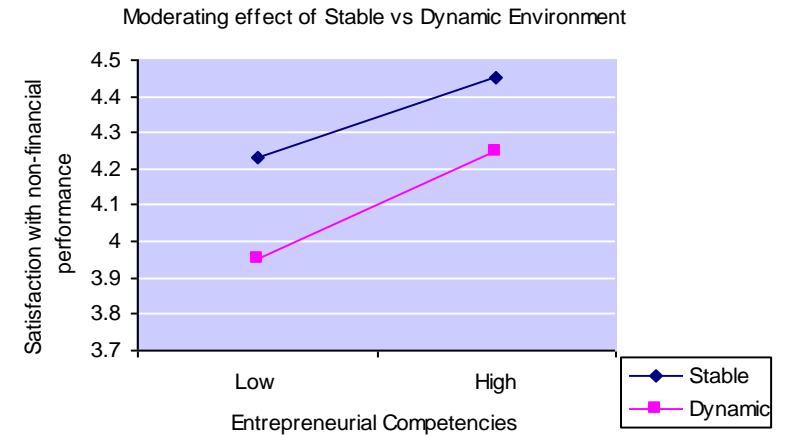


Figure 37. Moderating effects of Stable and Dynamic Environments on the relationship between entrepreneurial competencies and satisfaction with non-financial performance—Comprehensive model (Australia).

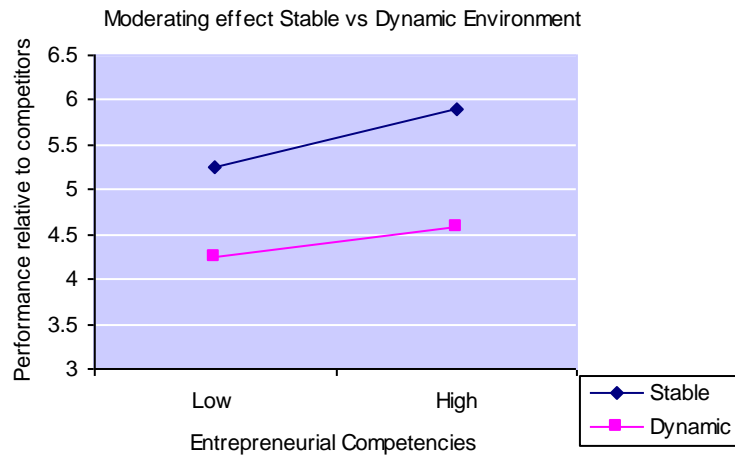


Figure 38. Moderating effects of Stable and Dynamic Environments on the relationship between entrepreneurial competencies and performance relative to competitors —Comprehensive model (Australia).

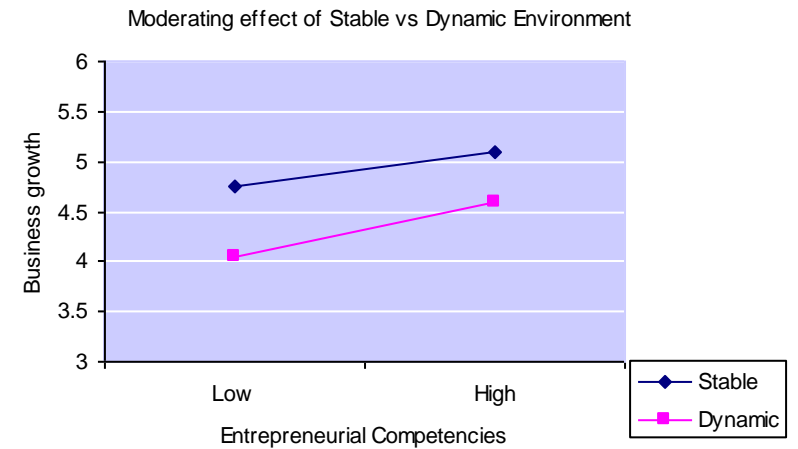


Figure 39. Moderating effects of Stable and Dynamic Environments on the relationship between entrepreneurial competencies and business growth—Comprehensive model (Australia).

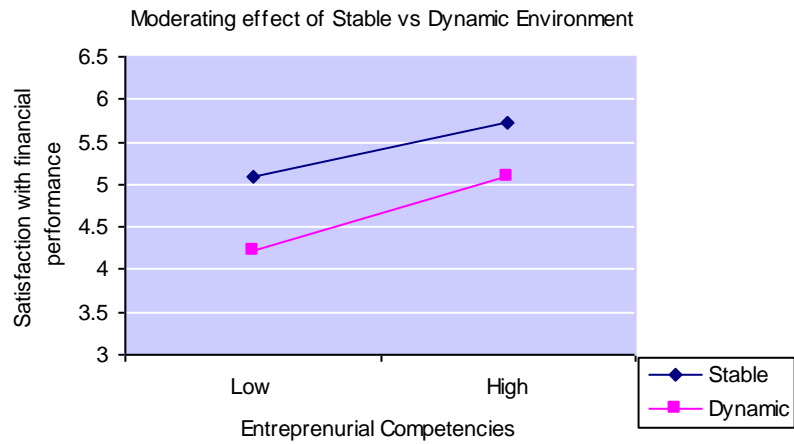


Figure 40. Moderating effects of Stable and Dynamic Environments on the relationship between entrepreneurial competencies and satisfaction with financial performance—Parsimonious model (Australia).

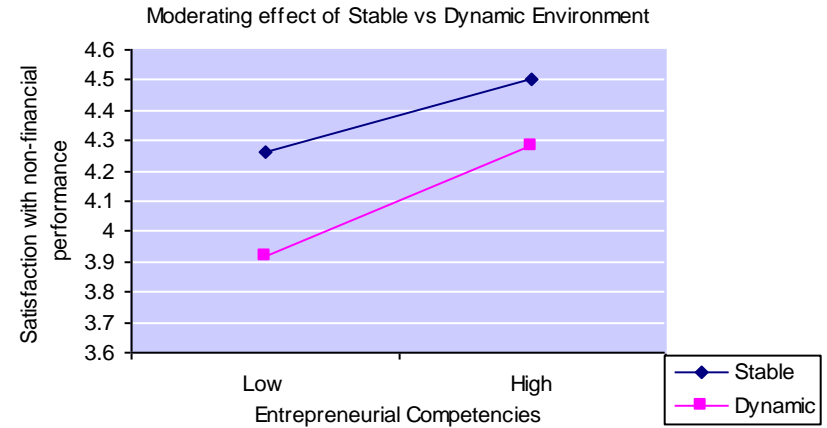


Figure 41. Moderating effects of Stable and Dynamic Environments on the relationship between entrepreneurial competencies and satisfaction with non-financial performance—Parsimonious model (Australia).

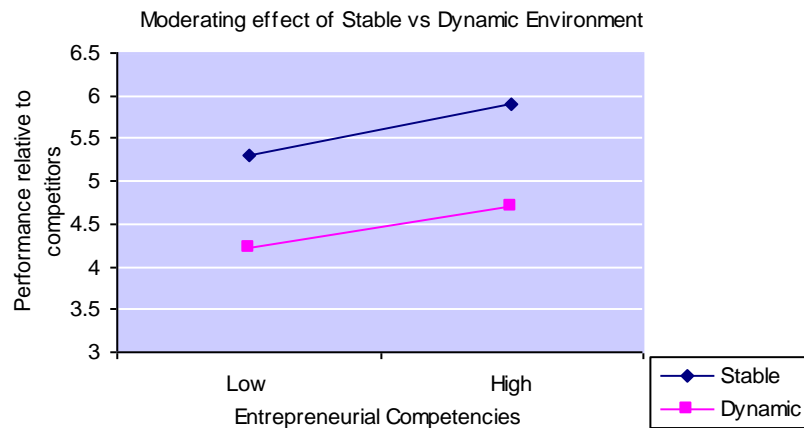


Figure 42. Moderating effects of Stable and Dynamic Environments on the relationship between entrepreneurial competencies and performance relative to competitors—Parsimonious model (Australia).

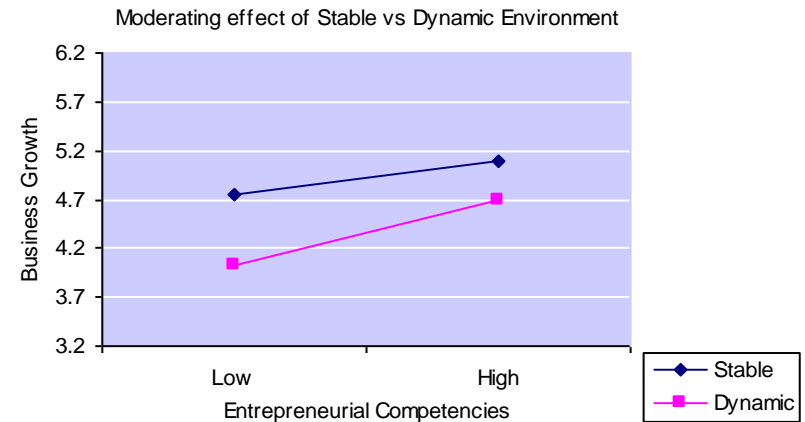


Figure 43. Moderating effects of Stable and Dynamic Environments on the relationship between entrepreneurial competencies and business growth — Parsimonious model (Australia).

As can be seen from the graphs, for both Comprehensive and Parsimonious model of entrepreneurial competencies, entrepreneurs who possess higher level of entrepreneurial competencies generally perform better than those with lower competencies (for both Benign vs. Hostile and Stable vs. Dynamic dimensions). More importantly, it can be seen from the graphs that except for the performance relative to competitors dimension, entrepreneurs who possess a higher level of competencies perform better than those with lower competencies in both Hostile and Dynamic environment compared to Benign and Stable environment, particularly in terms of satisfaction with financial and non-financial performance, and business growth. A possible explanation for this outcome is that the intensity of competition in a Hostile environment and the high rate of changes in a Benign environment have put more pressure on the entrepreneur to be proactive and engage in more entrepreneurial behaviour (i.e., demonstrate more entrepreneurial competencies). As argued by Covin et al. (1999), in a Hostile Environment, which is characterised by fierce rivalry, the adoption of aggressive, proactive, or more generally competitive postures is likely to result in higher business growth. Weaver, Dickson, Gibson, and Turner (2002), argue that entrepreneurially-oriented SME owners do not perceive uncertain (Hostile) environments as a negative phenomenon; rather, in this kind of situation, they demonstrate a higher degree of proactive and innovative behaviour, which may improve business performance. Similarly, Lindelöf and Löfsten (2006) argue that when firms are faced with a Hostile environment, entrepreneurial behaviours, particularly strategic orientation, contribute markedly to firm performance. Conversely, in Benign and Stable environments, entrepreneurs tend to be slightly more relaxed in managing their business, possibly due to the perception of fewer threats and lower survival risks.

In regard to performance relative to competitors, in which Australian entrepreneurs tend to perform better in both Benign and Stable environments compared to Hostile and Dynamic environments, a possible explanation is that perhaps the lack of emphasis given to the competitors' actions among the SME entrepreneurs in Australia (as evident in Study 1), may have resulted in slightly lower performance in situations where the competitive rivalry is fierce (as in Hostile environment) and when the rate of changes is high (as in Dynamic environment) than in a situation where competition and changes are low (as characterised by Benign and Stable environments respectively).

It is also the case that the variation in terms of business performance of entrepreneurs with low and high competencies tends to be slightly lower in a Stable versus Dynamic Environment compared to Benign and Hostile environment for both Comprehensive and Parsimonious model of entrepreneurial competencies. A plausible explanation for this

phenomenon is that business performance in Stable Environment, where the rate of change is low and competition is not strong, is generally more robust and protected from poorer entrepreneurial competencies. Having said that, the slightly stronger effect of high competencies on business success in a Dynamic environment could be explained by the need to be proactive and aggressive due to the high degree of changes in terms of technology, competitor's action, and customer demand. As mentioned earlier, the demonstration of a higher degree of proactive and innovative behaviour in coping with a Dynamic environment may improve business performance.

6.3.4 Hypotheses 4a-4b—Testing the direct effects of individual cultural orientations on competencies

Hypotheses 4a and 4b were concerned with the direct effects of individual orientations on the dimension Individualism and Tolerance for Ambiguity (among the Australian sample) on entrepreneurial competencies. As can be seen from Table 56, a direct association between cultural orientations and entrepreneurial competencies was not supported in the Australian data for both Comprehensive and Parsimonious models of entrepreneurial competencies. (Note that the only significant association identified in the correlation analysis, as presented in Table 53, was between Strategic Competency and Tolerance for Ambiguity; $r = .16, p < .05$). A possible explanation for this finding is suggested by Lindsay (2005) who argues that certain entrepreneurial characteristics and behaviours may override the cultural orientations of entrepreneurs. In addition, McGrath and McMillan (1992, p. 419) argue that “entrepreneurial behavior may indeed stem from a pervasive set of entrepreneurial beliefs” (i.e., high internal locus of control, opportunity recognition, and pro-activeness) that transcends culture. Accordingly, based on McGrath and McMillan's (1992) argument, because entrepreneurs, compared to non-entrepreneurs, are said to hold certain values and beliefs that are unique to them irrespective of their cultural identities, there is a possibility that these “entrepreneurial values” have more impact on the development of their competencies compared to the specific cultural orientations.

6.3.5 Hypotheses 5a-5d—Testing the effects of education, training, and general work experience on entrepreneurial competencies

For the Comprehensive model of entrepreneurial competencies, among the demographic variables only educational level had a positive significant association with entrepreneurial competencies ($\beta = .15, p < .05$; see Table 56). The effect of education was found to be higher for Organising and Leading ($\beta = .15 * .92 = .14$), Learning ($\beta = .15 * .89 = .13$), Strategic ($\beta = .15 * .88 = .13$), Relationship ($\beta = .15 * .88 = .13$), Personal ($\beta = .15 * .85$

= .13), and Conceptual ($\beta = .15 \cdot .84 = .13$) competencies. This was followed by Technical ($\beta = .15 \cdot .83 = .12$), Commitment ($\beta = .15 \cdot .81 = .12$), Opportunity ($\beta = .15 \cdot .79 = .12$), Ethical ($\beta = .15 \cdot .72 = .11$), and Familism ($\beta = .15 \cdot .72 = .11$) competencies. The lowest effect of education was on the Social Responsibility Competency ($\beta = .15 \cdot .40 = .06$).

Surprisingly, the effect of education was found to be nonsignificant in the Parsimonious model of entrepreneurial competencies. Presumably, because education affects strongly on Organising and Leading ($\beta = .14$), Strategic ($\beta = .13$), and Relationship ($\beta = .13$) competencies (for the Comprehensive model), the omission of the three competency areas in the Parsimonious model has resulted in the nonsignificant effect of education on entrepreneurial competencies. Overall, the finding for education suggests that for Australian respondents, education may be an important factor that could assist entrepreneurs in developing particularly Strategic, Organising and Leading, and Relationship competencies.

In addition, there was no evidence to support the significant direct effect of training before and after start up as well as work experience on the development of entrepreneurial competencies. The outcome that showed a nonsignificant effect of training is at odd with Webster, Walker, and Brown (2005, p. 553) who suggest that in small business sectors, “Training is regarded as an important component both for competitive success and business strategy”. The finding that work experience was unrelated to entrepreneurial competencies does not support the claim by Krueger and Brazeal (1994) that work experience increases perceived competencies and the ability to recognise opportunities.

6.3.6 Testing the effects of control variables on business success

For the Australian model, firm age, size, and entrepreneur’s experience were not significantly associated with business success for both Comprehensive and Parsimonious models of entrepreneurial competencies (see Table 56). This is consistent with Baum and Locke’s (2004) finding that neither firm age nor firm size was associated with performance. The effects of firm size and firm age may hold true for larger organisations but not for SMEs.

Although, there is some previous research that suggests that entrepreneurial experience has a positive impact on business success (Stuart & Abetti, 1990), there are other studies, like the present study, that have found no relationship between these two variables. For example, Keeley and Roure (1990) reported a nonsignificant relationship between entrepreneur’s experience and business performance. Moreover, Brush et al. (2001) have pointed out that, entrepreneurial experience is often a criterion that influences start-up funding success, rather than something that predicts firm performance.

6.4 Structural model for Malaysian Data

The procedure undertaken to evaluate the structural model for the Malaysian sample was similar to that for the Australian sample. First, the structural model for the Malaysian data was estimated using the Comprehensive model of entrepreneurial competencies (see Figure 44). Upon minor respecification based on the modification indices, the model yielded a good model fit of $\chi^2(311, N = 212) = 615.89, p = .00, \chi^2/df = 1.98, GFI = .82, CFI = .90, TLI = .89$ and $RMSEA = .068$. A similar procedure was applied in estimating the structural model using the Parsimonious model of entrepreneurial competencies. The second model estimation (see Figure 45) yielded a good model fit of $\chi^2(219, N = 212) = 430.18, p = .00, \chi^2/df = 1.96, GFI = .85, CFI = .91, TLI = .89$ and $RMSEA = .067$. The goodness of fit indices showed that the structural model that used the Comprehensive and Parsimonious models of entrepreneurial competencies met five of six goodness of fit criteria. Even though for both models, $p < .05$, it was decided to accept the models in light of problems associated with the χ^2 statistic, which is sensitive to the sample size. The results of the structural model for Malaysian data (for both Comprehensive and Parsimonious models of entrepreneurial competencies) are presented in Table 60.

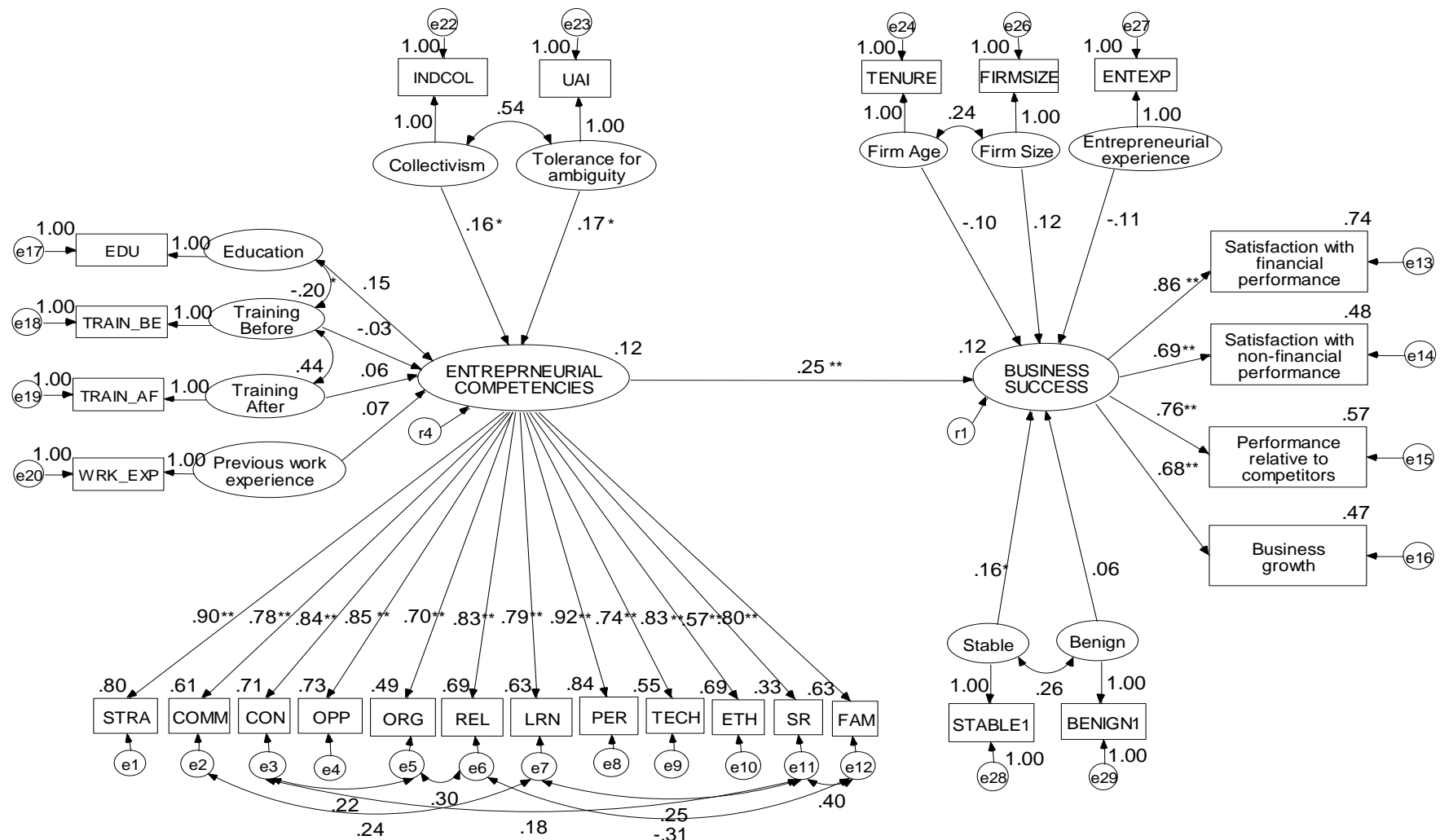


Figure 44. Structural model estimation using Comprehensive model of entrepreneurial competencies (Malaysia).

Note. STRA = Strategic; COMM = Commitment; CON = Conceptual; OPP = Opportunity; ORG = Organising and Leading; REL = Relationship; LRN = Learning; PER = Personal; TECH = Technical; ETH = Ethical; SR = Social Responsibility; FAM = Familism. ** Significant at $p < .01$; * Significant at $p < .05$.

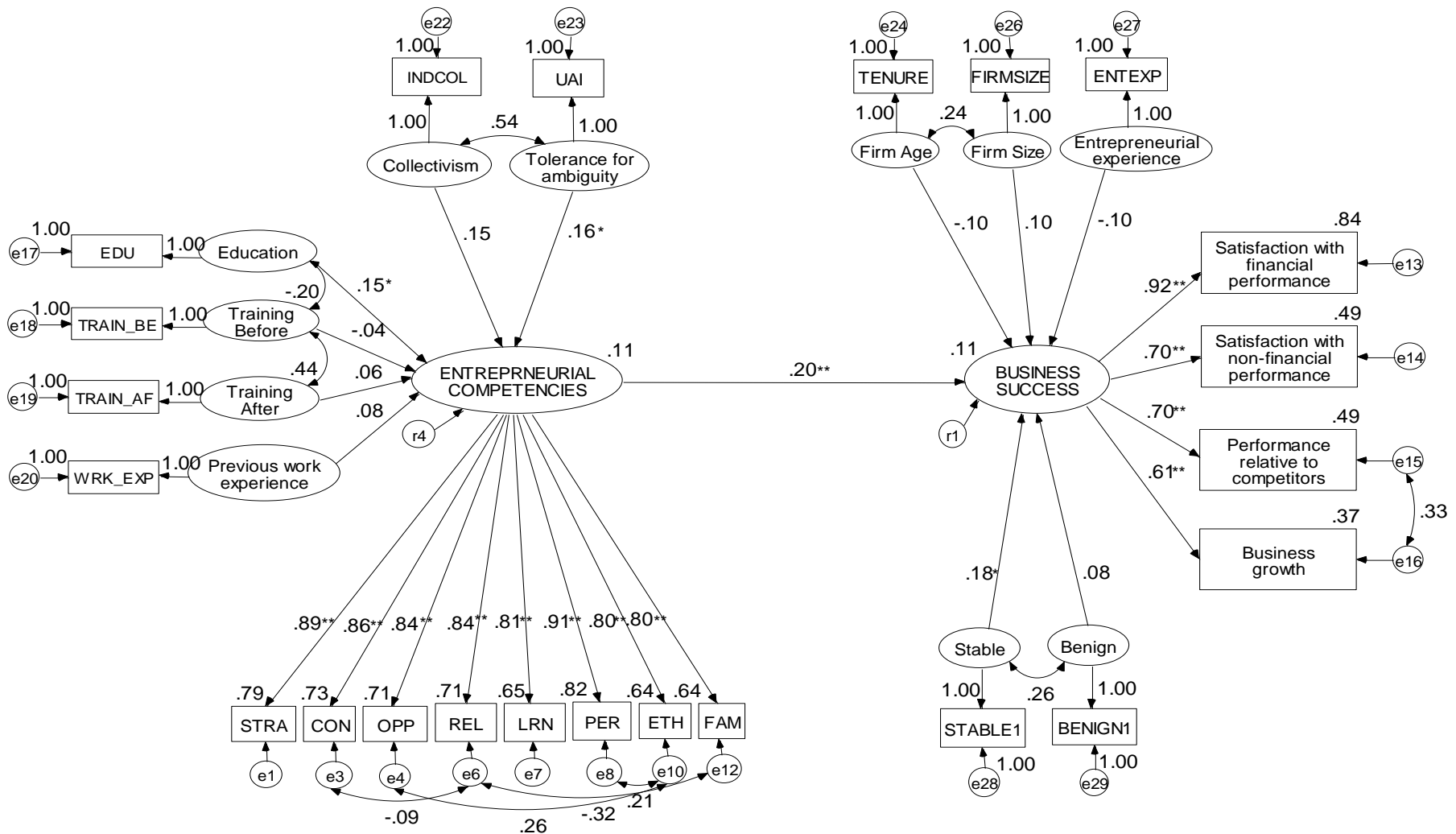


Figure 45. Structural model estimation using Parsimonious model of entrepreneurial competencies (Malaysia).

Note. STRA = Strategic; CON = Conceptual; OPP = Opportunity; REL = Relationship; LRN = Learning; PER = Personal; ETH = Ethical; FAM = Familism. **Significant at $p < .01$; * Significant at $p < .05$.

Table 60 Results of the Model Testing Using Structural Equation Modeling Procedure: Comparing Comprehensive and Parsimonious Models of Entrepreneurial Competencies (Malaysia)

Hypothesised Relationships Between the Studied Variables		Comprehensive Model of Entrepreneurial Competencies			Parsimonious Model of Entrepreneurial Competencies		
		Standardised effect (β)	p	Hypotheses Supported	Standardised effect (β)	p	Hypotheses Supported
H1	Direct effect of entrepreneurial competencies on business success	.25	<.01	Yes	.20	<.01	Yes
H2a	Direct of effect of Benign environment on business success	.06	ns	No	.08	ns	No
H2b	Direct of effect of Stable environment on business success	.16	<.05	Yes	.18	<.05	Yes
<u>Moderating effect*</u>							
H3a	Moderating effect of Benign environment on the relationship between entrepreneurial competencies and business success	.25	<.05	Yes	.27	<.05	Yes
H3b	Moderating effect of Hostile environment on the relationship between entrepreneurial competencies and business success	.35	<.01	Yes	.38	<.01	Yes
H3c	Moderating effect of Stable environment on the relationship between entrepreneurial competencies and business success	.27	<.01	Yes	.29	<.01	Yes
H3d	Moderating effect of Dynamic environment on the relationship between entrepreneurial competencies and business success	.29	<.10	No	.33	<.05	Yes
<u>Antecedents of entrepreneurial competencies</u>							
H4a	Direct effect of Collectivism on entrepreneurial competencies	.16	<.05	Yes	.15	<.10	No
H4b	Direct effect of Tolerance for Ambiguity on entrepreneurial competencies	.17	<.05	Yes	.16	<.05	Yes
H5a	Direct effect of educational level on entrepreneurial competencies	.15	<.05	Yes	.15	<.05	Yes
H5b	Direct effect of training before start up on entrepreneurial competencies	.03	ns	No	.03	ns	No
H5c	Direct effect of training after start up on entrepreneurial competencies	.06	ns	No	.06	ns	No
H5d	Direct effect of previous work experience on entrepreneurial competencies	.07	<.10	No	.07	<.10	No
<u>Control variables</u>							
H6a	Direct effect of firm age on business success	-.10	ns	No	-.10	ns	No
H6b	Direct effect of firm size on business success	.12	ns	No	.12	ns	No
H6c	Direct effect of entrepreneurial experience on business success	-.11	ns	No	-.11	ns	No

Note. * The model estimation for the moderating effects was undertaken separately and is reported in Section 6.4.3. "ns" indicates nonsignificant.

6.4.1 Hypothesis 1—Testing the direct effects of competencies on business success

Analysis of the Malaysian data indicated that entrepreneurial competencies for the Comprehensive model were significantly and positively associated with business success. As indicated in Figure 44, the structural model estimation using Comprehensive model of entrepreneurial competencies showed that entrepreneurial competencies have a direct path to business success, with a significant regression coefficient of .25 ($p < .001$). The path from competencies to business success was highest for satisfaction with financial performance ($\beta = .25 \times .86 = .22$), followed by performance relative to competitors ($\beta = .25 \times .76 = .19$), satisfaction with non-financial performance ($\beta = .25 \times .69 = .17$), and business growth ($\beta = .25 \times .68 = .17$).

Similarly, for the Parsimonious model of entrepreneurial competencies (see Figure 45), the result showed a significant direct effect of entrepreneurial competencies on business success ($\beta = .20, p < .001$). The strongest effect of entrepreneurial competencies (that comprised Strategic, Conceptual, Opportunity, Relationship, Learning, Personal, Ethical, and Familism) was on satisfaction with financial performance ($\beta = .20 \times .92 = .18$), followed by satisfaction with non-financial performance ($\beta = .20 \times .70 = .14$), performance relative to competitors ($\beta = .20 \times .70 = .14$), and business growth ($\beta = .20 \times .61 = .12$).

6.4.2 Hypotheses 2a-2b—Testing the direct effects of the perceived business environment on business success

The results pertaining to the direct effects of perceived business environment on business success are depicted in Table 60. It can be seen that for both Comprehensive and Parsimonious models of entrepreneurial competencies, the hypothesised link between Stable Environment and business success was supported ($\beta = .16, p < .05$, for the former and $\beta = .18, p < .05$, for the latter). However, the link between Benign Environment and business success was not significant for both models. By contrast, in the Australian model, the association between Benign Environment and business success was found significant when tested using the Parsimonious model of entrepreneurial competencies. Comparing the direct effects of entrepreneurial competencies and environmental Stability on business success, it is evident that the effect of Stable Environment was slightly weaker in both Comprehensive model ($\beta = .16, p < .05$) and Parsimonious model ($\beta = .18, p < .05$) than the effect of entrepreneurial competencies ($\beta = .25, p < .001$ for the Comprehensive model and $\beta = .25, p < .001$ for the Parsimonious model of entrepreneurial competencies). The findings showed that individual factors would appear to be stronger predictors of business success in SMEs than external factors. Previous research by Baum et al. (2001) confirms this conclusion. Using a multidimensional model of venture growth, these researchers

found that specific competencies were more strongly associated with venture growth ($\beta = .22, p < .05$) than business environment ($\beta = .10$).

6.4.3 Hypotheses 3a-3b—Testing the moderating effects of the perceived business environment on the relationship between competencies and success

The moderation analysis undertaken to test the moderating effects of business environment on the relationship between entrepreneurial competencies and business success was the same as that undertaken with the Australian data (see Section 6.3.3). The two dimensions of perceived business environment were split into high and low scores at the mean of the measures. As for the Australian analysis, two models were developed namely a “baseline” model and a “constrained” model using both Comprehensive and Parsimonious models of Entrepreneurial Competencies (see Figures 46 and 47).

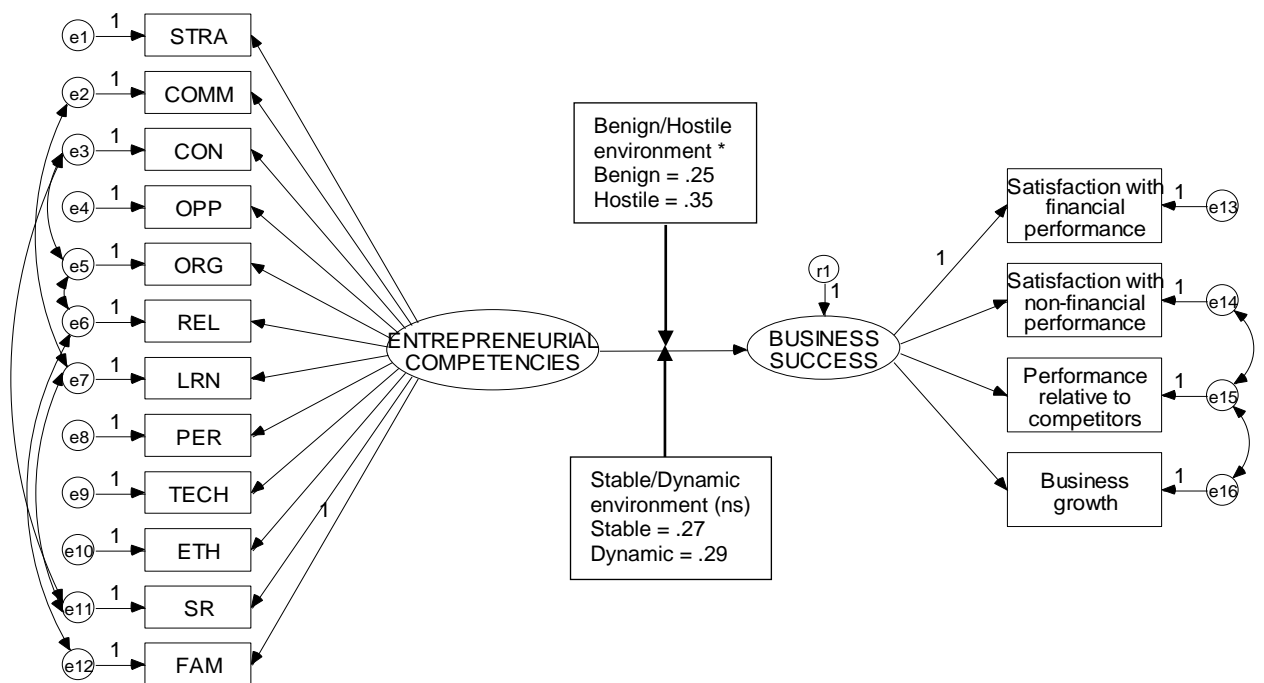


Figure 46. Moderator analyses on the baseline model of business environments using a Comprehensive model of entrepreneurial competencies (Malaysia).

Note. STRA = Strategic; COMM = Commitment; CON = Conceptual; OPP = Opportunity; ORG = Organising; REL = Relationship; LRN = Learning; PER = Personal; TECH = Technical; ETH = Ethical; SR = Social Responsibility; FAM = Familism. *Chi-square different test is significant at $p < .05$; “ns” indicates nonsignificant.

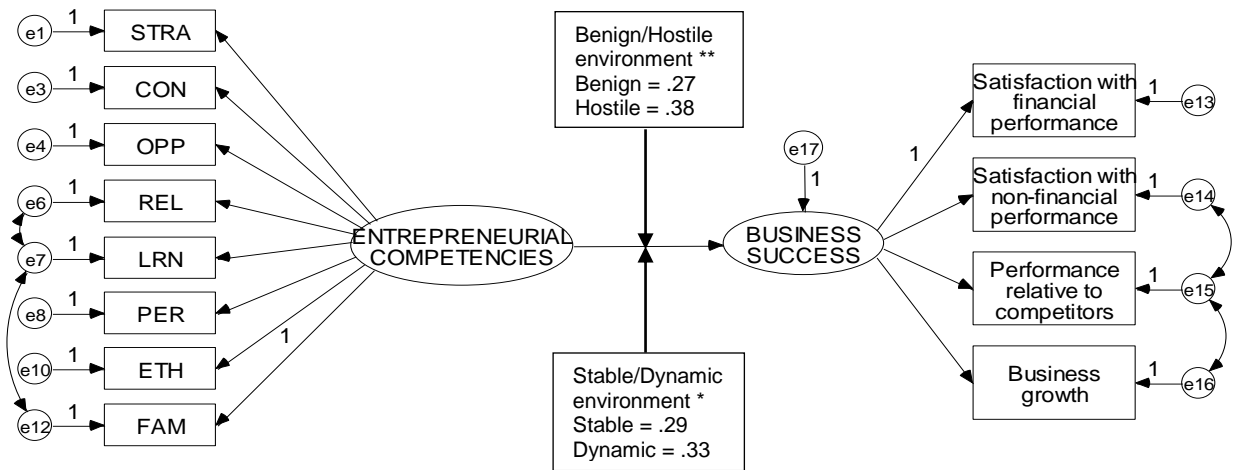


Figure 47. Moderator analyses on the baseline model of business environments using a Parsimonious model of entrepreneurial competencies (Malaysia).

Note. STRA = Strategic; CON = Conceptual; OPP = Opportunity; REL = Relationship; LRN = Learning; PER = Personal; ETH = Ethical; FAM = Familism. **Chi-square different test is significant at $p < .01$; *significant at $p < .05$.

The goodness of fit statistics for both models indicated an acceptable fit for both Comprehensive and Parsimonious models of entrepreneurial competencies. Specifically, for both models, five of the six fit statistics met the recommended values (refer to Table 61).

Table 61 Goodness of Fit Statistics for Baseline and Constrained Models—Comprehensive and Parsimonious Models of Entrepreneurial Competencies (Malaysia)

Model	χ^2	df	p	χ^2/df	GFI	CFI	TLI	RMSEA
Comprehensive EC* Model								
1. Benign vs. Hostile environment								
Baseline	349.16	192	.000	1.82	.836	.942	.928	.062
Constrained	390.67	207	.000	1.89	.812	.932	.922	.065
2. Stable vs. Dynamic environment								
Baseline	378.68	192	.000	1.97	.824	.929	.911	.068
Constrained	406.25	207	.000	1.96	.815	.924	.912	.068
Parsimonious EC Model								
1. Benign vs. Hostile environment								
Baseline	147.55	92	.000	1.60	.900	.971	.959	.054
Constrained	179.09	103	.000	1.73	.877	.961	.950	.059
2. Stable vs. Dynamic environment								
Baseline	165.09	92	.000	1.79	.892	.961	.945	.062
Constrained	189.82	103	.000	1.84	.878	.954	.941	.063

Note. * “EC” refers to entrepreneurial competencies.

To assess the chi-square difference between the “baseline” and the “constrained” models, comparison was also made between the two models—“baseline” and “constrained”—for both Comprehensive and Parsimonious model of entrepreneurial competencies (see Table 62).

Table 62 *Chi-Square Difference Tests for the Moderating Effects of Benign and Stable Environments —Comprehensive and Parsimonious Models of Entrepreneurial Competencies (Malaysia)*

Hypothesised moderated path	Baseline model		Constrained model		Chi-square difference test		
	χ^2	<i>df</i>	χ^2	<i>df</i>	$\Delta \chi^2$	Δdf	<i>p</i>
<u>Comprehensive EC* Model</u>							
1. Benign vs. Hostile environment EC → Business success	349.16	192	390.67	207	41.51	15	<.01
2. Stable vs. Dynamic environment EC → Business success	378.68	192	406.25	207	27.57	15	<.10 (ns)
<u>Parsimonious EC Model</u>							
1. Benign vs. Hostile environment EC → Business success	147.55	92	179.09	103	31.54	11	<.01
2. Stable vs. Dynamic environment EC → Business success	165.09	92	189.82	103	24.73	11	<.05

Note. * “EC” refers to entrepreneurial competencies. “ns” indicates nonsignificant.

Results summarised in Table 62 indicated that operating in a Benign versus Hostile Environment significantly moderates the relationship between competencies and success for both the Comprehensive model (critical ratio = $41.51/15 = 2.77$, $p < .01$) and Parsimonious model of entrepreneurial competencies (critical ratio = $31.54/11 = 2.87$, $p < .01$). However, the moderating effect for operating in a Stable versus Dynamic Environment was not significant for the Comprehensive model (critical ratio = $27.57/15 = 1.84$, $p < .10$) but was found to be significant for the Parsimonious model of entrepreneurial competencies (critical ratio = $24.73/11 = 2.25$, $p < .05$).

From the regression coefficients illustrated in Figures 46 and 47, it is evident that in both Comprehensive and Parsimonious models, entrepreneurial competencies have stronger effects on business success when the environment in which the firm is operating is Hostile and Dynamic compared to Benign and Stable. It can therefore be concluded that when the business environment is perceived as posing threats and risks, entrepreneurs who possess strong entrepreneurial competencies are likely to perform better than those with a lower level of such competencies. The moderating effects of Benign and Stable Environments on each of the dimensions of business success are summarised in Table 63.

The moderating effects of Benign versus Hostile Environments are illustrated in the graphs presented in Figures 48, 49, 50, and 51 for the Comprehensive model of entrepreneurial competencies and Figures 52, 53, 54, and 55 for the Parsimonious model of entrepreneurial competencies. The moderating effects of Stable versus Dynamic Environments for the Comprehensive model were nonsignificant, so graphs depicting their effects were not drawn. The moderating effects of Stable versus Dynamic Environments for the Parsimonious model are depicted in Figures 56, 57, 58, and 59.

Table 63 *The Regression Coefficients (β) of the Moderating Effects of Business Environments: Comparing Comprehensive and Parsimonious Models of Entrepreneurial Competencies (Malaysia)*

Model	Moderating effect of business environments on the relationship between:			
	EC* →Satisfaction with financial performance	EC→Satisfaction with non- financial performance	EC→Performance relative to competitors	EC→Business growth
<u>Comprehensive EC* Model</u>				
1. Benign vs. Hostile				
Benign Environment	$\beta = .23$	$\beta = .19$	$\beta = .20$	$\beta = .19$
Hostile Environment	$\beta = .28$	$\beta = .23$	$\beta = .27$	$\beta = .23$
2. Stable vs. Dynamic				
Stable Environment	(The moderating effect of Stable vs. Dynamic was nonsignificant)			
Dynamic Environment				
<u>Parsimonious EC Model</u>				
1. Benign vs. Hostile				
Benign Environment	$\beta = .24$	$\beta = .22$	$\beta = .22$	$\beta = .20$
Hostile Environment	$\beta = .30$	$\beta = .28$	$\beta = .29$	$\beta = .24$
2. Stable vs. Dynamic				
Stable Environment	$\beta = .25$	$\beta = .22$	$\beta = .22$	$\beta = .19$
Dynamic Environment	$\beta = .28$	$\beta = .26$	$\beta = .30$	$\beta = .22$

Note. * "EC" refers to entrepreneurial competencies.

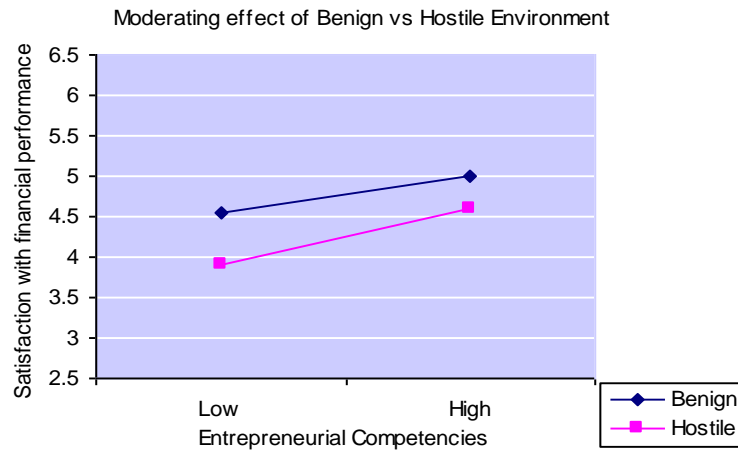


Figure 48. Moderating effects of Benign and Hostile Environments on the relationship between entrepreneurial competencies and satisfaction with financial performance—Comprehensive model (Malaysia).

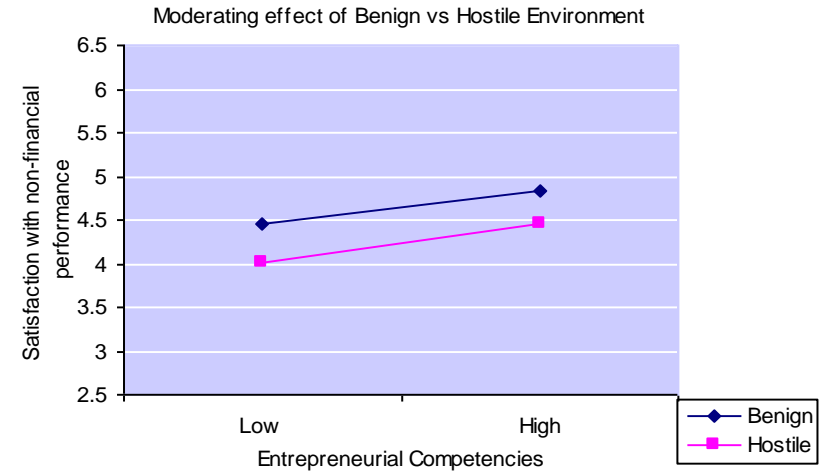


Figure 49. Moderating effects of Benign and Hostile Environments on the relationship between entrepreneurial competencies and satisfaction with non-financial performance—Comprehensive model (Malaysia).

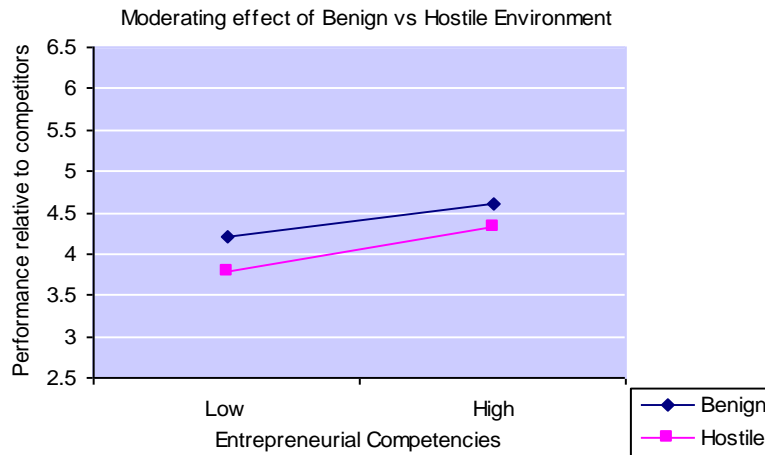


Figure 50. Moderating effects of Benign and Hostile Environments on the relationship between entrepreneurial competencies and performance relative to competitors—Comprehensive model (Malaysia).

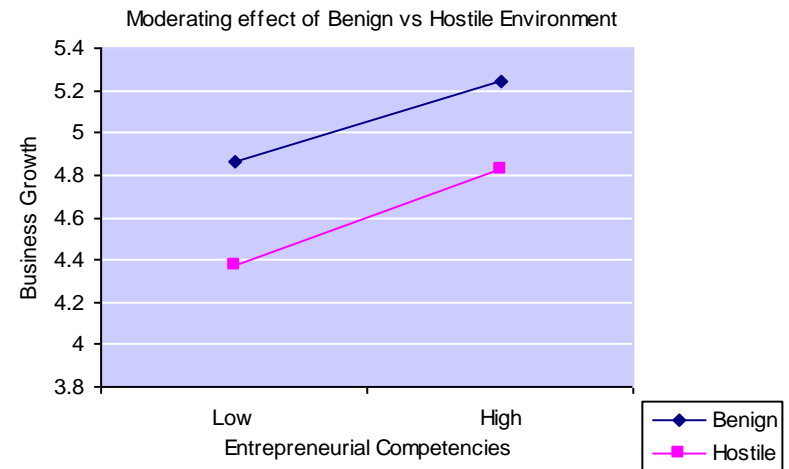


Figure 51. Moderating effects of Benign and Hostile Environments on the relationship between entrepreneurial competencies and business growth—Comprehensive model (Malaysia).

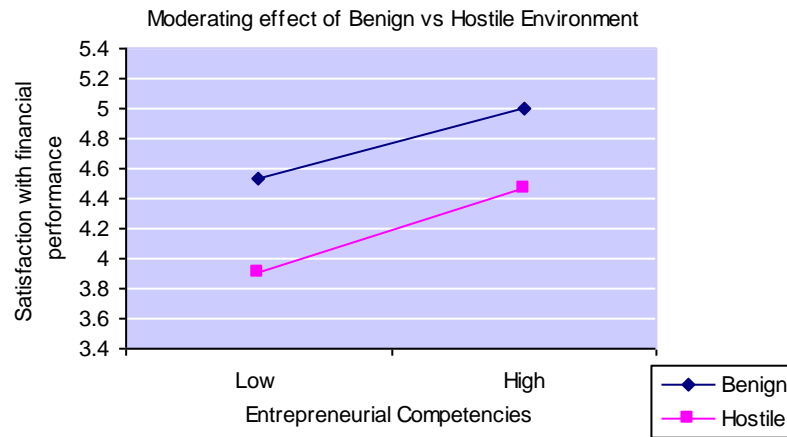


Figure 52. Moderating effects of Benign and Hostile Environments on the relationship between entrepreneurial competencies and satisfaction with financial performance— Parsimonious model (Malaysia).

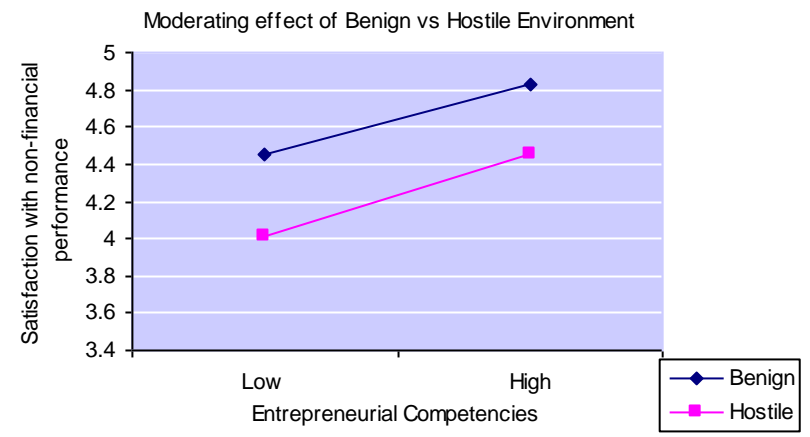


Figure 53. Moderating effects of Benign and Hostile Environments on the relationship between entrepreneurial competencies and satisfaction with non-financial performance— Parsimonious model (Malaysia).

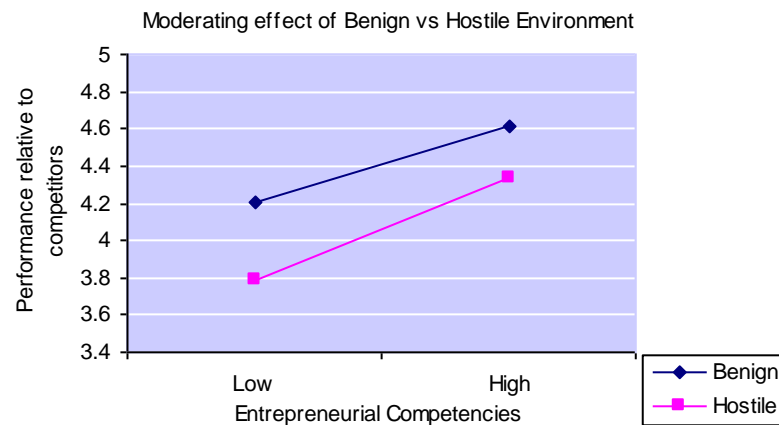


Figure 54. Moderating effects of Benign and Hostile Environments on the relationship between entrepreneurial competencies and performance relative to competitors— Parsimonious model (Australia).

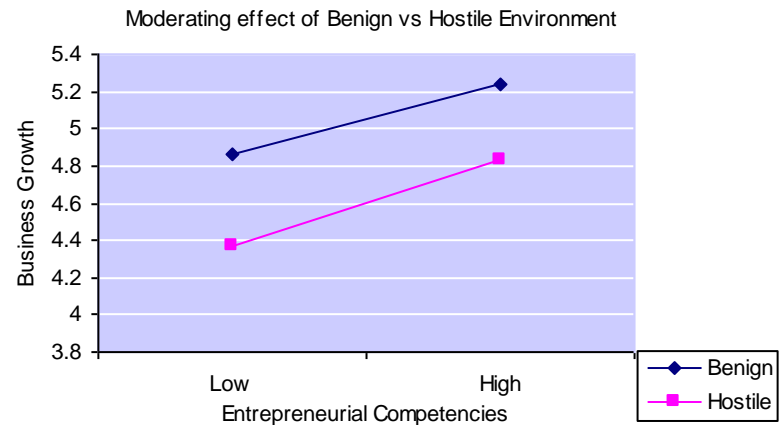


Figure 55. Moderating effects of Benign and Hostile Environments on the relationship between entrepreneurial competencies and business growth — Parsimonious model (Australia).

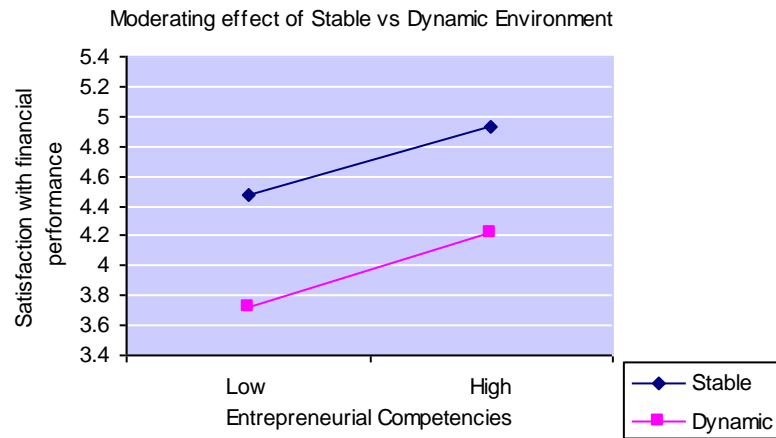


Figure 56. Moderating effects of Stable and Dynamic Environments on the relationship between entrepreneurial competencies and satisfaction with financial performance—Parsimonious model (Malaysia).

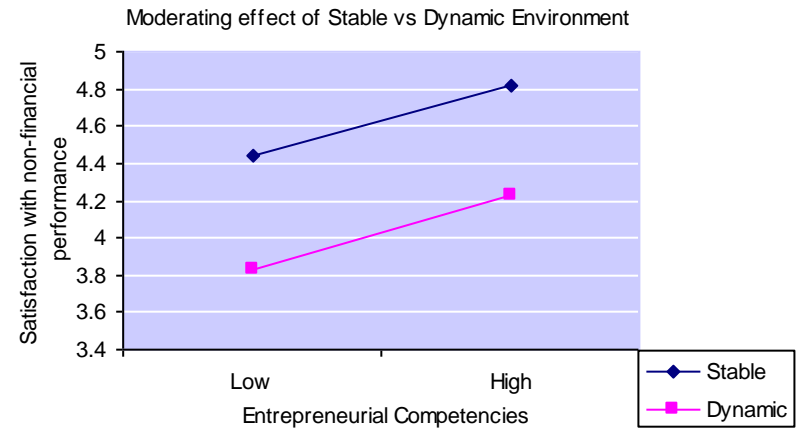


Figure 57. Moderating effects of Stable and Dynamic Environments on the relationship between entrepreneurial competencies and satisfaction with non-financial performance—Parsimonious model (Malaysia).

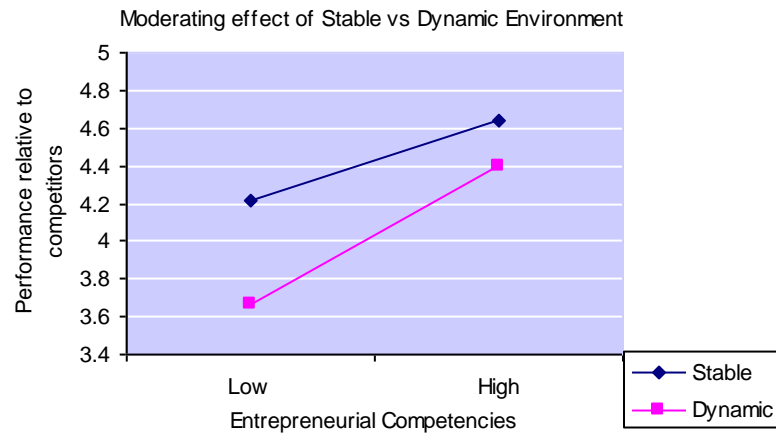


Figure 58. Moderating effects of Stable and Dynamic Environments on the relationship between entrepreneurial competencies and performance relative to competitors—Parsimonious model (Malaysia).

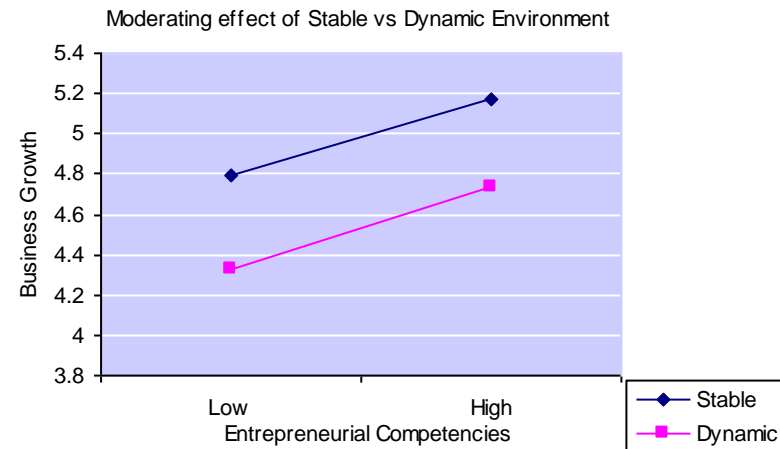


Figure 59. Moderating effects of Stable and Dynamic Environments on the relationship between entrepreneurial competencies and business growth—Parsimonious model (Malaysia).

As can be seen from the graphs, for both Comprehensive and Parsimonious model of entrepreneurial competencies, entrepreneurs with higher levels of entrepreneurial competencies perform better than those with slightly lower levels of such competencies (for both Benign vs. Hostile and Stable vs. Dynamic dimensions, except the moderating effect of Stable vs. Dynamic dimensions for the Comprehensive model which was found to be not significant). As in the case of Malaysia, for both Comprehensive and Parsimonious models, entrepreneurs who possessed high competencies were found to perform better than those with lower competencies in Hostile and Dynamic environments compared to Benign and Stable environments, particularly in terms of their performance relative to competitors. The same explanation as that offered previously for the Australian findings also applies here that is, in a Hostile Environment, it may be that the perceived high intensity of competition and risk places the entrepreneur under more pressure to be proactive and to more explicitly engage in entrepreneurial behaviour.

On the contrary, in a more Benign Environment, entrepreneurs tend to be slightly more relaxed in managing their business, possibly due to the perception of fewer threats and lower survival risks. However, the strong moderating effect of both Hostile (in Comprehensive and Parsimonious models) and Dynamic environments (in Parsimonious model) on performance relative to competitors could be explained by the strong emphasis on competitors' actions among Malaysian entrepreneurs, as identified in Study 1. Thus, it could be the case that the primary agenda among these entrepreneurs is to outperform their competitors in the industry.

In addition, as for Australia, even though the moderating effect of Stable versus Dynamic environment was significant, it was evident that the variation in terms of business performance of entrepreneurs with low and high competencies tends to be slightly lower in a Stable versus Dynamic Environment compared to Benign and Hostile environment for both Comprehensive and Parsimonious model of entrepreneurial competencies. Similarly, the explanation as that offered previously for the Australian findings also applies here, that is, operating in a Stable Environment, where there are low rates of change that take place particularly in terms of technology, competitors' actions, and customer demand, is seen to be more tolerant for entrepreneurs with poorer entrepreneurial competencies.

6.4.4 Hypotheses 4a-4b—Testing the direct effects of individual cultural orientations on competencies

Hypotheses 4a and 4b are concerned with testing the direct effects of preference for Collectivism and Tolerance for Ambiguity (among the Malaysian sample) on entrepreneurial

competencies. As can be seen from Table 60, in contrast to the findings for the Australian data, both of these hypotheses was supported, with $\beta = .16$ ($p < .05$) for the Collectivism dimension and $\beta = .17$ ($p < .05$) for the Tolerance for Ambiguity dimension for the Comprehensive model of entrepreneurial competencies. Specifically, Collectivism was most strongly associated with Personal Competency ($\beta = .16 \cdot .92 = .15$), followed by Strategic ($\beta = .16 \cdot .90 = .14$), Opportunity ($\beta = .16 \cdot .85 = .14$), Conceptual ($\beta = .16 \cdot .84 = .13$), Relationship ($\beta = .16 \cdot .83 = .13$), and Ethical ($\beta = .16 \cdot .83 = .13$) competencies. Similarly, Tolerance for Ambiguity was most strongly associated with Personal Competency ($\beta = .17 \cdot .92 = .16$), followed by Strategic ($\beta = .17 \cdot .90 = .15$), Opportunity ($\beta = .17 \cdot .85 = .14$), Conceptual ($\beta = .17 \cdot .84 = .14$), Relationship ($\beta = .17 \cdot .83 = .14$), and Ethical ($\beta = .17 \cdot .83 = .14$) competencies.

Surprisingly, however, when estimated using the Parsimonious model of entrepreneurial competencies (that comprised Strategic, Conceptual, Opportunity, Relationship, Learning, Personal, Ethical, and Familism), the direct effect of Collectivism on entrepreneurial competencies was no longer significant. It may be the case that the omission of Commitment, Organising, and Social Responsibility competencies has resulted in the nonsignificant effect of Collectivism orientation.

6.4.5 Hypotheses 5a-5d—Testing the effects of education, training, and general work experience on entrepreneurial competencies

The finding for educational level was the same as that for the Australian sample. Specifically, educational level was found to have a significant positive impact on entrepreneurial competencies for both Comprehensive and Parsimonious models of entrepreneurial competencies ($\beta = .15$, $p < .05$ for both models; see Table 60). Specifically, for the Comprehensive model of entrepreneurial competencies, the effect of education was stronger for Personal ($\beta = .15 \cdot .92 = .14$) and Strategic ($\beta = .15 \cdot .90 = .14$) competencies, followed by Opportunity ($\beta = .15 \cdot .85 = .13$), Conceptual ($\beta = .15 \cdot .84 = .13$), Relationship ($\beta = .15 \cdot .83 = .13$), Ethical ($\beta = .15 \cdot .83 = .12$), Familism ($\beta = .15 \cdot .80 = .12$), Learning ($\beta = .15 \cdot .79 = .12$), Commitment ($\beta = .15 \cdot .78 = .12$), Technical ($\beta = .15 \cdot .74 = .11$), and Organising ($\beta = .15 \cdot .70 = .11$) competencies. The weakest effect of education was on Social Responsibility competencies ($\beta = .15 \cdot .57 = .09$).

As with the Parsimonious model of entrepreneurial competencies, the effect of education was stronger for Personal Competency ($\beta = .15 \cdot .91 = .14$), followed by Strategic ($\beta = .15 \cdot .89 = .13$), Conceptual ($\beta = .15 \cdot .86 = .13$), Opportunity ($\beta = .15 \cdot .84 = .13$), Relationship ($\beta = .15 \cdot .84 = .13$), Learning ($\beta = .15 \cdot .81 = .12$), Ethical ($\beta = .15 \cdot .80 = .12$), and

Familism ($\beta = .15 \cdot .80 = .12$) competencies. The finding for education suggests that, in Malaysia, education appears to be an important factor contributing to the development of an entrepreneur's competencies. This supports Che Rose et al.'s (2006) findings which showed that SME entrepreneurs in Malaysia expressed interest to pursue further education because they believed that it could increase their knowledge and skills in business. As for the Australian data, there was no association between the other antecedents, including prior training and work experience, and entrepreneurial competencies.

6.4.6 Testing the effects of control variables on business success

As for the Australian data, the effects of firm age, firm size, and entrepreneurial experience on business success were found to be nonsignificant for the Malaysian data (see Table 60). The same explanation as that offered previously for the Australian findings also applies here. Clearly, these findings support Baum and Locke's (2004) finding that neither firm age nor firm size was associated with performance. In addition, a plausible explanation for a nonsignificant effect of entrepreneurial experience is that, although entrepreneurial experience may provide entrepreneurs with valuable "hands-on" learning that could guide them in managing the current business (Cox & Jennings, 1995), this experience may not directly influence business success. As also mentioned earlier, it can be the case that entrepreneurial experience is often a criterion that influences start-up funding success, rather than something that predicts firm performance (Brush et al., 2001).

6.5 Discussion

The present study offers new insights into the impact of entrepreneurial competencies on business success in SMEs in Australia and Malaysia. Even though the competencies framework for each country was slightly different (for both Comprehensive and Parsimonious models), the results indicate that entrepreneurs who possess high levels of the measured competencies are more likely to report business success. Evidently, the significant effect of entrepreneurial competencies on business success for both Comprehensive and Parsimonious models of entrepreneurial competencies in the model testing showed their applicability in the context studied. Furthermore, both Comprehensive and Parsimonious models produced good model fit given the sample data.

Specifically, in both countries, the twelve competency areas developed for this study - including, Strategic, Commitment, Conceptual, Opportunity, Relationship, Organising and Leading, Learning, Personal, Technical, Ethical, Social Responsibility, and Supporting and Cooperating (Australia)/Familism (Malaysia) were found to reflect a higher-order structure,

labelled “entrepreneurial competencies”, that had a strong positive relationship with business. In view of the Parsimonious model, seven competency domains including Commitment, Conceptual, Opportunity, Learning, Personal, Ethical, and Social Responsibility competencies were perceived as more important in Australia. By contrast, in Malaysia, eight competency areas including Strategic, Conceptual, Opportunity, Relationship, Learning, Personal, Ethical, and Familism were perceived as more important.

Clearly, this study highlights the prominent role of SME owner-managers in managing their business, and contradicts the argument that it is the environment that is most influential in determining the success or failure of an organisation. This finding is consistent with Man’s (2001) finding that, for Hong Kong SMEs operating in the service sector, entrepreneurial competencies were positively associated with business success. Moreover, the result provides some empirical validation of the framework developed by Bird (1995) that postulates a causal link between entrepreneurial competencies, as a single construct, and business success.

The present study also provides evidence to support Wasilczuk’s (2000) contention that entrepreneurs are capable of minimising the negative impact of the business environment through their skills and abilities (competencies). Specifically, there was good evidence in the present study to suggest that, particularly in challenging business environments, entrepreneurs possessing higher level of competencies achieved significantly better business success than those with lower level of such competencies. The moderating effects of both dimensions of business environments were significant for the Australian model and for the Malaysian model. However, the moderating effect of the Stable versus Dynamic environment only approached significance ($p < .10$) for the Comprehensive model but was found to be significant when the Parsimonious model of entrepreneurial competencies was used.

Another interesting finding was the significant influence of individual cultural orientations on the entrepreneurial competencies in the Malaysian sample. Singelis and Brown (1995) identify that individuals’ behaviours are mainly influenced by their dominant cultural values. These values also influence the way an individual perceives acceptable conducts, especially in an organisational setting (Hofstede & Bond, 1988). Taken in the context of the present study, individual values are predicted to influence the formation of entrepreneurial competencies. While cultural orientation is significantly linked with competencies in the Malaysian model, such association can not be established in the Australian model. Possibly, the existence of a set of beliefs and values unique to entrepreneurs (i.e., high internal locus of control, opportunity

recognition, and pro-activeness, as argued by McGrath and McMillan (1992), may override the impact of culture on entrepreneurs' behaviours.

The present study also found support for the significant impact of education on the development of entrepreneurial competencies for both Australian and Malaysian models. The result showed that entrepreneurs with more education will report possessing greater competencies. This is consistent with Haynes's (2003) contention that education increases the entrepreneur's knowledge about the business and the industry, which may in turn improved entrepreneurs' skills and abilities. Correspondingly, Brush et al. (2001) argue that formal education is an important personal resource for entrepreneurs because it provides good technical knowledge that may be helpful in identifying business opportunities. Furthermore, education is seen as increasing the opportunity for entrepreneurs to engage in networking, to enhance their credibility and their access to funding.

Surprisingly however, it was revealed that neither training before start up nor after start up had any significant impact on entrepreneurial competencies in the Australians or Malaysians. Previous work experience was also found to have no significant impact on entrepreneurial competencies. These findings contradict those of earlier studies that have identified training and previous work experience as important sources of skills and technical knowledge for entrepreneurs (Brush et al., 2001). This is surprising and raises an important question regarding the value of the formal training undertaken by these entrepreneurs and whether the "right things" were taught in the training programmes offered to these entrepreneurs. It also indicates that perhaps previous general work experience may not be as significant as the experience gained while managing the business, as suggested by some male entrepreneurs from Australia and Chinese entrepreneurs from Malaysia in Study 1. This is also consistent with the notion of "learning by doing" proposed by Cope and Watts (2000) which is perceived as one of the most critical part of entrepreneurial learning process.

6.6 Conclusion

In conclusion, the present study indicates that self-reported business success can be linked to the self-reported possession of better competencies in both Malaysian and Australian entrepreneurs (for both Comprehensive and Parsimonious models). High shared loadings across competency areas suggest the existence of an over-riding "general factor" (that is reflected in a higher-order structure), possibly comparable in format or content to the "g" factor in models of intelligence (Blaha & Wallbrown, 1991). The identification of competencies that are highly prevalent in Australia and Malaysia (as reflected in the

Parsimonious model) enhances the usability of these results for educational and training planning purposes in both contexts.

The nonsignificant effect of cultural orientations on entrepreneurial competencies in the Australian model warrants further discussion. While there is a possibility of the existence of “entrepreneurial values” that may surpass the influence of cultural norms, there is also a chance that the existing measure utilised was unable to capture the subtleties of the effect of culture on entrepreneurial competencies. This is obviously an area worth exploring further.

The study also highlights the role of entrepreneurial competencies in mitigating the negative influence of a challenging business environment (i.e., Hostile and/or Dynamic) on business performance, particularly when the Parsimonious model of entrepreneurial competencies was used. It was evident that entrepreneurs with higher level of entrepreneurial competencies were found to perform better than those with lower competencies in both Hostile and Dynamic Environments. Together these results indicate that entrepreneurial competency is an important correlate of success, regardless of culture, and that appropriately skilled SME managers will be able to effectively manage challenging business environments.

Chapter 7

Entrepreneurial Competencies as Drivers of SME Success in Australia and Malaysia: Discussion and Conclusion

7.1 Introduction

At the outset of this study, it was stated that the primary aim of this research was to evaluate the relationship between entrepreneurial competencies and business success among SME owners in Australia and Malaysia. The research employed a “mixed-method” approach. Study 1 utilised a qualitative approach to obtain evidence about the competencies perceived to be important by entrepreneurs and to ascertain the extent to which these competencies were consistent with competencies identified in existing frameworks. Study 2 adopted a quantitative approach to validate the entrepreneurial competencies framework derived from Study 1 and, subsequently, to test its link with business success using a large sample of entrepreneurs operating in Australia and Malaysia. The conceptual framework also incorporated other covariates. These consisted of the nature of the business environment (Benign vs. Hostile and Stable vs. Dynamic), the cultural orientations of the entrepreneurs (Individualism vs. Collectivism and Tolerance for Ambiguity vs. Uncertainty Avoidance), and various demographic variables thought to be associated with entrepreneurial competencies (education, training before and after start up, and general work experience).

In the present and final chapter of the thesis, the results of the research are considered in terms of their theoretical and practice implications. The chapter also draws on insights obtained from the research to offer a number of directions for future research in this area.

7.2 A Comparison of Models of Entrepreneurial Competencies for Australian and Malaysian SMEs

As stated, the research questions addressed in the thesis were as follows:

1. What are the competencies perceived to be important by entrepreneurs in SMEs in Australia and Malaysia? Are there competencies that are perceived to be important by entrepreneurs operating in these contexts that are not included in existing models?
2. Are there cross-cultural differences in the competencies identified by Australian and Malaysian entrepreneurs?
3. To what extent does the competency model developed in the qualitative study (Study 1) predict SME business success in Australia and Malaysia (Study 2)?

4. To what extent does the business environment directly or indirectly influence business success in SMEs?
5. To what extent do the individual cultural orientations of entrepreneurs influence the behaviours reflecting entrepreneurial competencies?
6. To what extent do education, training before and after start up, and prior work experiences influence the development of entrepreneurial competencies?

The following sub-sections discuss the overall findings of the research by integrating and comparing the results of Study 1 and Study 2.

7.2.1 Comparing models of entrepreneurial competencies between cultures

The findings of Study 1 provided some evaluation of the applicability of Man's (2001) model of entrepreneurial competencies in Australia and Malaysia. Competencies identified by Man as being relevant to effective performance in entrepreneurs were also identified by the Australian and Malaysian entrepreneurs who were interviewed in Study 1. Specifically, behaviours indicating satisfactory performance were identified in the following competency domains included in Man's model: Strategic, Commitment, Conceptual, Opportunity, Organising, Relationship, Learning, and Personal, and Chandler and Jansen's (1992) Technical Competency. Importantly, Study 1 also highlighted some additional competency domains, namely, Ethical and Social Responsibility (in Australia and Malaysia) and Familism (for Malaysia only). With respect to the former, the emergence of these two domains may reflect contemporary business concerns about the "Triple Bottom Line", a framework which suggests that for a firm to be sustainable, it should incorporate not only economical, but also social and environmental considerations in their decision making (Norman & MacDonald, 2004). With respect to the latter, the emergence of Familism as a competency domain unique to Malaysia is consistent with the importance attributed to family in this cultural context. This latter finding also highlights the critical importance of cultural factors when developing models that seek to explain business performance and the variables that influence it.

The validation, in Study 2, of the revised model of entrepreneurial competencies generated two well-fitting models, a "Comprehensive" model and a "Parsimonious" model (described in Chapter 5). Moreover, within each of these "higher-order" models, separate best fit models were identified for the Australian data, on the one hand, and the Malaysian data on the other. (These models are discussed in the next section in terms of their similarities and differences). This latter finding further attested to the influence of national culture on the behaviours reflecting entrepreneurial competencies in both countries.

Given the theoretical significance of both the Comprehensive and Parsimonious models, along with the strong psychometric evidence (reliability, validity, and goodness-of-fit statistics) of the robustness of each model, outcomes using each model were described in the model testing. Theoretically, the Comprehensive model advocates the inclusion of all possible competencies that might be required by entrepreneurs, taking into account contemporary concerns regarding what constitutes good business practice. The omission of any of these competencies is seen as portraying a potentially misleading picture of what is required of entrepreneurs operating in the current environment. On the other hand, the Parsimonious model provides a simpler and clearer depiction of the similarities and differences in the competency needs of entrepreneurs operating in Australia and Malaysia. Without discounting the importance of all twelve of the competency areas included in the Comprehensive model, it is believed that the Parsimonious model responds to the call for a robust model of entrepreneurial competencies that enables entrepreneurs and training providers to more easily prioritise the competencies that are important to SME success in each country.

The above models of entrepreneurial competencies, that were identified and validated in the present study, are illustrated in Figures 60, 61, 62, and 63. Further discussion of the similarities and differences between Australia and Malaysia in regards to the competencies identified in the Comprehensive and Parsimonious models is provided in the next subsections.

7.2.1.1 The Comprehensive model of entrepreneurial competencies

It is important to note that even the Comprehensive model of entrepreneurial competencies indicated competency differences between Australia and Malaysia (see Figures 60 and 61). In Study 1, the Australian entrepreneurs who were interviewed did not identify Familism as being important to business success. However, in Study 2, there were four behaviours that could be described as being consistent with Familism that were considered important by Australian entrepreneurs. These consisted of “cooperating, sharing resources with close associates”, “identify and seek help from employees that one can trust”, “getting support and advice from family members”, and “share knowledge and resources with close associates”. It should be noted that, because of the exclusion from the Australian model of two items reflecting the importance of “family” (i.e., “cultivating an entrepreneurial culture in the family” and “building a strong business base for the family”), for the Australian model, Familism was renamed Supporting and Cooperating. This change helped to differentiate the two countries in terms of the content of this competency domain.

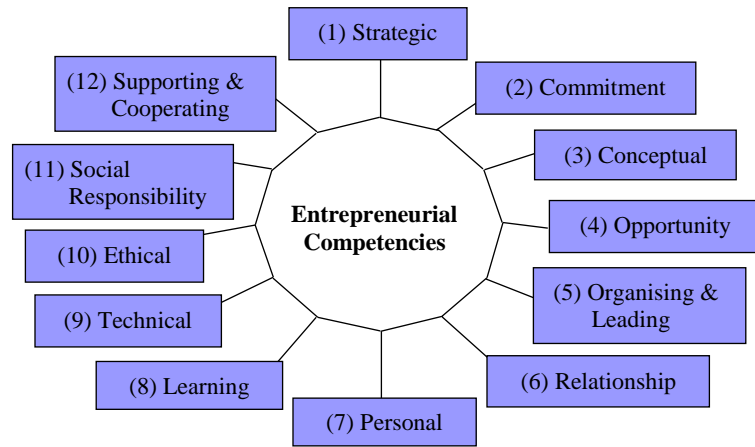


Figure 60. The Comprehensive model of entrepreneurial competencies—12 competency areas (Australia).

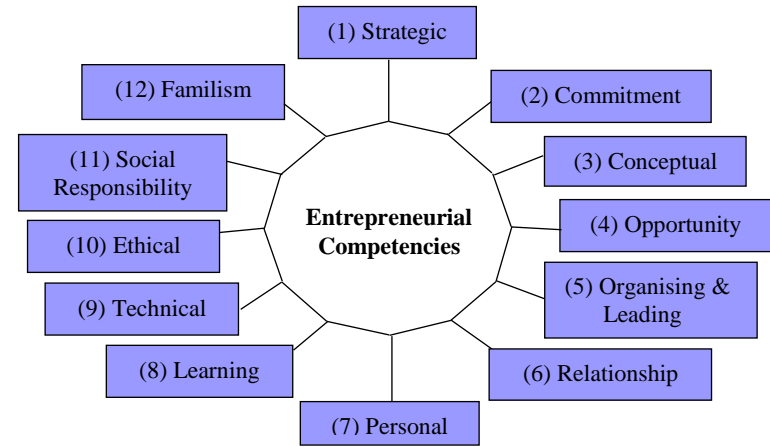


Figure 61. The Comprehensive model of entrepreneurial competencies—12 competency areas (Malaysia).

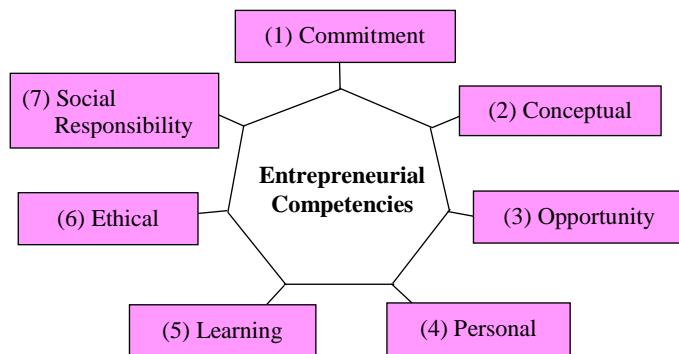


Figure 62. The Parsimonious model of entrepreneurial competencies—7 competency areas (Australia).

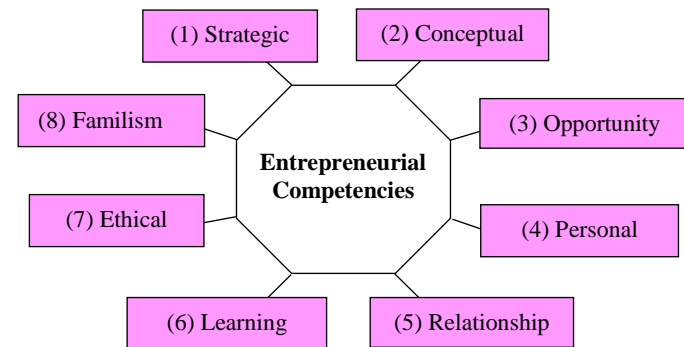


Figure 63. The Parsimonious model of entrepreneurial competencies—8 competency areas (Malaysia).

The omission from the Australian model of the two items related to “family” possibly reflects the stronger focus on Individualism in Australia than in Malaysia (Hofstede, 1991). This contrasts with a more collectivist orientation in Malaysia (Abdullah, 1992) that is likely to be associated with a prioritisation of the family.

It is important to note that, even though Familism has been viewed as an element of the collectivist cultures (Park, 2003), there have been no previous studies that have linked this competency domain to entrepreneurial success. At the same time, however, Pearson and Chatterjee (2001) have stated that the essence of success for the Asian entrepreneurship has been collective family support and network. Similarly, Taylor, Jones, and Boles (2004) have argued that “social capital” – which includes developing interpersonal trust and obtaining support from family and close friends – is linked with business performance. Study 1 indicated that, among Malaysian entrepreneurs, the practice of sharing resources and cooperating with family members and close associates was seen as critical to their success.

Both Study 1 and Study 2 indicated that the content of most of Man’s (2001) other competency domains was similar across countries. This suggests that the behaviours associated with entrepreneurial competencies, in general, show considerable consistency across cultures. Similarly, McGrath et al. (1992) and Baum, Olian, Erez, Schnell, Smith, Sims, et al. (1993) found that entrepreneurs have more in common with their international counterparts than with non-entrepreneurs from their own culture.

7.2.1.2 The Parsimonious model of entrepreneurial competencies

As can be seen in Figure 62, the Parsimonious model of entrepreneurial competencies for Australia comprised seven competency areas including Commitment, Conceptual, Opportunity, Learning, Personal, Ethical, and Social Responsibility. Figure 63 shows that, for Malaysia, the model comprised eight competency areas including Strategic, Conceptual, Opportunity, Relationship, Learning, Personal, Ethical, and Familism. Australia and Malaysia therefore had five competency areas in common, namely, Conceptual, Opportunity, Learning, Personal, and Ethical, possibly suggesting the universal nature of these competencies areas in the contexts studied. The competency areas that differentiated the two countries were Commitment and Social Responsibility (for Australia only), and Strategic and Familism (for Malaysia only).

The exclusion of the Strategic Competency domain from the Australian model may be explained by a tendency among Australian entrepreneurs to conduct business and make business decisions on the basis of “gut instinct”. This interpretation is supported by comments from a number of the Australian entrepreneurs interviewed in Study 1 (refer to

Section 4.6.1.3). This is consistent with the findings of a recent study by Lin, Huang, and Tseng (2007). Specifically, their study that undertook semi-structured interviews among 10 SMEs in Australia has revealed that these entrepreneurs relied heavily on their “gut instincts” in making decisions, particularly in regards to the planning and implementation of e-commerce adoption in their businesses. Additional support for this interpretation can be found in Figure 3 (Chapter 4). This figure indicates that the Australian entrepreneurs who were interviewed reported less frequent conducting of research and calculation of costs and benefits when making business decisions than did their Malaysian counterparts. Consistent with this weaker commitment to strategic issues, there was also a tendency for these Australian entrepreneurs to indicate that they did not pay much attention to their competitors’ strategies (see Section 4.6.1.1). In contrast, among the Malaysian entrepreneurs who were interviewed, there was evidence of a stronger focus on the actions of competitors, along with a more cautious attitude toward risk taking, which led these entrepreneurs to focus on devising appropriate strategies to outperform competitors and minimise risks (refer to Study 1). The Malaysian entrepreneurs also reported using various other tactics to reduce risks, including devising strategies to prepare for the “worst scenario”, conducting research before proceeding with an investment, and determining strategic actions by weighing costs and benefits. Tactics such as these all serve to define the Strategic Competency domain, thereby explaining the inclusion of this domain in the Malaysian model.

It is somewhat surprising that Commitment Competency domain appeared in the Australian model but not in the Malaysian model. This result may possibly suggest that that the behaviours defining this domain, which include dedication to making the business work, determination not to let the business fail, possession of a strong drive to succeed, commitment to long term business goals and the production of quality goods or services, are perceived to be less crucial in Malaysia than behaviours associated with other competency areas. In contrast, the Personal Competency domain constituted the most important component of total entrepreneurial competency for Malaysian participants ($\beta = .92$, in the Comprehensive model; $\beta = .91$, in the Parsimonious model, see Figures 44 and 45).

The inclusion of the Relationship and Familism Competency domains in the Malaysian model, but not in the Australian model, possibly reflects the more collectivist orientation that has been observed to characterise Malaysian society (Hofstede and Bond, 1988). Behaviours included in both the Relationship Competency domain (i.e., maintaining a personal network of work contacts, interacting with others, developing long term trusting

relationships with others, and creating a positive work climate through discussion) and the Familism Competency domain (i.e., cultivating an entrepreneurial culture in the family, building a foundation for the next generation to continue the business, and getting support and advice from family and close associates) are consistent with a strong commitment to a collectivist philosophy that values family and close associates (Triandis, 1995).

While the Social Responsibility Competency domain did appear in the Parsimonious model for the Australian data, it did not appear in the corresponding model for the Malaysian data. This was somewhat surprising given the results of Study 1 which indicated that both Australian and Malaysian entrepreneurs regarded issues of Social Responsibility as relevant to their business success. A possible explanation is that the Malaysian entrepreneurs, being part of a collectivist society, placed a stronger emphasis than their Australian counterparts on the welfare of the in-group (i.e., family and close associates), as opposed to the out-group (i.e., society in general). This hypothesis is consistent with observations by Triandis and Suh (2002) that collectivist cultures are associated with interdependence and concern for the in-group, along with a commitment to actively seeking to protect the welfare of the in-group over that of the out-group. This exclusive concern for family and close associates may well explain the inclusion of the Familism Competency domain, but not the Social Responsibility Competency domain (which focuses on employees, customers, and society in general), in the Malaysian model.

Another possible explanation for the omission of the Social Responsibility Competency domain in the Malaysian model is that, in Malaysia, public concern with more general, societal well-being may be less important than it is in Australia. This is because the focus on social responsibility issues in Malaysia is often directed to large firms compared to smaller firms (see for example, Abdul Rashid & Ibrahim, 2002; P. Thompson & Zakaria, 2004). It may also be that Malaysian entrepreneurs may perceive that the costs of engaging in socially responsible behaviours may outweigh the benefits and that such behaviours have no relevance to business success; this, in turn, may have led to a lack of motivation to engage in such behaviours. It is important to remember that the data being referred to here describe those behaviours that participants think are linked to business success. It is possible that Malaysian respondents, while valuing social responsibility behaviours in general, do not see them as critical to the achievement of SME success. By contrast, a growing commitment to broader definitions of both business success (Triple Bottom Line) and business responsibility (community obligations) in Australia may explain the emergence of this factor in the Australian model. A study by Madden, Scaife, and Crissman (2006, p. 57) found evidence to suggest that in Australian SMEs, “there was

a genuine enthusiasm for the notion of corporate social responsibility which was viewed as duty”. Similarly, in a survey of 9,000 small businesses conducted by the Council of Small Business Organisations of Australia (2000), it was found that two-thirds of the respondents revealed a commitment to behaviours indicative of strong social responsibility, especially behaviours associated with supporting the local community.

In both Australia and Malaysia, the Organising and Leading Competency domain, as well as the Technical Competency domain dropped out of the Parsimonious model. This result might partly be explained by the nature of the businesses that participated in Study 2. The majority of entrepreneurs in the sample – more than 70% for both Australia and Malaysia – operated businesses in the service sector. In a recent study by Ayadurai and Ahmad (2006), it was found that female entrepreneurs operating SMEs in the service sector tended to rate management (reflecting Organising and Leading Competency) and technical skills (reflecting Technical Competency) as less important than behaviours such as a preparedness to innovate, take risks, network, and persist. Moreover, Technical Competency, as defined in the current study by behaviours such as “use specific techniques/tools relevant to the business” and “utilise technical knowledge relevant to the business” may have only limited relevance to the service sector.

In sum, several important conclusions can be drawn from the identification of both the Comprehensive and Parsimonious models in the Australian and Malaysian contexts. Firstly, the Comprehensive model of entrepreneurial competencies revealed that all twelve competency areas had some role in defining overall entrepreneurial competency in the Australian and Malaysian populations studied. Importantly, however, the behaviours that defined two of these competency domains, namely, Organising and Leading and Familism (renamed Supporting and Cooperating for Australia), appeared to be somewhat different for the two countries. The other ten competency areas identified in the Comprehensive model appeared to be invariant across countries. Secondly, the Parsimonious model of entrepreneurial competencies showed that some competency areas were viewed as important to success in both countries (i.e., Conceptual, Opportunity, Personal, Learning, and Ethical) while others were country-specific (i.e., Relationship, Strategic, Familism, Social Responsibility and Commitment). It was suggested that these differences could be traced to cultural variations in values between the two countries.

7.2.2 The influence of entrepreneurial competencies on business success

Both the Comprehensive and Parsimonious models of entrepreneurial competencies were used to examine the hypothesised relationship between entrepreneurial competencies and business success in Australia and Malaysia. The findings of the present study

confirmed that entrepreneurial competencies were strong predictors of business success in both countries. However, it was evident that the relationship between competencies and business success, for both the Comprehensive and Parsimonious models, was stronger in Australia than in Malaysia (refer to Tables 56 and 60). A possible explanation for this outcome is that the greater focus on personal effort and responsibility among the Australian entrepreneurs, associated in Study 1 with an internal locus of control, may have resulted in Australian participants attributing success more to their own capabilities. For Malaysian participants however, being part of a collectivist society in which humility, modesty, and indirectness are greatly valued (Abdul Rashid & Ho, 2003), there may have been some reluctance to rate themselves highly in the various competency areas. In addition, among Malaysian entrepreneurs, there was evidence that Malays viewed their success as arising from their religious faith – it was “God’s Will” – while Chinese ascribed a strong role to “luck” (refer to Chapter 4, Section 4.6.5.2). On the basis of these findings, it might be concluded that, for Malaysian entrepreneurs, it is not only the entrepreneur’s skills that matter, but also external factors such as God’s Will and luck. Notwithstanding the difference between Australia and Malaysia in the predictive power of the relationship between entrepreneurial competencies and business success, the significant finding for the model for each country conveys an important message to all business practitioners regarding the importance of personal capabilities in determining business success. The results confirm Lipparini and Sobrero’s (1994) contention that, in SMEs, competitive advantage is achieved and sustained through the ability of the entrepreneur ability, despite constraints associated with firm size. Similarly, Westerberg, Singh, and Hackner (1997) emphasises the critical role of the CEO in acquiring and developing knowledge, skills and abilities that influence a firm’s success. These findings, considered together with the findings of the present research that, for both the Australian and Malaysian models, entrepreneurial competencies had a substantial direct impact on business success suggest that entrepreneurs should engage in skill development as a critical first step towards business success.

7.2.3 The direct and moderating role of perceived business environment

The effect of the business environment on the link between entrepreneurial competencies and business success in both countries was investigated in Study 2. In the Comprehensive model, environmental Stability was found to be positively related to business success in both Australia and Malaysia; no such relationship was found for environmental Benignity.

The effect of environmental Stability remained significant for the Parsimonious model, for both Australia and Malaysia. Interestingly, for the Australian model (but not for the Malaysian model), the effect of environmental Benignity became significant. The nonsignificant effect of Benign environment in the Malaysian context can be explained by the exclusion of items in the survey that reflect other constraints facing Malaysian SMEs such as the lack of financing, difficulties in exploiting technology, and a heavy regulatory burden (Saleh & Ndubisi, 2006a; S.-D. Wang, 2003). Specifically, Wang (2003, p. 77) has argued that it is often the case that in Malaysia, the “financial institutions assess SMEs as being inherently high-risk borrowers owing to their low capitalisation and limited assets, vulnerability to market fluctuations and high mortality rates”. Thus, even though the business environment is perceived as Benign, which is measured by low competition and high customer loyalty in this study, the limitation imposed by these other factors (that were not included in the survey) may have impacted the perception of business success among Malaysian entrepreneurs. As such, it is considered important for future studies to include these other factors (i.e., issue on financing, exploitation of technology, and government regulation) in measuring the Benignity versus Hostility of business environment, particularly in the context of Malaysia.

In addition to the direct effects (of business environment on business success) described above, the present study also provided evidence of the moderating effect of the business environment. In both the Comprehensive and Parsimonious models, whether the environment was Benign or Hostile and Stable or Dynamic (except for the effects of Stability and Dynamism in the Comprehensive model for Malaysian data) significantly moderated the relationship between entrepreneurial competencies and business success. In general, the results indicated that entrepreneurs who possessed a higher level of the measured competencies performed better than entrepreneurs with a lower level of these competencies in situations where the environment was perceived as being Hostile (as opposed to Benign) and Dynamic (as opposed to Stable). In other words, entrepreneurs with strong entrepreneurial competencies appear to be in a better position than their less competent counterparts to face a turbulent and uncertain business environment. An implication of this finding is that entrepreneurs in SMEs may have the ability to minimise the negative impact of a turbulent and hostile environment on business success via the display of appropriate competencies. This is consistent with research by Westerberg et al. (1997) that highlighted the significant role of the CEO in determining a firm’s ability to survive “turbulent” situations.

Considered as a whole, the above evidence supports the conclusion that environmental factors do influence the viability of SMEs. At the same time, however, the direct effect of overall entrepreneurial competency on firm success was found to be stronger than the influence of the environment, whether directly on business success, or as a moderator of the relationship between entrepreneurial competency and success. Based on this evidence, it can be concluded that even though external factors play a part in determining firm-level performance, this outcome is influenced more by the capabilities of the entrepreneur. The findings therefore provide limited support only for an environmental determinism perspective on SME success which is based on the assumption that it is the environment that determines the survival of an organisation and that the entrepreneur is simply a passive respondent to external forces. This conclusion is consistent with Choi and Shepherd's (2004) suggestion that the successful exploitation of opportunities or resources in a dynamic environment (of the kind frequently confronting SMEs) is critically dependent upon an entrepreneur's management capabilities. Similarly, Baum et al. (2001) found that environment was not the primary predictor of business success in smaller firms, but rather, it had an indirect effect through its influence on the strategies used by the organisation. According to these authors, the relatively low impact of business environment may well suggest that the fate of the business, in smaller firms in particular, is largely in the hands of the owner.

7.2.4 The influence of an individual cultural orientation on entrepreneurial competencies

As indicated in Chapter 3, the theoretical framework included a focus on the entrepreneur's cultural orientation, the rationale being that elements embedded in culture are thought to shape an individual's thinking and behaviour, and determine what constitutes acceptable and unacceptable practice (Hofstede & Bond, 1988; Singelis & Brown, 1995; Triandis & Suh, 2002). In this study, it was hypothesised that the cultural orientation of the entrepreneur might affect the behaviours that delineate competencies. The descriptive analyses showed that the Australian entrepreneurs were individualistic and tolerant of ambiguity, whereas the Malaysian entrepreneurs were collectivist and also tolerant of ambiguity. Although these findings are consistent with those reported elsewhere in the literature (A. Abdullah & Lim, 2001), there was some evidence in the present study of a cultural shift on the Uncertainty Avoidance dimension among the Malaysian entrepreneurs. Compared to previous research suggesting that Malaysians generally have a tendency to avoid uncertainty (Lim, 2001), the Malaysian entrepreneurs in this study were found to have somewhat more tolerance for ambiguity than expected. A possible

explanation for this is that entrepreneurs may be more tolerant of ambiguity than the general population. Given the finding that entrepreneurs in both countries were tolerant of ambiguity, it can be argued that entrepreneurs may share some common values across cultures compared to non-entrepreneurs (McGrath, MacMillan, & Scheinberg, 1992). This is consistent with the “universalist” position that views entrepreneurs as a homogeneous group unified by their role rather than their culture (J. R. Baum et al., 1993; Mitchell et al., 2000). Another possible explanation is that the spread of, and exposure to, western entrepreneurship practices may have contributed to a degree of cultural modification whereby entrepreneurs operating in non-western contexts have come to accept non-native cultural values that are more in line with the current needs of entrepreneurs, that is being more tolerant of ambiguity. As argued by Herbig and Dunphy (1998), cultural values influence behaviour when outcomes from such an influence are positive. When specific values are not linked to positive outcomes, they may be abandoned. The shift from demonstrating a degree of uncertainty avoidance to the acceptance of uncertainty shown by the Malaysian entrepreneurs in the present study, although slight in its absolute size, may reflect the need for entrepreneurs to respond to current business pressures.

The link between entrepreneurs’ cultural orientations (in the present study, Individualism vs. Collectivism and Tolerance for Ambiguity) and entrepreneurial competencies was also assessed for each country. It was found that both Collectivism and Tolerance for Ambiguity were positively associated with entrepreneurial competencies in Malaysia, but not in Australia (refers to Australian entrepreneurs who held Individualism and Tolerance for Ambiguity orientations). It appears, then, that among Malaysian entrepreneurs, entrepreneurial competencies may be underpinned and enhanced by adherence to cultural norms. This is consistent with the previous findings which found that cultural values have a profound effect on all aspect of management behaviour (Adler, 1997; Bartlett & Ghoshal, 1997; Mead, 1994). Surprisingly, however, in the Parsimonious model of entrepreneurial competencies for Malaysia, the effect of Collectivism on entrepreneurial competencies was nonsignificant, whereas the effect of Tolerance for Ambiguity remained significant. As suggested in Chapter 6, this change in the Collectivism result for Malaysia might have been due to the exclusion, in the Parsimonious model, of the Organising and Social Responsibility Competency domains, each of which was reasonably influenced by Collectivism in the Comprehensive model. For Australia, the results were unchanged.

The failure to find a link between cultural values and competencies in Australia warrants comment, both theoretical and methodological. Theoretically, McGrath and

MacMillan (1992) have argued for the existence of a set of beliefs among entrepreneurs, which they refer to as “entrepreneurial values” (that reflect internal locus of control, innovativeness, creativity, and pro-activeness), that override cultural norms. More recently, Fontaine (2007) states that his seven years of work on cultural values has found evidence to suggest that contextual factors (i.e., national policies and organisational factors) are more important in explaining the variations in work values/behaviours than culture *per se*. This may, to some extent, explain the nonsignificant effect of individual cultural orientations on behaviours delineating competencies among Australian entrepreneurs. Methodologically, it is also possible that the Australian data failed to capture the subtleties of the effect of culture on each of the separate competency areas. With the generation of a higher-order structure of entrepreneurial competencies, the direct effects of Individualism and Tolerance for Ambiguity on each competency area could not be directly examined. Thus, the present study could do no more than examine the effects of cultural orientations on the general model of entrepreneurial competencies.

A better understanding of the effect of culture on entrepreneurial competencies and success in SMEs might be achieved if future research focused not only on individual cultural values (as in the present study), but also on the “fit” between the individual’s (entrepreneur’s) cultural values and the cultural values of the society in which (s)he is operating. This approach would entail exploring whether the degree of similarity (or alternatively, mismatch) between individual and societal values moderated, or mediated, the link between competency and business performance.

7.2.5 The influence of education, training, and general work experience on entrepreneurial competencies

The effect of education on entrepreneurial competencies was significant in both the Australian and Malaysian Comprehensive models. Specifically, higher education was associated with self-report of better developed entrepreneurial competencies. This finding is consistent with Haynes’s (2003) finding that education enhances the knowledge and skills of entrepreneurs, which in turn can enhance the development of entrepreneurial competencies. Surprisingly however, in the Parsimonious model, the effect of education on entrepreneurial competencies was nonsignificant for Australia. As mentioned, this result could reflect the strong relationship between education and the Strategic as well as Organising and Leading Competency domains, domains that were not retained in the Parsimonious model for Australia.

The effect of training, before and after start-up, on entrepreneurial competencies was nonsignificant for both Australia and Malaysia (and for both the Comprehensive and

Parsimonious models). This is somewhat surprising given evidence that training can enhance the knowledge, skills, and business management abilities of entrepreneurs and that it may also, to a certain degree, change the mindset and attitudes that entrepreneurs have towards work (Brush et al., 2001). At the same time, however, a recent study by Storey (2004) showed that, notwithstanding the possible beneficial effect of training, within SMEs, people are not very committed to formal training; instead they value “life experience” and learning “on the job”. This is consistent with Webster, et al.’s (2005) observation that small businesses tend to focus on the “informal transfer” of skills within the organisation (i.e., between employees), rather than engage in formal training which may be perceived as being largely irrelevant. These authors go on to argue that, to be of value, small business training should:

1. take the form of just-in-time modules presented in short chunks and to the point;
2. be relevant to the individual business and address specific business needs;
3. provide ongoing support and advice;
4. be affordable and available; and
5. demonstrate a strong link to recognisable business outcomes (p. 553).

In both Australia and Malaysia, and for both the Comprehensive and Parsimonious models, the effect of previous work experience on entrepreneurial competencies was also found to be nonsignificant. This suggests that previous general work experience may not be as valuable in terms of the development of entrepreneurial competencies as the more specific experience gained while managing the business. This result is consistent with comments made by some of the Australian and Malaysian-Chinese entrepreneurs in Study 1 (see Section 4.3.1). It may also be that “learning by doing” as proposed by Cope and Watts (2000) is seen as a more critical component of entrepreneurial learning. Likewise, Gibb (1997) has contended that the primary method of learning among SME business owners is via “hands-on” problem-solving and crisis resolution.

7.3 Theoretical and Practical Implications

7.3.1 Theoretical implications

The current study explores the cross-cultural validity of a model that attempts to link entrepreneurial competencies to business success. The integration of cross-cultural management theory with a competency model is an attempt to differentiate the effects of context, measured both broadly (via country, i.e., Australia and Malaysia) and more narrowly (via business environment), on entrepreneurial management behaviour. With the notable exception of Man’s (2001) research, previous work on entrepreneurial competencies has been based largely on a western perspective. The current study was

concerned with exploring whether western conceptualisations of competencies, and their links to business success, could be mapped directly onto the eastern experience. In attempting to test cross-cultural validity, the current study operationalised both national culture, via country, and individual cultural orientations, via Individualism versus Collectivism and Tolerance for Ambiguity versus Uncertainty Avoiding (notwithstanding that other values also discriminate between cultures). The approach taken was in keeping with Ramayah and Jantan's (2004) advice that researchers should be cautious when adopting "foreign" instruments, particularly when applying them in the Malaysian context. This is because the exclusion, from instruments developed in the West, of important items relevant to the Malaysian context may result in misleading findings (Ramayah, Jantan, & Tadisina, 2001). In this sense, the present study has endeavoured to advance entrepreneurship research through the development of a reliable and valid tool to measure entrepreneurial competencies cross-culturally. The demand for such a tool is well documented in the literature (Bird, 1995; Kiggundu, 2002).

In addition, validation of a useful tool is the first step in the development of a skill enhancement program. Lawler (1994, p. 10) suggests that: "The research challenge is to first develop ways of evaluating skills, then to be able to measure the worth of the skills to the organization." Similarly, in the context of SMEs, developing the skills of individual entrepreneurs is seen as critical, as is operationalising entrepreneurial competencies and linking them to business level performance. Both activities make an important contribution to theory and practice.

The testing of the Comprehensive model of entrepreneurial competencies provided a means for extending the competency framework proposed by Man (2001). The present research found evidence for (Study 1), and empirically validated (Study 2), the existence of three new competency domains: Ethical, Social Responsibility, and Supporting and Cooperating (Australia)/Familism (Malaysia). It is therefore recommended that, in future research on entrepreneurial competencies, consideration should be given to the inclusion of these three domains. In addition, the identification of the Parsimonious model of entrepreneurial competencies offers a clearer path to understanding the different competency requirements for entrepreneurs operating in Australia and Malaysia. Importantly, while demonstrating the context-specific nature of some competency domains, the Parsimonious model also suggested the universality of several other domains including Conceptual, Opportunity, Learning, Personal, and Ethical. Some competency domains can therefore be seen to be "culturally-bound", while others appear to be "culture-

free”. The present research therefore provides a base for researchers to further explore the universal and context-specific nature of different competency areas.

This study also adds to the small, but growing, body of research that has established a link between competencies and business success. By utilising the competency approach, the study provides the basis for a model of business success that more accurately reflects the realities of entrepreneurial activities. This is because the competency approach focuses on the actual behaviours in which entrepreneurs engage while they undertake various activities and tasks related to their entrepreneurial, managerial, and technical roles. By doing so, it overcomes the problem of an unclear association between entrepreneurial traits and performance.

7.3.2 Practical implications

7.3.2.1 Implications for the practise and training

Understanding business success through the lens of entrepreneurial competencies is important because it provides entrepreneurs with knowledge about the way they should operate their business and encourages them to be conscious of the potential positive or negative impacts of their own behaviour. The identification of behaviours reflecting competencies that have causal relationships with business success allows the entrepreneur to recognise the need for, and seek, appropriate training. Competencies can be improved with education and training (Man & Lau, 2005) and the behaviours highlighted in the models validated here are highly amenable to shaping through educational programs (Garavan & McGuire, 2001).

The Comprehensive model of entrepreneurial competencies identified in this study suggests that entrepreneurs should be aware of the importance of competencies associated with the Ethical and Social Responsibility domains. As argued by Gibb (2005), SME business-owners are, for the most part, likely to be operating within a limited community for the life of their business, and it is therefore critical for these individuals to develop a strong and positive relationship with this community. The demonstration of ethical and socially responsible behaviour is a pathway for developing and maintaining this bond. Spence and Rutherford (2001) have argued that ethical and socially responsible behaviour by an entrepreneur may provide a “competitive edge” and assist the management process.

The identification of a Parsimonious model which showed differences in competency domains for Australian and Malaysian entrepreneurs has important practical implications for entrepreneurs who intend to expand or internationalise their business, whether to Australia or Malaysia. An understanding of the important competencies required for conducting business in each context enables entrepreneurs to more adequately

prepare for entry into the Australian or Malaysian markets. For example, the importance of the Social Responsibility Competency domain in Australia suggests that, in order to be successful in the Australian context, entrepreneurs (both local and foreign) should pay attention to behaviours such as forging relationships with charitable organisations, engaging in community activities, and demonstrating concern for the welfare of one's staff. On the other hand, in Malaysia, where the Relationship Competency domain is seen as important, learning how best to develop and maintain productive relationships might be more critical.

The findings of the present study also indicate that entrepreneurial competencies are most important in determining success when the business environment is Hostile and Dynamic. Given the generally turbulent business environments that face entrepreneurs in SMEs worldwide – due largely to the increasing globalisation of business – the possession of appropriate competencies should greatly assist entrepreneurs.

7.3.2.2 Implications for the educators and policy makers

The current findings indicate that culture matters when describing the competencies needed for business success among entrepreneurs in Australia and Malaysia. Thus, as Dana (2001, p. 405) argued, “It would be a fallacy to assume that a programme that has been functional in one environment will necessarily have the same effect elsewhere. A great danger lies in attempting to trans-locate training programmes”.

The findings of the present study may help educators and trainers identify and teach the “right things” to practising and prospective entrepreneurs. Educators and policy makers should also be cognisant of the fact that, at least for participants in this study, current training programs were not seen to contribute much to the development of entrepreneurial competencies. It may be that current training programs are not tailored to the needs of SMEs, or not sufficiently focused on the improvement of competencies, such as those identified in the present study, that are needed by entrepreneurs. Furthermore, given that the majority of learning among entrepreneurs occurs in the course of normal work routines (Hendry, Jones, Arthur, & Pettigrew, 1991; Kerr & McDougall, 1999), a more effective way of teaching SME owners may be via “mentoring schemes”. According to Barrett (2006), the objective of mentoring in SMEs is to learn from others' experience, particularly from the more experienced entrepreneurs in the field. Given that formal training is often viewed as inappropriate, costly, and burdensome to SME entrepreneurs (Webster et al., 2005), the introduction of effective mentoring schemes could accommodate the SME owner's preference for a more practical, just-in-time approach,

where assistance is offered specifically to address the immediate problems and needs of the business.

In addition, following the identification of the Ethical and Social Responsibility Competency domains, a challenge for educators and policy makers is to recognise the distinctive characteristics, for SMEs, of competencies in these domains, and to avoid viewing issues of ethical and social responsibility through the lens of the corporate policies of large firms. Hatten (2006) clearly states that ethical and social responsibility issues in smaller firms should go hand in hand with the firm's strategic planning. The rationale, he argues, is that strategic planning spells out the long-term plans of the business that require decision making on the part of the entrepreneur and decisions about "what to do and how to go about doing it" are guided by the entrepreneur's values. Given that in SMEs, the business goal typically equates with the personal goal of the entrepreneur, formulating training programs that portray the interconnectedness between strategic planning and ethical and social responsibility may be of great value.

Finally, with the verification of the causal link between competencies and business success in this study, the role of policy makers is to focus on entrepreneurial development initiatives towards developing relevant aspects of an individual's behaviour and skills. Relevant aspects include: opportunity recognition; the capacity to act on opportunities; conceptual thinking; learning; and personal effectiveness.

7.4 Limitations of the Study

While this research makes a number of valuable theoretical and practical contributions, there are several limitations with the design of the data collection process that draw attention to the need for further validation of the results. Firstly, self-report was used as the source of all data for the measurement of predictor (competency) and outcome (business success) measures, as well as for the covariates (business environment and cultural orientations). This approach was necessary because of difficulties associated with the independent assessment of each of these variables. Self-report is not uncommon in studies examining management behaviour, including that of entrepreneurs working in SMEs (Chandler & Hanks, 1994; Man, 2001). It has also been argued that the approach is a valid one for measuring entrepreneurial competencies (Chandler & Jansen, 1992). Chandler and Jansen argue that self-reported competencies are valid when these competencies are measured using a structured rating instrument (i.e., survey) such as that used in the present study, which has good reliability. Future studies should, however, endeavour to identify ways to obtain competency data from multiple informants (that is, from informants other than the entrepreneur him/herself) in order to minimise the possibility of response bias.

The reliance on self-reported financial performance may be similarly problematic. It is very likely that interviewees who rate their own performance as good are also likely to see their business as performing well. Notwithstanding this possibility, previous research has demonstrated that managerial assessment of firm performance is generally quite consistent with objective performance data (Dess & Robinson, 1984; Venkatraman & Ramanujam, 1986). Certainly, many studies examining performance and success in smaller firms have utilised similar forms of measurement to those used here. The advantage of this approach is that it does not require the collection of sensitive and private financial data, which are typically not publicly available for small private organisations (McGee & Peterson, 2000). Nevertheless, future studies should consider identifying and utilising alternative ways of operationalising business success, including accessing profit and loss statements where these are available.

A second possible criticism of the study concerns the reliance on cross-sectional data involving existing entrepreneurs. As such, the present study considers only the surviving firms in its sample frame but not firms that have ceased their operations. Future research in this area would benefit from a longitudinal study which includes firms that are no longer in existence. Such a study could provide valuable insights into the factors that contribute to firm failures.

A third limitation concerns the generalisability of the results (i.e., the ecological validity). As discussed earlier, while both Australia and Malaysia are culturally diverse countries, only a small part of this diversity was captured in the present study. Moreover, the study is an international comparative study of only two countries (one Western and one Eastern) and, as such, the generalisability of the results to other settings and cultures remains to be determined. A useful direction for future research in this regard would be to test the Parsimonious model in other countries with the aim of validating what appear to be culturally-based differences in the competency model.

A fourth limitation concerns the possibility that influences at the level of the business sector – which were not examined in the present study – may have an important role to play in the relationship between competency and performance. Further research could usefully explore such influences.

Fifthly, the results reported here pertain to owner-managers of SMEs who are actively involved in managing a small manufacturing or service business. The applicability of these results beyond these kinds of businesses, and this kind of personal engagement, requires investigation.

A final limitation of the study concerns the difficulties encountered in Study 2 in trying to achieve a high participation rate. Although the samples in both countries were sufficient for estimating the structural models, the researcher had to engage in significant follow-up to overcome a very low initial participation rate. Others have long highlighted this issue as a major hindrance in studies of SMEs (Organisation for Economic Co-operation and Development, 2003).

7.5 Directions for Future Research

The discussion in the last section highlighted the importance of future research to cross-validate the results of the present study, as well as to determine the generalisability of these results. Specifically, future research should:

1. Collect data on all variables from other sources to verify and validate the results;
2. Test model applicability in other countries, or in other cultural groups within the same country; and
3. Examine model generalisability to different sectors, and businesses of different sizes.

Future research would also benefit from a longitudinal approach to data collection. This would enable a more fine-grained exploration of how competencies (and more specifically, their behavioural manifestations) change over time. As argued by Cheng et al. (2005), competencies are dynamic, not static, and the competencies needed by entrepreneurs may change in accordance with the demands of the industry. Longitudinal research would also provide further insights into the nature of the causal link between competencies and business success. In addition, as suggested earlier, a longitudinal study would allow the inclusion of firms that had ceased their operations. If failed firms were also included, insights into the factors that contributed to their failure (whether individual or environmental factors) could be generated.

Another interesting avenue of investigation would be to undertake a comparative study to ascertain whether or not there are gender differences in competency requirements. The suggestion has been made that men and women entrepreneurs manage their businesses somewhat differently (McGregor & Tweed, 2001), opening up the intriguing possibility that different competencies may be associated with success for men and women operating in SMEs.

In the context of Malaysia, it is recommended that future studies should focus on intra-cultural differences among the different racial groups represented in this country. Even though it has been reported that there is minimal cultural distance between Malays, Chinese and Indians (see for example, A. Abdullah & Lim, 2001; Lim, 2001), it is likely

that ethnic or racial background does influence the approach of these different groups to business. In Australia, studies that focus on the competency requirements of indigenous entrepreneurs could also be of value given the paucity of management research with indigenous Australians generally (Foley, 2003; Frederick, Kuratko, & Hodgetts, 2007). Developing insights into the similarities and differences between indigenous and non-indigenous entrepreneurs in Australia could lead to more appropriate and culturally sensitive entrepreneurial education, training, and development programs (Lindsay, 2005).

The identification of the Ethical and Social Responsibility Competency domains in the present study indicates that these are areas of behaviour that require further investigation. According to Spence and Rutherford (2001), the practice of ethics and social responsibility in small firms is different from that in large firms. Given the relevance of these behaviours, future studies might usefully investigate how they impact upon business performance.

Future research could also be directed towards establishing whether the entrepreneurial competencies needed for business success vary with the stage of the business lifecycle (i.e., birth, growth, maturity, and decline).

Finally, future research might address the question of whether entrepreneurs who operate internationally (i.e., cross-culturally) require different competencies from entrepreneurs who operate domestically (i.e., intra-culturally).

7.6 Conclusion

In conclusion, it was evident that the findings of Study 1 (which utilised a qualitative approach) were supported and validated in Study 2 (which utilised a quantitative approach). Specifically, the findings of Study 1 identified Strategic, Commitment, Conceptual, Opportunity, Organising and Leading, Relationship, Learning, Personal, Technical, Ethical, Social Responsibility (in Australia and Malaysia) and Familism (for Malaysia only) as important competencies required by entrepreneurs. Importantly, additional empirical testing and validation undertaken in Study 2 found that the identified entrepreneurial competencies were significant predictors of entrepreneurial success in SMEs in Australia and Malaysia (for both the Comprehensive and Parsimonious models). In addition, the validation of the model of entrepreneurial competencies undertaken for both Australian and Malaysian data revealed both “universalities” and “uniqueness” in the competencies required by entrepreneurs operating in these different contexts. Within the Parsimonious model, five competency domains (i.e., Conceptual, Opportunity, Learning, Personal, and Ethical) were found to be similar across countries. At the same time, there were five competency domains in all (i.e., Strategic, Commitment, Relationship, Social

Responsibility, and Familism) that differentiated the two countries. This study therefore provides evidence that culture does matter in entrepreneurship. The study also showed that entrepreneurs are capable of minimising the negative impact of business environment if they are willing to equip themselves with the competencies that are important in their cultural context. Based on the results of this study, there seems little doubt that entrepreneurial competencies are a key driver of success in SMEs and as such, they should continue to be a central focus of future research in this field.

References

- Aaker, D. A., Kumar, V., & Day, G. S. (2004). *Marketing research*. New York: John Wiley & Sons.
- Abdul Rashid, M. Z., & Ho, J. A. (2003). Perceptions of business ethics in a multicultural community: The case of Malaysia. *Journal of Business Ethics*, 43(1-2), 75-87.
- Abdul Rashid, M. Z., & Ibrahim, S. (2002). Executive and management attitudes towards corporate social responsibility in Malaysia. *Corporate Governance*, 2(4), 10-16.
- Abdullah, A. (1992). The influence of ethnic values on managerial practices in Malaysia. *Malaysian Management Review*, 27(1), 3-18.
- Abdullah, A., & Lim, L. (2001). Cultural dimensions of Anglos, Australians, and Malaysians. *Malaysian Management Review*, 36(2), 1-17.
- Abdullah, M. A. (1999). *Small and medium enterprises in Malaysia*. Brookfield, USA: Ashgate.
- Abdullah, M. A., & Beal, T. (2003). The strategic contributions of small and medium enterprises to the economics of Japan and Malaysia: Some comparative lessons for Malaysian SMEs. *The Seventh International Conference on Global Business and Economic Development, Strategies for Sustainable Business Responses to Regional Demands and Global Opportunities, Bangkok, Thailand*, 1337-1354.
- Adams, B. L., & Sykes, V. (2003). Performance measure and profitability factors of successful African-American entrepreneurs: An exploratory study. *Journal of American Academy of Business*, 2, 418-425.
- Adler, N. J. (1997). *International dimensions of organizational behavior*. Cincinnati, OH: Shout-Western College Publishing.
- Aiken, L., & West, S. (1991). *Multiple regression*. Newbury, California: Sage Publications Newbury Park.
- Ajzen, I. (1987). Attitudes, traits, and actions: Dispositional prediction of behavior in personality and social psychology. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 20, pp. 1-63). New York: Academic Press.
- Aldrich, H. E., & Wiedenmayer, G. (1993). From traits to rates: An ecological perspective on organizational foundings. In J. A. Katz & R. H. Brockhaus (Eds.), *Advances in entrepreneurship, firm emergence, and growth* (pp. 45-195). Greenwich, CT: JAI Press.
- Allison, C. W., Chell, E., & Hayes, J. (2000). Intuition and entrepreneurial behaviour. *European Journal of Work and Organizational Psychology*, 9(1), 31-43.
- Alstete, J. W. (2002). On becoming an entrepreneur: An evolving typology. *International Journal of Entrepreneurial Behaviour & Research*, 8(4), 222-234.
- Anderson, E. W., & Fornell, C. (2000). The customer satisfaction index as a leading indicator. In T. A. Swartz & D. Iacobucci (Eds.), *Handbook of service marketing and management* (pp. 255-267). Thousand Oaks: Sage Publications.
- Asia-Pacific Economic Cooperation. (2003). *What's happening in APEC? Business Briefing*. Retrieved August 23, 2004, from <http://www1.apecsec.org.sg/whatsnew/announce/busbrief.html>

- Asia-Pacific Economic Cooperation. (2004). Implementation of the SPAN: An update by Malaysia. Agenda Item: 14-4.
- Australian Bureau of Statistics (ABS). (2001). *Small Business in Australia*. Canberra.
- Australian Bureau of Statistics (ABS). (2002). *Small Business in Australia*. Canberra.
- Ayadurai, S., & Ahmad, W. R. (2006). *A study on the critical success factors of women entrepreneurs in small and medium enterprises (SMEs) in Malaysia*. Paper presented at the International Council for Small Business (ICSB) 51st World Conference, Melbourne, Australia.
- Baharun, R., Abdul Hamid, A. B., & Hashim, N. H. (2004). *Comparative analysis of managerial practices in small medium enterprises in Malaysia*. Paper presented at the 49th International Small Business Council, 20-23 June, South Africa.
- Baines, S., Wheelock, J., & Abrams, A. (1997). Micro businesses and the household. In D. Deakins, P. Jennings & C. Mason (Eds.), *Small firms: Entrepreneurship in the nineties* (pp. 47-60). London: Paul Chapman.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Baron, R. A. (1998). Cognitive mechanisms in entrepreneurship: Why and when entrepreneurs think differently than other people. *Journal of Business Venturing*, 13(4), 275-294.
- Barrett, R. (2006). Small business learning through mentoring: Evaluating a project. *Education + Training*, 48(8/9), 614-626.
- Barringer, B. R., & Harrison, J. S. (2000). Walking a tightrope: Creating value through interorganizational relationships. *Journal of Management*, 26(3), 367-405.
- Bartlett, C. A., & Ghoshal, S. (1997). The myth of the generic manager: New personal competencies for new management roles. *California management review*, 40(1), 92-116.
- Bartram, D. (2005). The Great Eight Competencies: A criterion-centric approach to validation. *Journal of Applied Psychology*, 90(6), (Special issue: Special Section: Theoretical Models and Conceptual Analyses--Second Installment), 1185-1203.
- Bates, T. (1995). Analysis of survival rates among franchise and independent small business startups. *Journal of Small Business Management*, 33(2), 26-36.
- Baum, J., Calabrese, T., & Silverman, B. (2000). Don't go it alone: Alliance network composition and startups' performance in Canadian biotechnology. *Strategic Management Journal*, 21(3), 267-294.
- Baum, J. R. (1995). *The relation of traits, competencies, motivation, strategy, and structure to venture growth*. Paper presented at the Babson-Kauffman Entrepreneurship Research Conference.
- Baum, J. R., & Locke, E. A. (2004). The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *Journal of Applied Psychology*, 89(4), 587-598.
- Baum, J. R., Locke, E. A., & Smith, K. G. (2001). A multidimensional model of venture growth. *Academy of Management Journal*, 44(2), 292-303.
- Baum, J. R., Olian, J. D., Erez, M., Schnell, E. R., Smith, K. G., Sims, H. P., et al. (1993). Nationality and work role interaction: A cultural contrast of Israeli and U.S.

- entrepreneurs' versus managers' needs. *Journal of Business Venturing*, 8(6), 499-512.
- Beaver, G. (2002). *Small business, entrepreneurship, and enterprise development*. Englewood Cliffs, NJ: FT/Prentice Hall.
- Beaver, G., & Jennings, P. (2005). Competitive advantage and entrepreneurial power: The dark side of entrepreneurship. *Journal of Small Business and Enterprise Development*, 12(1), 9-23.
- Begley, T. M., & Boyd, D. B. (1987). Psychological characteristics associated with performance in entrepreneurial firms and small businesses. *Journal of Business Venturing*, 2(1), 79-93.
- Bennett, R., & Dann, S. (2000). The changing experience of Australian female entrepreneurs. *Gender, Work & Organization*, 7(2), 75-84.
- Berger, B. (1991). *The culture of entrepreneurship*. San Francisco, CA: ICS Press.
- Berrell, M., Wright, P., & Hoa, T. T. V. (1999). The influence of culture on managerial behaviour. *Journal of Management Development*, 18(7), 578-589.
- Berry, J. W., Poortinga, Y. H., Segall, M. H., & Dasen, P. R. (1992). *Cross cultural psychology: research and applications*. Cambridge: Cambridge University Press.
- Bickerdyke, I., Lattimore, R., & Madge, A. (2000). *Business failure and change: An Australian perspective*: Productivity commission staff research paper, AusInfo, Canberra.
- Bird, B. (1995). Toward a theory of entrepreneurial competency. In J. A. Katz & R. H. Brockhaus (Eds.), *Advances in entrepreneurship, firm emergence, and growth* (Vol. 2, pp. 51-72). Greenwich, Connecticut: Jai Press Inc.
- Blackman, A. J. (2003). *Entrepreneurs: Interrelationship between their characteristics, values, expectations, management practices and SME performance*. Unpublished doctoral thesis, Griffith University, Gold Coast.
- Blaha, J., & Wallbrown, F. H. (1991). Hierarchical factor structure of the Wechsler Preschool and Primary Scale of Intelligence. *Psychological Assessment*, 3(3), 455-463.
- Bloodgood, J. M., Sapienza, H. J., & Carsrud, A. L. (1995). The dynamics of new business start-ups: Person, context, and process. In J. A. Katz & R. H. Brockhaus (Eds.), *Advances in entrepreneurship, firm emergence, and growth* (Vol. 2, pp. 123-144). Greenwich, Connecticut: Jai Press Inc.
- Boden, R. J., & Nucci, A. R. (2000). On the survival prospects of men's and women's new business ventures. *Journal of Business Venturing*, 15(4), 347-362.
- Bollen, K. (1989). *Structural equations with latent variables*. New York: Wiley.
- Boyatzis, R. E. (1982). *The Competent Manager: A Model for Effective Performance*. New York: Wiley.
- Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Thousand Oaks, California: Sage Publications.
- Boyd, B. K., Dess, G. G., & Rasheed, A. M. A. (1993). Divergence between archival and perceptual measures of the environment: Causes and consequences. *Academy of Management Review*, 18(2), 204-226.

- Brandstatter, H. (1997). Becoming an entrepreneur - A question of personality structure. *Journal of Economic Psychology*, 18(2-3), 157-177.
- Brockhaus, R. H., & Horwitz, P. S. (1985). The psychology of the entrepreneur. In D. L. Sexton & R. W. Smilor (Eds.), *The art and science of entrepreneurship*. Cambridge, MA: Ballinger.
- Brophy, M., & Kiely, T. (2002). Competencies: A new sector. *Journal of European Industrial Training*, 26(2), 165-176.
- Bruderl, J., & Preisendorfer, P. (1998). Network support and the success of newly founded businesses. *Small Business Economics*, 10(3), 213-225.
- Brush, C. G., & Chaganti, R. (1998). Business without glamour? An analysis of resources on performance by size and age in small service and retail firms. *Journal of Business Venturing*, 14, 233-257.
- Brush, C. G., Greene, P. G., & Hart, M. M. (2001). From initial idea to unique advantage: The entrepreneurial challenge of constructing a resource base. *Academy of Management Executive*, 15(1), 64-80.
- Bull, I., & Willard, G. E. (1993). Towards a theory of entrepreneurship. *Journal of Business Venturing*, 8(3), 181-294.
- Burgoyne, J. G. (1993). The competence movement: Issues, stakeholders and prospects. *Personnel Review*, 22(6), 6-13.
- Busenitz, L. W., & Barney, J. B. (1997). Differences between entrepreneurs and managers in large organizations: Biases and heuristics in strategic decision-making. *Journal of Business Venturing*, 12(1), 9-30.
- Business Times. (Sept 13, 2003). SMEs can be global player.
- Buttner, E. H., & Moore, D. P. (1997). Women's organisational exodus to entrepreneurship: Self-reported motivations and correlates with success. *Journal of Small Business management*, 35(1), 34-46.
- Bygrave, W. D., & Hofer, C. W. (1991). Theorizing about entrepreneurship. *Entrepreneurship: Theory & Practice*, 16(2), 13-22.
- Byrne, B. M. (2001). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Byrne, B. M., & Baron, P. (1993). The Beck Depression Inventory: Testing and cross-validating a hierarchical factor structure for nonclinical adolescent. *Measurement & Evaluation in Counseling and Development*, 26(3), 164-178.
- Caird, S. (1990). What does it mean to be enterprising? *British Journal of Management*, 1(3), 137-145.
- Carland, J., Hoy, F., Boulton, W., & Carland, J. (1984). Differentiating entrepreneurs from small business owners: A conceptualization. *The Academy of Management Review*, 9(2), 354-359.
- Central Bank of Malaysia. (2005). *SME Bank-Advisory Centre*. Retrieved 13 March, 2007, from http://www.smebank.com.my/malay/download/advisory_centre_bm.pdf
- Central Bank of Malaysia. (2006). *Small and Medium Enterprise (SME) Annual Report 2005*. Retrieved 14 December, 2006, from <http://www.bnm.gov.my/index.php?ch=103&pg=456&ac=526&yr=2005>

- Central Bank of Malaysia. (2007). *Conclusion of the Sixth National SME Development Council Meeting: Major Initiatives to Support the Development of SMEs*. Retrieved 21 March, 2007, from <http://www.bnm.gov.my/index.php?ch=8&pg=14&ac=1377>
- Chak, C. M. (1998). *Strategic management for small and medium enterprises*. Unpublished Doctor of Philosophy, St Clements University, USA.
- Chandler, G. N., & Hanks, S. H. (1994). Founder competence, the environment, and venture performance. *Entrepreneurship Theory and Practice*, 18(3), 77-89.
- Chandler, G. N., & Jansen, E. (1992). The founder's self-assessed competence and venture performance. *Journal of Business Venturing*, 7(3), 223-236.
- Chawla, S., Pullig, R., & Alexander, F. (1997). Critical success factors from an organisational life cycle perspective: Perceptions of small business owners from different business environments. *Journal of Business and Entrepreneurship*, 9(1), 47-58.
- Che Rose, R., Kumar, N., & Yen, L. L. (2006). Entrepreneurs success factors and escalation of small and medium-sized enterprises in Malaysia. *Journal of Social Sciences*, 2(3), 74-80.
- Chell, E., Haworth, & Brearley. (1991). *The entrepreneurial personality*. London: Routledge.
- Cheng, M.-I., Dainty, A. R. J., & Moore, D. R. (2005). Towards a multidimensional competency-based managerial performance framework: A hybrid approach. *Journal of Managerial Psychology*, 20(5), 380 - 396.
- Child, J. (1972). Organizational structure, environment, and performance-The role of strategic choice. *Sociology*, 6, 1-22.
- Child, J. (1997). Strategic Choice in the Analysis of Action, Structure, Organizations and Environment: Retrospect and Prospect. *Organization Studies*, 18(1), 43-77.
- Choi, Y. R., & Shepherd, D. A. (2004). Entrepreneurs' decisions to exploit opportunities. *Journal of Management*, 30(3), 377-395.
- Choo, C. W. (2001). Environmental scanning as information seeking and organizational learning. *Information Research*, 7(1), 7-1.
- Choueke, R., & Armstrong, R. (2000). Culture: a missing perspective on small- and medium-sized enterprise development? *International Journal of Entrepreneurial Behaviour & Research*, 6(4), 227-238.
- Coakes, S., & Steed, L. (2003). *SPSS: Analysis without Anguish: version 11.0 for Windows*: John Wiley.
- Cooper, A. C. (1993). Challenges in predicting new firm performance. *Journal of Business Venturing*, 8(3), 241-254.
- Cooper, D. R., & Schindler, P. S. (2003). *Business research methods*. Irwin, USA: McGraw-Hill.
- Cooper, S. (2006). *Technical entrepreneurship*. Harlow, England: Pearson Education Limited.
- Cope, J., & Watts, G. (2000). Learning by doing: An exploration of experience, critical incidents and reflection in entrepreneurial learning. *International Journal of Entrepreneurial Behaviour and Research*, 6(3), 104-124.

- Council of Small Business Organisations of Australia. (2000). *The Spirit of Enterprise-National Survey of Small Business Community Involvement*. COSBOA, Canberra.
- Covin, J., & Slevin, D. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10(1), 75-87.
- Covin, J., & Slevin, D. (1991). A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship Theory and Practice*, 16(1), 7-25.
- Covin, J., Slevin, D., & Heeley, M. (1999). Pioneers and followers: Competitive tactics, environment, and firm growth. *Journal of Business Venturing*, 15(2), 175-210.
- Covin, J. G., & Slevin, D. P. (1988). The influence of organization structure on the utility of an entrepreneurial top management style. *Journal of Management Studies*, 25(3), 217-234.
- Cox, C., & Jennings, R. (1995). The foundations of success: the development and characteristics of British entrepreneurs and intrapreneurs. *Leadership & Organization Development Journal*, 16(7), 4-9.
- Cransrud, A. L., & Krueger, N. F. (1995). Entrepreneurship and social psychology: Behavioural technology for understanding the new venture initiation process. In J. A. Katz & R. H. Brockhaus (Eds.), *Advances in entrepreneurship, firm emergence, and growth*. (Vol. 2, pp. 73-96). Greenwich: Connecticut: Jai Press Inc.
- Cunningham, B., & Lischeron, J. (1991). Defining entrepreneurship. *Journal of Small Business Management*, 29(1), 45-61.
- Curran, J., & Blackburn, R. (2000). *Researching the small firm*. London: Sage.
- Dana, L. P. (2001). The education and training of entrepreneurs in Asia. *Education + Training*, 43(8/9), 405-415.
- de Burca, S., Fynes, B., & Brannick, T. (2006). The moderating effect of information technology sophistication on services practice and performance. *International Journal of Operations & Production Management*, 26(11), 1240-1254.
- de Koning, A. (2003). Opportunity development: A socio-cognitive perspective. In J. A. Katz & D. A. Shepherd (Eds.), *Cognitive approaches to entrepreneurship research: Advances in entrepreneurship, firm emergence, and growth* (Vol. 6, pp. 265-314). Boulder, USA: Jai Press Inc.
- Deakins, D., & Freel, M. (1998). Entrepreneurial learning and the growth process in SMEs. *The Learning Organization*, 5(3), 144-155.
- Delmar, F. (2006). The psychology of the entrepreneur. In S. Carter & D. Jones-Evans (Eds.), *Enterprise and Small Business: Principles, Practice, and Policy*. Harlow, England: Pearson Education Limited.
- Dess, G., & Robinson, R. (1984). Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit. *Strategic Management Journal*, 5(3), 265-273.
- Dodd, S. D., & Patra, E. (2002). National differences in entrepreneurial networking. *Entrepreneurship and Regional Development*, 14(2), 117-134.
- Dollinger, M. J. (1999). *Entrepreneurship: Strategies and resources*. Prentice Hall, Upper Saddle River, New Jersey.
- Dorfman, P., & Howell, J. (1988). *Dimensions of national culture and effective leadership patterns: Hofstede revisited*: JAI Press.

- Drago, W. A., & Clements, C. (1999). Leadership characteristics and strategic planning. *Management Research News*, 22(1), 11-18.
- Duchesneau, D. A., & Gartner, W. B. (1990). A profile of new venture success and failure in an emerging industry. *Journal of Business Venturing*, 5(5), 297-312.
- Dulewicz, V., & Higgs, M. (2000). Emotional intelligence: A review and evaluation study. *Journal of Managerial Psychology*, 15(4), 341-372.
- Duncan, R. B. (1972). Characteristics of organizational environments and perceived environmental uncertainty. *Administrative Science Quarterly*, 17(3), 313-327.
- Easterby-Smith, M., Thorpe, R., & Lowe, A. (1991). *Management research : an introduction*. London: Sage Publications.
- Entrialgo, M., Fernandez, E., & Vazquez, C. J. (2000). Psychological characteristics and process: The role of entrepreneurship in Spanish SMEs. *European Journal of Innovation Management*, 3(3), 137-149.
- Entrialgo, M., Fernandez, E., & Vazquez, C. J. (2001). The effect of organizational context on SME's entrepreneurship: Some Spanish evidence. *Small Business Economics*, 16(3), 223-236.
- Farris, P. W., Parry, M. F., & Ailawadi, K. L. (1992). Structural analysis of models with composite dependent variables. *Marketing Science*, 11(1), 76.
- Fisher, R. J. (1993). Social desirability bias and the validity of indirect questioning. *The Journal of Consumer Research*, 20(2), 303-315.
- Fleishman, J., & Benson, J. (1987). Using LISREL to evaluate measurement models and scale reliability. *Educational and Psychological Measurement*, 47(4), 925.
- Foley, D. (2003). An examination of Indigenous Australian entrepreneurs. *Journal of Developmental Entrepreneurship*.
- Fontaine, R. (2007). Cross-cultural management: Six perspectives. *Cross Cultural Management: An International Journal*, 14(2), 125-135.
- Fontaine, R., & Richardson, S. (2005). Cultural values in Malaysia: Chinese, Malays and Indians compared. *Cross Cultural Management: An International Journal*, 12(4), 63-77.
- Fontaine, R., & Tan, K. (2004). *Transfer knowledge among Malaysian entrepreneurs*. Paper presented at the Fourth International Conference on Knowledge, Culture and Change in Organisation, London.
- Frederick, H. H., Kuratko, D. F., & Hodgetts, R. m. (2007). *Entrepreneurship: Theory, Process, Practice (Asia-Pacific Edition)*. South Melbourne, Victoria: Thomson.
- Frese, M., Brantjes, A., & Hoorn, R. (2002). Psychological success factors of small scale businesses in Namibia: The roles of strategy process, entrepreneurial orientation, and the environment. *Journal of Developmental Entrepreneurship*, 7(3).
- Fülöp, G., Hisrich, R. D., & Szegedi, K. (2000). Business ethics and social responsibility in transition economies. *The Journal of Management Development*, 19(1), 5-31.
- Garavan, T. N., & McGuire, D. (2001). Competencies and workplace learning: some reflections on the rhetoric and the reality. *Journal of Workplace Learning*, 13(4), 144-164.
- Gartner, W. B. (1985). A conceptual framework for describing the phenomenon of new venture creation. *Academy of Management Review*, 10(4), 696-707.

- Gartner, W. B. (1988). Who is an entrepreneur? is the wrong question. *American Journal of Small Business*, 12(4), 11-32.
- Gartner, W. B. (1989). "Who is an entrepreneur?" is the wrong question. *Entrepreneurship Theory and Practice*, 12(4), 47-68.
- Gartner, W. B., Shaver, K. G., Gatewood, E., & Katz, J. A. (1994). Finding the entrepreneur in entrepreneurship (editorial). *Entrepreneurship: Theory & Practice*, 18(3), 5-9.
- Gaskill, L. A. R., Van Auken, H. E., & Manning, R. A. (1993). A factor analytic study of the perceived causes of small business failure. *Journal of Small Business Management*, 31(4), 18-31.
- Geletkanycz, M. A. (1997). The salience of 'culture's consequences': The effects of cultural values on top executive commitment to the status quo. *Strategic Management Journal*, 18(8), 615-634.
- Georgellis, Y., Joyce, P., & Woods, A. (2000). Entrepreneurial action, innovation, and business performance: The small independent business. *Journal of Small Business and Enterprise Development*, 7(1), 7-17.
- Gibb, A. A. (1997). Small firm training and competitiveness: Building on the small business as a learning organisation. *International Small Business Journal*, 15(3), 13-29.
- Gibb, A. A. (2005). The entrepreneur as the core competence of the firm: Implication for management educators. *Entrepreneurship, Innovation, and Small Business Network*, Issue 2.
- Gill, J., & Johnson, P. (1991). *Research methods for managers*. London: Paul Chapman.
- Gilley, K. M., & Rasheed, A. (2000). Making more by doing less: An analysis of outsourcing and its effects on firm performance. *Journal of Management*, 26(4), 763-790.
- Glancey, K., Greig, M., & Pettigrew, M. (1998). Entrepreneurial dynamics in small business service firms. *International Journal of Entrepreneurial Behaviour & Research*, 4(3), 249 - 268.
- Glaser, B. (1992). *Basics of Grounded Theory Analysis*. Mill Valley, CA: Sociology Press.
- Global Entrepreneurship Monitor (GEM). (2006). *GEM 2006 Results*. London: London Business School.
- Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam.
- Goll, I., & Rasheed, A. A. (2004). The moderating effect of environmental munificence and dynamism on the relationship between discretionary social responsibility and firm performance. *Journal of Business Ethics*, 49(1), 41-54.
- Goodwin, L. D., & Goodwin, W. L. (1985). An analysis of statistical techniques used in the Journal of Educational Psychology, 1979-1983. *Educational Psychologist*, 20(1), 13-22.
- Haber, S., & Reichel, A. (2005). Identifying performance measures of small ventures: The case of the tourism industry. *Journal of Small Business Management*, 43(3), 257-287.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis*. Upper Saddle River, NJ: Prentice-Hall International, Inc.

- Hall, G., & Fulshaw, S. (1993). Factors associated with the relative performance amongst small firms in the British Instrumentation Sector. In H. Klnadt (Ed.), *Entrepreneurship and Business Development* (pp. 227-237). Aldershot: Avebury.
- Hansen, E. L. (2001). *Resource acquisition as a startup process: initial stocks of social capital and organizational foundings*. Retrieved January 13, 2005, from www.babson.edu/entrep/fer/IV/IVB/html/Iv-b.html
- Harrell, S. (1985). Why do the Chinese work so hard?: Reflections on an entrepreneurial ethic. *Modern China*, 11(2), 203-226.
- Harrison, R. T., & Leitch, C. M. (2005). Entrepreneurial learning: Researching the interface between learning and the entrepreneurial context. *Entrepreneurship: Theory & Practice*, 29(4), 351-372.
- Hartenian, L. S. (2003). Team member acquisition of team knowledge, skills, and abilities. *Team Performance Management*, 9(1/2), 23-30.
- Hatten, T. S. (2006). *Small Business Management: Entrepreneurship and Beyond* (3rd ed.). New York: Houghton Mifflin Company.
- Haynes, P. J. (2003). Differences among entrepreneurs: "Are you experienced?" may be the wrong question. *International Journal of Entrepreneurial Behaviour & Research*, 9(3), 111-128.
- Hayton, J. C., George, G., & Zahra, S. A. (2002). National culture and entrepreneurship: A review of behavioral research. *Entrepreneurship Theory and Practice*, 26(4), 33-52.
- Heffernan, M. M., & Flood, P. C. (2000). An exploration of the relationship between the adoption of managerial competencies, organisational characteristics, human resources sophistication and performance in Irish organisations. *Journal of European Industrial Training*, 24(2/3/4), 128-136.
- Hendry, C., Jones, A., Arthur, M., & Pettigrew, A. (1991). Human Resource Development in Small to Medium Enterprises, Research Paper No. 88, Employment Department Group, London.
- Herbig, P., & Dunphy, S. (1998). Culture and innovation. *Cross Cultural Management*, 5(4), 13-21.
- Herron, L., & Robinson, R. B. (1993). A structural model of the effects of entrepreneurial characteristics on venture performance. *Journal of Business Venturing*, 8(3), 281-294.
- Hildebrandt, L. (1987). Consumer retail satisfaction in rural areas: A reanalysis of survey data. *Journal of Economic Psychology*, 8(1), 19-42.
- Hills, G. E. (1995). *Opportunity recognition by successful entrepreneurs: A pilot study*. Paper presented at the Fifteenth Annual Entrepreneurship Research Conference, Babson College, Massachusetts.
- Hodgetts, R. M., & Kuratko, D. F. (2001). *Effective Small Business Management*. Orlando, Fla: Hartcourt College Publishers.
- Hoffmann, T. (1999). The meanings of competency. *Journal of European Industrial Training*, 23(6), 275-285.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills: Sage Publications.

- Hofstede, G. (1984). *Culture's consequences: International differences in work-related values*. London: Sage Publications Inc.
- Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. New York: McGraw-Hill.
- Hofstede, G. (1993). Cultural constraints in management theories. *Academy of Management Executive*, 7(1), 81-94.
- Hofstede, G., & Bond, M. H. (1988). The Confucius connection: From cultural roots to economic growth. *Organizational Dynamics*, 16(4), 5-21.
- Holmes-Smith, P., & Rowe, K. (1994). The development and use of congeneric measurement models in school effectiveness research: Improving the reliability and validity of composite and latent variables for fitting multilevel and structural equation models. *International Congress for School Effectiveness and Improvement, Melbourne*.
- Hood, J. N., & Young, J. E. (1993). Entrepreneurship's requisite areas of development: A survey of top executives in successful entrepreneurial firms. *Journal of Business Venturing*, 18(2), 115-135.
- Hoque, Z. (2004). A contingency model of the association between strategy, environmental uncertainty and performance measurement: impact on organizational performance. *International Business Review*, 13(4), 485-502.
- Hornsby, J. S., Kuratko, D. F., Naffziger, D. W., LaFollette, W. R., & Hodgetts, R. M. (1994). The ethical perceptions of small business owners: A factor analysis study. *Journal of Small Business Management*, 32(4), 9-16.
- Huff, L., & Kelley, L. (2005). Is collectivism a liability? The impact of culture on organizational trust and customer orientation: A seven-nation study. *Journal of Business Research*, 58(1), 96-102.
- Hui, S. K.-f., Csete, J., & Raftery, J. (2006). Factors involved in the success of Hong Kong construction and property entrepreneurs. *International Journal of Entrepreneurial Behaviour & Research*, 12(4), 228 - 245.
- Hulin, C., Cudeck, R., Netemeyer, R., Dillon, W. R., McDonald, R., & Bearden, W. (2001). Measurement. *Journal of Consumer Psychology*, 10(1/2), 55-69.
- Ibrahim, A. B., & Goodwin, J. R. (1986). Perceived causes of success in small business. *American Journal of Small Business*, 11(2), 41-51.
- Iversen, O. I. (2000). *Managing people towards a multicultural workforce*. Paper presented at the 8th World Congress on Human Resources Management, Paris.
- Jenning, P., & Beaver, G. (1997). The performance and competitive advantage of small firms: A management perspective. *International Small Business Journal*, 15(2), 63-75.
- Jenssen, J. I. (2001). Social networks, resources, and entrepreneurship. *The International Journal of Entrepreneurship and Innovation*, 2(2), 103-109.
- Jenssen, J. I., & Greve, A. (2002). Does the degree of redundancy in social networks influence the success of business start-ups? *International Journal of Entrepreneurial Behaviour & Research*, 8(5), 254-267.
- Jogaratnam, G. (2002). Entrepreneurial orientation and environmental hostility: An assessment of small independent restaurant businesses. *Journal of Hospitality & Tourism Research*, 26(3), 258-277.

- Johannisson, B. (1990). Economics of overview - guiding the external growth of small firm. *International Small Business Journal*, 9(1), 32-44.
- Johnson, B. R. (1990). Towards multidimensional model of entrepreneurship: The case of achievement motivation and the entrepreneur. *Entrepreneurship Theory and Practice*, 14(3), 39-54.
- Johnson, D. (2001). What is innovation and entrepreneurship? Lessons for larger organisations. *Industrial and Commercial Training*, 33(4), 135-140.
- Jones, J. (2000). *Ethics Revisited. The 1990s: an "ethical decade" or a decade of hypocrisy?* Retrieved Dec 15, 2001, from <http://commerce.flinders.edu.au/researchpapers/00-6.htm>
- Jöreskog, K., & Sörbom, D. (1989). *LISREL 7: A Guide to the Program and Applications*: SPSS Chicago, Illinois.
- Jöreskog, K., & Sörbom, D. (1996). *LISREL 8 user's reference guide*. Chicago: Scientific Software International.
- Kalleberg, A. L., & Leicht, K. T. (1991). Gender and organizational performance: Determinants of small business survival and success. *The Academy of Management Journal*, 34(1), 136-161.
- Kamini, R. S. (2005, 31 Dec). SMIDEC galvanises entrepreneurs. *New Straits Times*, p. 53.
- Kandola, R., & Pearn, M. (1992). Identifying competencies. In R. Boam & P. Sparrow (Eds.), *Designing and achieving competency: A competency-based approach to developing people and organizations*. New York: McGraw-Hill.
- Keaveney, S. M. (1995). Customer switching behavior in service industries: An exploratory study. *Journal of Marketing*, 59(2), 71-82.
- Keeley, R. H., & Roue, J. B. (1990). Management, strategy, and industry structure as influences on the success of new firms. *Management Science*, 36(10), 1256-1267.
- Kerr, A., & McDougall, M. (1999). The small business of developing people. *International Small Business Journal*, 17(2), 10-21.
- Kierstead, J. (1998). *Competencies and KSAO's*, from http://www.hrma-agrh.gc.ca/research/personnel/comp_ksao_e.pdf
- Kiggundu, M. N. (2002). Entrepreneurs and entrepreneurship in Africa: what is known and what needs to be done. *Journal of Developmental Entrepreneurship*, 7(3), 239-258.
- King, N. (1994). The qualitative research interview. In C. Cassell & G. Symon (Eds.), *Qualitative methods in organizational research* (pp. 14-36). London: Sage Publications.
- Kirzner, I. M. (1985). *Discover and the capitalist process*. Chicago: University of Chicago Press.
- Kline, R. B. (1998). *Principles and practice of structural equation modeling*. New York: Guilford Press.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling*. New York: Guilford Press.
- Koh, H. C. (1996). Testing hypotheses of entrepreneurial characteristics: A study of Hong Kong MBA students. *Journal of Managerial Psychology*, 11(3), 12-25.

- Korunka, C., Frank, H., Lueger, M., & Mugler, J. (2003). The entrepreneurial personality in the context of resources, environment, and the startup process--a configurational approach. *Entrepreneurship Theory and Practice*, 26(2), 23-42.
- Kotorov, R. (2003). Customer relationship management: strategic lessons and future directions. *Business Process Management Journal*, 9(5), 566-571.
- Krueger, N. F., & Brazeal, D. V. (1994). Entrepreneurial potential and potential entrepreneurs. *Entrepreneurship Theory and Practice*, 18(3), 91-104.
- Kuratko, D. F., Hornsby, J. S., & Naffziger, D. W. (1997). An examination of owner's goals in sustaining entrepreneurship. *Journal of Small Business Management*, 35(1), 24-33.
- Lado, A. A., Boyd, N. G., & Wright, P. (1992). A competency-based model of sustainable competitive advantage: Toward a conceptual integration. *Journal of Management*, 18(1), 77-91.
- Lawler, E. E. (1994). From job-based to competence-based organizations. *Journal of Organizational Behaviour*, 15(1), 3-13.
- Lee, D. Y., & Tsang, E. W. K. (2001). The effects of entrepreneurial personality, background and network activities on venture growth. *Journal of Management Studies*, 38(4), 583-602.
- Lee, S. M., & Peterson, S. J. (2000). Culture, entrepreneurial orientation, and global competitiveness. *Journal of World Business*, 35(4), 401-416.
- Leo, C., Bennett, R., & Härtel, C. E. J. (2005). Cross-cultural differences in consumer decision-making styles. *Cross Cultural Management: An International Journal*, 12(3), 32-62.
- Leung, K., & Zhang, J. (1996). Systematic considerations: Factors facilitating and impeding the development of psychology in developing countries. *International Journal of Psychology*, 30, 693-706.
- Lewis, P. (1985). Defining 'business ethics': Like nailing jello to a wall. *Journal of Business Ethics*, 4(5), 377-383.
- Lim, L. (2001). Work-related values of Malays and Chinese Malaysians. *International Journal of Cross Cultural Management*, 1(2), 209-226.
- Lin, C., Huang, Y., & Tseng, S. (2007). A study of planning and implementation stages in electronic commerce adoption and evaluation: The case of Australian SMEs. *Contemporary Management Research*, 3(1), 83-100.
- Lincoln, J., & Kalleberg, A. (1990). *Culture, Control, and Commitment*. New York: Cambridge University Press.
- Lindelöf, P., & Löfsten, H. (2006). Environmental hostility and firm behavior--An empirical examination of new technology-based firms on sciences parks. *Journal of Small Business Management*, 44(3), 386-406.
- Lindsay, N. J. (2005). *Toward A Cultural Model of Indigenous Entrepreneurial Attitude*, from <http://www.amsreview.org/articles/lindsay05-2005.pdf>
- Liprani, A., & Sobrero, M. (1994). The glue and the pieces: Entrepreneurship and innovation in small-firm networks. *Journal of Business Venturing*, 9(2), 125-140.
- Locke, E. A. (2000). *The prime movers: Traits of the great wealth creators*. New York: Amacom.

- Longenecker, C. O., Simonetti, J. L., & Sharkey, T. W. (1999). Why organizations fail: the view from the front-line. *Management Decision*, 37(6), 503-513.
- Low, J., & Siesfeld, T. (1998). Wall Street considers more than you think. *Strategy and Leadership*, 26(2), 24-28.
- Low, M. B., & MacMillan, I. C. (1988). Entrepreneurship: Past research and future challenges. *Journal of management*, 14, 139-151.
- Lozada, H. R., & Calantone, R. J. (1996). Scanning behavior and environmental variation in the formulation of strategic responses to change. *The Journal of Business and Industrial Marketing*, 11(1), 1996.
- Lukas, B. A., Hair, J. H. J., Brush, R. P., & Ortinau, D. J. (2004). *Marketing Research*. North Ryde: McGraw-Hill Australia.
- Luken, R., & Stares, R. (2005). Small business responsibility in developing countries: A threat or an opportunity? *Business Strategy and the Environment*, 14, 38-53.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135-172.
- Madden, K., Scaife, W., & Crissman, K. (2006). How and why small to medium size enterprises (SMEs) engage with their communities: An Australian study. *International Journal of Nonprofit and Voluntary Sector Marketing*, 11(1), 49-60.
- Mahajar, A. J., & Mohd Yunus, J. (2006). The effectiveness of government export assistance programs on Malaysia small & medium enterprises (SMEs). *Problems & Perspectives in Management*(1), 58-71.
- Man, T. W. Y. (2001). *Entrepreneurial competencies and the performance of small and medium enterprises in the Hong Kong services sector*. Unpublished doctoral thesis, Hong Kong Polytechnic University, Hong Kong.
- Man, T. W. Y., & Lau, T. (2000). Entrepreneurial competencies of SME owner/managers in the Hong Kong services sector: A qualitative analysis. *Journal of Enterprising Culture*, 8(3), 235-254.
- Man, T. W. Y., & Lau, T. (2005). The context of entrepreneurship in Hong Kong: An investigation through the patterns of entrepreneurial competencies in contrasting industrial environments. *Journal of Small Business and Enterprise Development*, 12(4), 464-481.
- Man, T. W. Y., Lau, T., & Chan, K. F. (2002). The competitiveness of small and medium enterprises: A conceptualization with focus on entrepreneurial competencies. *Journal of Business Venturing*, 17(2), 123-142.
- Mardjono, A. (2005). A tale of corporate governance: Lessons why firms fail. *Managerial Auditing Journal*, 20(3), 272 - 283.
- Marino, L., Strandholm, K., Steensma, H. K., & Weaver, K. M. (2002). The moderating effect of national culture on the relationship between entrepreneurial orientation and strategic alliance portfolio extensiveness. *Entrepreneurship Theory and Practice*, 26(4), 145-160.
- Markman, G. D., & Baron, R. A. (1998). *Social skills and entrepreneurs' financial success: Evidence that the ability to get along with others really matters*. Paper presented at the Frontiers for Entrepreneurship Research.

- Marlow, S., & Strange, A. (1994). Female entrepreneurs: Success by whose standards? In M. Tanton (Ed.), *Women in management: A developing presence* (pp. 172-184). London: Routledge.
- Martin, G., & Staines, H. (1994). Managerial competences in small firms. *Journal of Management Development*, 13(7), 23-34.
- Mascarenhas, B. (1985). Flexibility: Its relationship to environmental dynamism and complexity. *International Studies of Management and Organization*, XIV(4), 107-124.
- Masurel, E., Montfort, K. V., & Lentink, R. (2003). *SME innovation and the crucial role of the entrepreneur*. Paper presented at the Series Research Memoranda 0001, Free University Amsterdam, Faculty of Economics, Business Administration and Econometrics.
- Maxwell, J. A. (1996). *Qualitative research design: An interactive approach*. Thousand Oaks, California: Sage Publications.
- Maxwell, J. A., & Westerfield, D. (2002). Technological entrepreneurship characteristics related to the adoption of innovative technology. *SAM Advanced Management Journal*, 67(1), 9-21.
- McClelland, D. C. (1961). *The Achieving Society*. Princeton, NJ: Van Nostrand.
- McClelland, D. C. (1973). Testing for competence rather than for intelligence. *American Psychologist*, 28(1), 1-14.
- McClelland, D. C. (1987). Characteristics of successful entrepreneurs. *Journal of Creative Behaviour*, 21(3), 219-233.
- McClelland, E., Swail, J., Bell, J., & Ibbotson, P. (2005). Following the pathway of female entrepreneurs: A six-country investigation. *International Journal of Entrepreneurial Behaviour & Research*, 11(2), 84 - 107.
- McGee, J. E., & Peterson, M. (2000). Toward the development of measures of distinctive competencies among small independent retailers. *Journal of Small Business Management*, 38(2), 19-33.
- McGrath, R. G., & MacMillan, I. C. (1992). More like each other than anyone else? A cross cultural study of entrepreneurial perceptions. *Journal of Business Venturing*, 7(5), 419-429.
- McGrath, R. G., MacMillan, I. C., & Scheinberg, S. (1992). Elitists, risk takers, and rugged individualists? An exploratory analysis of cultural differences between entrepreneurs and non-entrepreneurs. *Journal of Business Venturing*, 7(2), 115-135.
- McGrath, R. G., MacMillan, I. C., Yang, E. A.-Y., & Tsai, W. (1992). Does culture endure, or is it malleable? Issues for entrepreneurial economic development. *Journal of Business Venturing*, 7(6), 441-458.
- McGregor, J., & Tweed, D. (2001). Gender and managerial competence: support for theories of androgyny? *Women in Management Review*, 16(6), 279-287.
- Mead, R. (1994). *International Management*. Oxford: Blackwell.
- Meeus, M. T. H., & Oerlemans, L. A. G. (2000). Firm behaviour and innovative performance. An empirical exploration of the selection-adaptation debate. *Research Policy*, 29, 41-58.

- Michalko, M. (2000). *Thinking out of the box*. Retrieved September 1, 2005, from http://www.winstonbrill.com/bril001/html/article_index/articles/451-500/article472_body.html
- Miller, D., & Friesen, P. H. (1983). Strategy-making and environment: The third link. *Strategic Management Journal*, 4(3), 221-235.
- Miller, L., & Smith, K. (1983). Handling nonresponse issues. *Journal of Extension*, 21(5), 45-50.
- Milton-Smith, J. (1997). Business ethics in Australia and New Zealand. *Journal of Business Ethics*, 16(14), 1485-1497.
- Miner, J. B. (1997). A psychological typology and its relationship to entrepreneurial success. *Entrepreneurship and Regional Development*, 9(4), 319-334.
- Mintzberg, H. (1973). *The nature of managerial work*. New York: Harper & Row.
- Mitchell, R. K., Smith, B., Seawright, K. W., & Morse, E. A. (2000). Cross cultural cognitions and the venture creation decision. *Academy of Management Journal*, 43(5), 974-993.
- Moingeon, B., & Edmundson, A. (1996). *Organizational learning and competitive advantage*. London: Sage Publications.
- Mole, V., Dawson, S., Winstanley, D., & Sherval, J. (1993). *Researching managerial competences*. Paper presented at the British Academy of Management Annual Conference, Milton Keynes.
- Morris, M. H. (2001). The critical role of resources. *Journal of Developmental Entrepreneurship*, 6(2), 1-3.
- Morris, M. H., Schindehutte, M., Walton, J., & Allen, J. (2002). The ethical context of entrepreneurship: Proposing and testing a developmental framework. *Journal of Business Ethics*, 40(4), 331-361.
- Morrison, A. (2000). Entrepreneurship: What triggers it? *International Journal of Entrepreneurial Behaviour & Research*, 6(2), 59-71.
- Morse, J. M., & Richards, L. (2002). *Readme first for a user's guide to qualitative methods*. California, USA: Sage publications, Inc.
- Mueller, S. L., & Thomas, A. S. (2001). Culture and entrepreneurial potential: A nine country study of locus of control and innovativeness. *Journal of Business Venturing*, 16(1), 51-75.
- Murphy, G. B., Tailer, J. W., & Hill, R. C. (1996). Measuring performance in entrepreneurship research. *Journal of Business Research*, 36(1), 15-23.
- Muthen, B., & Muthen, L. (2006). *Mplus discussion website*. Retrieved 12 November, 2006, from <http://www.statmodel.com>
- Muzychenko, O., & Saeed, J. (2004). Cross cultural professional competence in higher education. *Journal of Management Systems*, 16(4), 1-19.
- Nachtigall, C., Kroehne, U., Funke, F., & Steyer, R. (2003). (Why) Should we use SEM? Pros and cons of structural equation modeling. *Methods of Psychological Research - Online*, 8(2), 1-22.
- Naffziger, D. (1995). Entrepreneurship: A person based theory approach. In J. A. Katz & R. H. Brockhaus (Eds.), *Advances in entrepreneurship, firm emergence, and growth* (Vol. 2, pp. 21-50). London: Jai Press Inc.

- Naffziger, D. W., Hornsby, J. S., & Kuratko, D. F. (1994). A proposed model of entrepreneurial motivation. *Entrepreneurship Theory and Practice*, 18(3), 29-42.
- Naman, J. L., & Slevin, D. P. (1993). Entrepreneurship and the concept of fit: A model and empirical tests. *Strategic Management Journal*, 14(2), 137-153.
- Naples, M. I. (1997). Business failures and the expenditure multiplier, or how recessions become depressions. *Journal of Post Keynesian Economics*, 19(4), 511-523.
- Norman, W., & MacDonald, C. (2004). Getting to the bottom of "Triple Bottom line". *Business Ethics Quarterly*, 14(2), 243-262.
- Nunnally, J., & Bernstein, I. (1994). *Psychometric theory McGraw-Hill series in psychology*: McGraw-Hill.
- O'Gorman, C. (2001). The sustainability of growth in small and medium-sized enterprises. *International Journal of Entrepreneurial Behaviour & Research*, 7(2), 60-75.
- O'Regan, N., & Ghobadian, A. (2004). The importance of capabilities for strategic direction and performance. *Management Decision*, 42(2), 292-312.
- Organisation for Economic Co-operation and Development. (2001). *Productivity and firm dynamics: Evidence from microdata. OECD Economic Outlook No.69*. Retrieved 16 March, 2004, from <http://www.oecd.org/dataoecd/30/22/2079019.pdf>
- Organisation for Economic Co-operation and Development. (2002). *OECD small and medium enterprise outlook 2002*. Retrieved August, 25, 2004, from [http://www.insme.info/documenti/OECD_sme_outlook_2002.pdf#search='OECD %202002'](http://www.insme.info/documenti/OECD_sme_outlook_2002.pdf#search='OECD%202002')
- Organisation for Economic Co-operation and Development. (2003). *A first analysis of statistical strategies regarding SMEs*. Paper presented at the Workshop on Improving Statistics on SMEs and Entrepreneurship, 17-19 September 2003, Paris.
- Osman, I., & Hashim, K. (2003). An evaluation of the business practices in Malaysian SMEs. *Malaysian Management Review*, 38(2).
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128(1), 3-72.
- Page, C., & Meyer, D. (2000). *Applied Research Design for Business and Management*. Sydney: McGraw-Hill, Inc.
- Parasuraman, S. P., Purohit, Y. S., Godshalk, V. M., & Beutell, N. J. (1996). Work and family variables, entrepreneurial career success and psychological well being. *Journal of Vocational Behavior*, 48(3), 275-300.
- Park, T. H. (2003). *The influences of familism on interpersonal trust in South Korea*. Paper presented at the Hawaii International Conference of Social Sciences, Honolulu, Hawaii, USA.
- Parry, S. B. (1998). Just what is a competency? (And why should you care). *Training*, 35(4), 58-64.
- Patton, M. Q. (1987). *How to use qualitative methods in evaluation*. Newbury Park, California: Sage Publications.
- Patton, M. Q. (1990). *Qualitative Evaluation and Research Methods*. Newbury Park: Sage Publications.

- Pearson, C. A. L., & Chatterjee, S. R. (2001). Differences and similarities of entrepreneurial characteristics in a diverse social setting - Evidence from Australian and Singaporean managers. *Journal of Enterprising Culture*, 9(3), 273-289.
- Pech, R. J., & Cameron, A. (2006). An entrepreneurial decision process model describing opportunity recognition. *European Journal of Innovation Management*, 9(1), 61-78.
- Perren, L. (2000). Factors in the growth of micro-enterprises (part2): Exploring the implication. *Journal of Small Business and Enterprise Development*, 6(4), 366-385.
- Poon, P. S., Evangelista, F. U., & Albaum, G. (2005). A comparative study of the management styles of marketing managers in Australia and the People's Republic of China. *International Marketing Review*, 22(1), 34-47.
- Portal Komuniti KTAK. (2006). *Keusahawanan : PUNB Perkenal Skim Usahawan Pemborong*. Retrieved 21 January, 2006, from <http://www.idesa.net.my/modules/news/article.php?>
- Porter, M. E. (1991). Towards a dynamic theory of strategy. *Strategic Management Journal*, 12(Special Issue for Winter), 95-117.
- Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, 68(3), 79-91.
- Ramayah, T., & Jantan, M. (2004). Technology acceptance: An individual perspective, current, and future research in Malaysia. *Review of Business Research*, 2(1), 103-111.
- Ramayah, T., Jantan, M., & Tadisina, S. K. (2001). *Job satisfaction: Empirical evidence for alternatives to JDI*. Paper presented at the 32nd Annual Meeting of Decision Science Institute Conference, San Francisco, USA.
- Ramsden, M., & Bennett, R. J. (2005). The benefits of external support to SMEs: "Hard" versus "soft" outcomes and satisfaction levels. *Journal of Small Business and Enterprise Development*, 12(2), 227 - 243.
- Rao, D. R. (2004). *Culture and entrepreneurship in Fiji's small tourism business sector*. Unpublished thesis, Victoria University, Melbourne.
- Rauch, A., & Frese, M. (2000). Psychological approaches to entrepreneurial success: A general model and an overview of findings. In C. L. Copper & I. T. Robertson (Eds.), *International Review of Industrial and Organizational Psychology* (pp. 101-142). Chichester: Wiley.
- Reid, R., Dunn, B., Cromie, S., & Adams, J. (1999). Family orientation in family firms: A model and some empirical evidence. *Journal of Small Business and Enterprise Development*, 6(1), 55-67.
- Reiss, F. (2006). http://www.publishinggame.com/art_whysmallbusinessesfail.htm. Retrieved 11 December, 2006
- Rice, R. C. (2000). *Factors affecting the competitiveness of small and medium enterprises*. Retrieved March 13, 2005, from [http://www.pegasus.or.id/Reports/19\)%20Factors%20Affecting.pdf](http://www.pegasus.or.id/Reports/19)%20Factors%20Affecting.pdf)
- Rigdon, E. E. (1998). Structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 251-294). Mahwah, NJ: Lawrence Erlbaum Associates, Publisher.
- Ripsas, S. (1998). Towards an interdisciplinary theory of entrepreneurship. *Small Business Economics*, 10(2), 103-115.

- Ritter, T., & Gemunden, H. G. (2004). The impact of a company's business strategy on its technological competence, network competence, and innovation success. *Journal of Business Research*, 57(6), 548-556.
- Robbins, S. P. (1998). *Organizational Behavior: Concepts, Controversies, and Applications*. New Jersey: Prentice Hall.
- Robertson, M., Collins, A., Medeira, N., & Slater, J. (2003). Barriers to start-up and their effect on aspirant entrepreneurs. *Education + Training*, 45(6), 308 - 316.
- Román, S., & Munuera, J. L. (2005). Determinants and consequences of ethical behaviour: an empirical study of salespeople. *European Journal of Marketing*, 39(5/6), 473 - 495.
- Rosa, P., Hamilton, D., Carter, S., & Burns, H. (1994). The impact of gender on small business management: Preliminary of a British study. *International Small Business Journal*, 12(3), 25-33.
- Rowe, C. (1995). Clarifying the use of competence and competency models in recruitment, assessment, and staff development. *Industrial and Commercial Training*, 27(11), 12-17.
- Rowe, K. (2002). *The measurement of latent and composite variables from multiple items or indicators: Applications in performance indicator systems*. Paper presented at the Australian Council for Educational Research, Background paper prepared for keynote address presented for the Royal Melbourne Institute of Technology Statistics Seminar Series1.
- Sadler-Smith, E., Hampson, Y., Chaston, I., & Badger, B. (2003). Managerial behavior, entrepreneurial style, and small firm performance. *Journal of Small Business Management*, 41(1), 47-67.
- Saffu, K. (2003). The role and impact of culture on South Pacific Island entrepreneurs. *International Journal of Entrepreneurial Behaviour & Research*, 9(2), 55-73.
- Saleh, A. S., & Ndubisi, N. O. (2006a). An evaluation of SME development in Malaysia. *International Review of Business Research Papers*, 2(1), 1-14.
- Saleh, A. S., & Ndubisi, N. O. (2006b). SME Development in Malaysia: Domestic and global challenges. *Economics Working Papers wp06-03, School of Economics and Information Systems, University of Wollongong, NSW, Australia*.
- Salganik, M. J., & Heckathorn, D. D. (2004). Sampling and estimation in hidden populations using respondent-driven sampling. *Sociological Methodology*, 34, 193-239.
- Salomo, S., Brinckmann, J., & Talke, K. (2006). *Functional management competence and growth of young technology-based firms*. Paper presented at the Entrepreneurial Leadership Symposium.
- Salomo, S., Gemunden, H. G., & Brinckmann, J. (2005). *Entrepreneurial-Management Competence and development of new technology-based firms*. Paper presented at the Babson Kauffman Entrepreneurship Research Conference.
- Sawyer, O. O. (1993). Environmental uncertainty and environmental scanning activities of Nigerian manufacturing executives: a comparative analysis. *Strategic Management Journal*, 14(3), 287-299.
- Scheinberg, S., & MacMillan, I. (1988). An 11 country study of motivations to start a business. *Frontiers of Entrepreneurship Research 1988*.

- Schuler, R. S., & Jackson, S. E. (1987). Linking competitive strategies with human resource management practices. *Academy of Management Executive*, 1(3), 207-219.
- Schumaker, R. E., & Lomax, R. G. (1996). *A beginner's guide to structural equation modeling*. Mahwah, NJ: Erlbaum.
- Shane, S. (1993). Cultural influences on national rates of innovation. *Journal of Business Venturing*, 8(1), 59-73.
- Shane, S., & Kolvereid, L. (1995). National environment, strategy, and new venture performance: A three country study. *Journal of Small Business Management*, 33(2), 37-50.
- Shaver, K. G., & Scott, L. R. (1991). Person, process, choice: the psychology of new creation. *Entrepreneurship Theory and Practice*, 16(2), 23-45.
- Shaw, E. (1999). A guide to the qualitative research process. *Qualitative Market Research: An International Journal*, 2(2), 59-70.
- Shefsky, L. E. (1994). *Entrepreneurs are made not born: Secrets from 200 successful entrepreneurs*. New York: McGraw-Hill.
- Shook, C. L., Priem, R. L., & McGee, J. (2003). Venture creation and the enterprising individual: A review and synthesis. *Journal of Management*, 29(3), 379-399.
- Simpson, M., Tuck, N., & Bellamy, S. (2004). Small business success factors: The role of education and training. *Education + Training*, 46(8/9), 481-491.
- Singelis, T. M., & Brown, W. J. (1995). Culture, self, and collectivist communication: Linking culture to individual behavior. *Human Communication Research*, 21(3), 354-389.
- Singh, R., Hills, G., & Lumpkin, G. T. (1999). *New venture ideas and entrepreneurial opportunities: Understanding the process of opportunity recognition*. Paper presented at the USASBE/SBIDA Annual National Conference, Sailing the Entrepreneurial Wave Info the 21st Century, San Diego, California.
- Singh, S. (1988). Personality characteristics, work values, and life styles of fast and slow progressing small scale industrial entrepreneurs. *The Journal of Social Psychology*, 129(6), 801-805.
- Sloane, P. (1999). *Islam, modernity and entrepreneurship among the Malays*. London: Macmillan.
- Small and Medium Industries Development Corporation (SMIDEC). (2004). <http://www.smidec.gov.my>.
- Smallbone, D., Leig, R., & North, D. (1995). The characteristics and strategies of high-growth SMEs. *International Journal of Entrepreneurial Behaviour & Research*, 1(3), 44-62.
- SMIDEC Media Release. (July 21, 2003). *The performance of SMEs in the manufacturing sector*. Kuala Lumpur, Malaysia: Small and Medium Industries Development Corporation.
- Smilor, R. W. (1997). Entrepreneurship: Reflections on a subversive activity. *Journal of Business Venturing*, 12(5), 341-421.
- Smith, P., & Bond, M. (1999). *Social psychology across culture*. Boston: Allyn & Bacon.
- Snell, R., & Lau, A. (1994). Exploring local competences salient for expanding small businesses. *Journal of Management*, 13(4), 4-15.

- Sohi, R. S. (1996). The effects of environmental dynamism and heterogeneity on salespeople's role perceptions, performance and job satisfaction. *European Journal of Marketing*, 30(7), 49-67.
- Spanos, L. J. (2005). Corporate governance in Greece: Developments and policy implications. *Corporate Governance*, 5(1), 15 - 30.
- Spence, L. J., & Rutherford, R. (2001). Social responsibility, profit maximisation and the small firm owner-manager. *Journal of Small Business and Enterprise Development*, 8(2), 126-139.
- Spencer, L. M., & Spencer, S. M. (1993). *Competence at work: Model for superior performance*. New York: John Wiley and Sons.
- Stanger, A. M. J. (2004). Gender-comparative use of small business training and assistance: a literature review. *Education + Training*, 46(8/9), 464-473.
- Starr, J., & MacMillan, I. (1990). Resource cooptation via social contracting: Resource acquisition strategies for new ventures. *Strategic Management Journal*, 11, 79-92.
- Steenkamp, J.-B. E. M., & Trijp, H. C. M. v. (1991). The use of LISREL in validating marketing constructs. *International Journal of Research in Marketing*, 8(4), 283-299.
- Steensma, H. K., Marino, L., & Weaver, K. M. (2000). Attitudes toward cooperative strategies: A cross-cultural analysis of entrepreneurs. *Journal of International Business Studies*, 31(4), 591-609.
- Still, L. V., & Timms, W. (2000). Women's business: the flexible alternative workstyle for women. *Women in Management Review*, 15(5/6), 272-283.
- Stokes, D. (2006). Marketing and the small business. In S. Carter & D. Jones-Evans (Eds.), *Enterprise and Small Business: Principles, Practice, and Policy*. Harlow, England: Pearson Education Limited.
- Stokes, D., & Blackburn, R. (2002). Learning the hard way: the lessons of owner-managers who have closed their businesses. *Journal of Small Business and Enterprise Development*, 9(1), 17-27.
- Storey, D. (1994). *Understanding the small business sector*. London: Routledge.
- Storey, D. (2004). Exploring the link, among small firms, between management training and firm performance: A comparison between the UK and other OECD countries. *International Journal of Resource Management*, 15(1), 112-130.
- Stuart, R. W., & Abetti, P. A. (1990). Impact of entrepreneurial and management experience on early performance. *Journal of Business Venturing*, 5(3), 151-162.
- Suarez-Villa, L. (1998). The structures of cooperation: Downscaling, outsourcing and the networked alliance. *Small Business Economics*, 10(1), 5-16.
- Tabachnick, B., & Fidell, L. (2001). *Using multivariate statistics*. Boston: Allyn and Bacon.
- Tanaka, J., & Huba, G. (1984). Confirmatory hierarchical factor analyses of psychological distress measures. *Journal of Personality and Social Psychology*, 46(3), 621-635.
- Taylor, D. W., Jones, O., & Boles, K. (2004). Building social capital through action learning: an insight into the entrepreneur. *Education + Training*, 46(5), 226-235.

- Temtime, Z. T., & Pansiri, J. (2005). Managerial competency and organizational flexibility in small and medium enterprises in Botswana. *Problems & Perspectives in Management*, 2005(1), 25-36.
- Terziovski, M. (2003). The relationship between networking practices and business excellence: A study of small to medium enterprises (SMEs). *Measuring Business Excellence*, 7(2), 78-92.
- Tett, R. P., Guterman, H. A., Bleier, A., & Murphy, P. J. (2000). Development and content validation of a "hyperdimensional" taxonomy of managerial competencies. *Human Performance*, 13(3), 205-251.
- Thomas, A. S., & Mueller, S. L. (2000). A case for comparative entrepreneurship: Assessing the relevance of culture. *Journal of International Business Studies*, 31(2), 287-301.
- Thompson, J. (1996). Strategic and competitive success: Towards a model of the comprehensively competent organization. *Management Decision*, 34(2), 5-19.
- Thompson, J. L. (1999). The world of the entrepreneur - a new perspective. *Journal of Workplace Learning: Employee Counselling Today*, 11(6), 209-224.
- Thompson, J. L., Stuart, R., & Lindsay, P. R. (1997). The competence of top team members: A framework for successful performance. *Team Performance Management*, 3(2), 57-75.
- Thompson, P., & Zakaria, Z. (2004). Corporate social responsibility reporting in Malaysia: progress and prospects. *The Journal of Corporate Citizenship*, 13(Spring), 125-137.
- Timmons, J. A. (1978). Characteristics and role demands of entrepreneurship. *American Journal of Small Business*, 3(1), 5-17.
- Timmons, J. A. (2000). *New venture creation: Entrepreneurship 2000* (5th ed.). Homewood, IL: Irwin.
- Tracy, B. (2005). *The role of the entrepreneur*. Retrieved July 6, 2005, from <http://www.entrepreneur.com/article/print/0,2361,322099,00.html>
- Triandis, H. C. (1995). *Individualism and Collectivism*. Oxford: Westview Press.
- Triandis, H. C., & Suh, E. M. (2002). Cultural influences on personality. *Annual Review of Psychology*, 53, 133-160.
- Tsai, W. M.-H., MacMillan, I. C., & Low, M. B. (1991). Effects of strategy and environment on corporate venture success in industrial markets. *Journal of Business Venturing*, 6(1), 9-28.
- Tucker, J., & Lean, J. (2003). Small firm finance and public policy. *Journal of Small Business and Enterprise Development*, 10(1), 50-61.
- United Nations Development Programme (UNDP) Malaysia. (2007). *Malaysia small and medium enterprises: Building and enabling environment*. Kuala Lumpur, Malaysia: United Nations Development Programme.
- Ushedo, B. O., & Ehiri, J. E. (2006). Ethical challenges in ecological policy: Global thinking and local action. *Management of Environmental Quality: An International Journal*, 17(1), 31-42.
- Venkatraman, N., & Ramanujam, V. (1986). Measurement of business performance in strategy research: A comparison of approaches. *Academy of Management Review*, 11(4), 801-814.

- Verreynne, M.-L., & Meyer, D. (2007). *Small firm performance: Modelling the role of innovative differentiation*. Paper presented at the 4th AGSE International Entrepreneurship Research Exchange, Brisbane, Australia.
- Wagner III, J. A. (1995). Studies of individualism-collectivism: Effects on cooperation. *Academy of Management Journal*, 38(1), 152-172.
- Wahari, H., & Raban, Z. (2005, 1 June). Wawasan baru RMK-9 utamakan R&D. *Utusan Malaysia*.
- Walker, E., & Brown, A. (2004). What success factors are important to small business owners? *International Small Business Journal*, 22(6), 577-593.
- Wallace, J. (1998). *The impact of small business course on competencies*. Paper presented at the 22nd National Small Business Consulting Conference, Santa Fe, New Mexico, US.
- Wang, C. K., & Ang, B. L. (2004). Determinants of venture performance in Singapore. *Journal of Small Business Management*, 42(2), 347-363.
- Wang, S.-D. (2003). The development of e-financing: Implications for SMEs. *Bulletin on Asia-Pacific Perspective 2003/2004*(United Nations), 77-84.
- Ward, A. (2004). Enterprise skills and enterprise learning. *Foresight*, 6(2), 104-109.
- Wasilczuk, J. (2000). Advantageous competence of owner/managers to grow the firm in Poland: Empirical evidence. *Journal of Small Business Management*, 38(2), 88-94.
- Watson, J. (2003). Failure rates for female-controlled businesses: Are they any different? *Journal of Small Business Management*, 41(3), 262-277.
- Watson, J., Newby, R., & Woodliff, D. (2000). *Work and owner satisfaction: Implications for performance measurement*. Paper presented at the USASBE (United States Association for Small Business and Entrepreneurship) Annual National Conference, San Antonio, Texas.
- Watson, K., Hogarth-Scott, S., & Wilson, N. (1998). Small business start-ups: success factors and support implications. *International Journal of Entrepreneurial Behaviour & Research*, 4(3), 217-238.
- Weaver, K. M., Dickson, P. H., Gibson, B., & Turner, A. (2002). Being uncertain: The relationship between entrepreneurial orientation and environmental uncertainty. *Journal of Enterprising Culture*, 10(2), 87-105.
- Webster, B., Walker, E., & Brown, A. (2005). Australian small business participation in training activities. *Education + Training*, 47(8/9), 552 - 561.
- Westerberg, M., Singh, J., & Hackner, E. (1997). Does the CEO matter? An empirical study of small Swedish firms operating in turbulent environments. *Scandinavian Journal of Management*, 13(3), 251-270.
- Westhead, P., & Wright, M. (1998). Novice, portfolio, and serial founders in rural and urban areas. *Entrepreneurship: Theory & Practice*, 22(4), 63-100.
- Westhead, P., Wright, M., & Ucbasaran, D. (2001). The internationalization of new and small firms: A resource-based view. *Journal of Business Venturing*, 16(4), 333-358.
- Wiklund, J. (1999). The sustainability of the entrepreneurial orientation--performance relationship. *Entrepreneurship: Theory & Practice*, 24(1), 37-49.

- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: a configurational approach. *Journal of Business Venturing*, 20(1), 71-91.
- Winterton, J. (2002). Entrepreneurship: Towards a competence framework for developing SME managers. *United States Association for Small Business and Entrepreneurship Conference Proceedings*.
- Woodruffe, C. (1992). What is meant by a competency? In R. Boam & P. Sparrow (Eds.), *Designing and achieving competency: A competency-based approach to developing people and organizations*. New York: McGraw-Hill.
- Yu, T. F.-L. (2001). Towards a capabilities perspective of the small firm. *International Journal of Management Reviews*, 3(3), 185-197.
- Yusof, S. A., & Amin, R. M. (1999). Admired values: The case of teenagers in Malaysia. *International Journal of Social Economics*, 26(5/6), 802-810.
- Yusuf, A. (1995). Critical success factors for small business: Perceptions of South Pacific entrepreneurs. *Journal of Small Business Management*, 33(2), 68-73.
- Zahra, S. A. (1993). Environment, corporate entrepreneurship, and financial performance: A taxonomic approach. *Journal of Business Venturing*, 8(3), 319-340.
- Zairi, M., & Peters, J. (2002). The impact of social responsibility on business performance. *Managerial Auditing Journal*, 17(4), 174-178.
- Zhao, F. (2005). Exploring the synergy between entrepreneurship and innovation. *International Journal of Entrepreneurial Behaviour & Research*, 11(1), 25-41.
- Zikmund, W. G. (2003). *Business research methods*. Mason, Ohio: Thomson South-Western.
- Zweig, D., & Webster, J. (2003). Personality as a moderator of monitoring acceptance. *Computers in Human Behavior*, 19(4), 479-493.