

**A Model of Network Marketing Business
Entrepreneurial Performance**

by
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CERTIFICATE OF AUTHORSHIP/ORIGINALITY

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Fu Dai

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ABSTRACT

Network marketing organization (NMO) is a growing form of business organization. According to the World Federation of Direct Selling Association (2009), there has been a growth in the number of individuals in network marketing business. The current study focuses on investigating the factors that determine immigrant network marketers' performance in conducting their network marketing business. This research integrates the literature on Social Cognitive Theory (Bandura, 1986), Theory of Planned Behaviour (Ajzen, 1991), immigrant entrepreneurship (Chaganti & Greene, 2002) and NMO studies (Biggart, 1989; Sparks & Schenk, 2006) to develop a path model. This model is tested with data obtained from a survey of 227 Chinese immigrant network marketers in Australia. Adopting the Partial Least Squares methodology, the model is analysed using *SmartPLS* (Ringle, Wende & Will, 2005). Results suggest that the model has a good predictive ability and a high level of goodness of fit.

The current study made several theoretical and empirical contributions. The first one is the identification of factors (influence of social environment in NMO, motivation, self-efficacy, desire for opportunity, social competence, human capital and actions undertaken) that determine immigrants' performance in pursuing entrepreneurship in the field setting of network marketing organization. The Theory of Planned Behavior (Ajzen, 1991) and entrepreneurial intention model (Krueger, 1993) suggest that self-efficacy and desire for opportunity are the sources of entrepreneurial intention. The current study identifies that self-efficacy and desire for opportunity are two of the factors that directly resulted in actions being undertaken by immigrant network marketers to participate in network marketing activities, which in turn led to determine the performance positively.

Evidence from previous studies indicates that social competence is positively related to entrepreneurial performance (Baron and Markman 2003). The current study first discovered that the higher level of social competence will cause more entrepreneurial actions to be undertaken in the network marketing business context, which determines the higher level of performance. This study is also first to provide evidence demonstrating a positive causal relationship between human capital and entrepreneurial

actions and performance in the context of NMO. The second contribution is to find out the process of how NMOs develop immigrant network marketers and make these individuals actively participate in NMO activities. Finally, based on the path analysis, the study develops a model of network marketing business entrepreneurial performance and contributes to the literature of NMO. The study has practical contributions and implications as well.

CHAPTER ONE

INTRODUCTION AND OVERVIEW

1.1 Chapter Introduction

This chapter presents the introduction to the thesis. It starts with an introduction to the research background and identifying the research area. This is followed by a statement of the research problem, theories, hypotheses, justification for the research, research methodology, and an outline of the thesis as a whole. At the end of the chapter is a summary.

1.2 Research Background

Network marketing, also known as *direct selling* or *multilevel marketing*, is a system in which a manufacturer (network marketing firm) pays people outside the company to sell its products and services directly to consumers (Harris, 2004). In return, each salesperson is given the opportunity to build his or her own network marketing organization (NMO) by recruiting, training and motivating others to sell the same products and services (Vander Nat & Keep, 2002; Harris, 2004). The network marketing organization is a growing form of business organization. (Sparks & Schenk, 2001, 2006). According to the World Federal Direct Selling Association, the total sales revenue of network marketing firms reached US \$1.083 Billion in 2005 and it claimed that the industry has 500,000 independent distributors and customers in Australia (World Federal Direct Selling Association, 2009). This means that about 2.3% of Australia's population (ABS, 2010) is involved in network marketing businesses either as network marketers or as users of the products sold by network marketing companies.

Anecdotal evidence shows that large numbers of have been attracted to the major network marketing organization (NMO) to pursue entrepreneurship in Australia (*Sing Tao Daily*, 19th October 2005; *Sing Tao Daily*, 28 September 2007) and North America (Lin, 2007). NMOs are promoted as a way for individuals who do not have adequate resources and/or skills to start up their own small business to pursue entrepreneurship (Kuntze, 2001). Immigrant entrepreneurship started attracting the researchers' attention in the most recent decade (Iyer & Shapiro, 1999; Chaganti & Greene, 2002; Zhou, 2004; Ley, 2006; Sequeira & Rasheed, 2006). Chaganti and

Greene (2002) define the immigrant entrepreneurs as “Individuals who, as recent arrivals in the country, start a business as a means of economic survival” (p. 128).

Although the NMO has emerged over the decades, only a limited number of empirical studies have been published. The first comprehensive study of NMOs was conducted by Biggart (1989) from a sociological perspective, while the existing empirical studies mainly cover areas of transformational leadership (Sparks & Schenk, 2001), organizational socialization (Bhattacharya & Mehta, 2000; Sparks & Schenk, 2006), organizational citizenship (Sparks & Schenk, 2006), organizational identification (Pratt, 2000; Sparks & Schenk, 2006), entrepreneurial motivation (Kuntze, 2001), ethnic entrepreneurship (Lin, 2007) and spirituality in NMOs (Groß, 2010). Among these studies, Lin (2007) is the only one that focuses on Chinese immigrants in the network marketing business. These studies deepen our understanding of NMOs, but a critical issue of how the entrepreneurship of network marketers contributes to their business success has not been given sufficient attention. What is even less well known is how the social environment in a NMO affects the network marketer’s behaviours in conducting their business. This study attempts to examine the factors affecting entrepreneurial actions undertaken by immigrants in conducting their network marketing business in Australia, and investigates the relationship between the entrepreneurial actions and performance.

There is a substantial difference between the methods of operating a conventional small business and a network marketing business. In most cases, each conventional small business owner operates his/her business independently, whereas different network marketing business owners work collectively and operate their businesses together, in spite of the fact that each of them is responsible for his/her profit and costs (Biggart, 1989, Bhattacharya & Mehta, 2000). Collectively working allows network marketers to share resources and risks faced in operating their business (Biggart, 1989, Bhattacharya & Mehta, 2000), which substantially reduces the barriers or hurdles for Chinese immigrants to start their network marketing businesses (Bhattacharya & Mehta, 2000).

The main entrepreneurial activities undertaken by network marketers can be summarized as the combination of selling products, recruiting new network marketers and supporting and training them to do the same things (Granfield & Nicols, 1975; Biggart, 1989; Bloch, 1996; Pratt, 2000; Koehn, 2001; Sparks & Schenk, 2001; Sparks

& Schenk, 2006). Understanding how network marketers succeed through their actions is essential for theorists to comprehend NMOs.

The purpose of the present study is to develop and test the model of network marketing business entrepreneurial performance. This study takes Chinese immigrant network marketers in Australia as the research unit.

1.3 Research Problem, Theories, and Hypotheses

Given the findings from limited studies of the NMO as a foundation, coupled with the paucity of research relating to NMOs, the problems addressed in this study are articulated as follows:

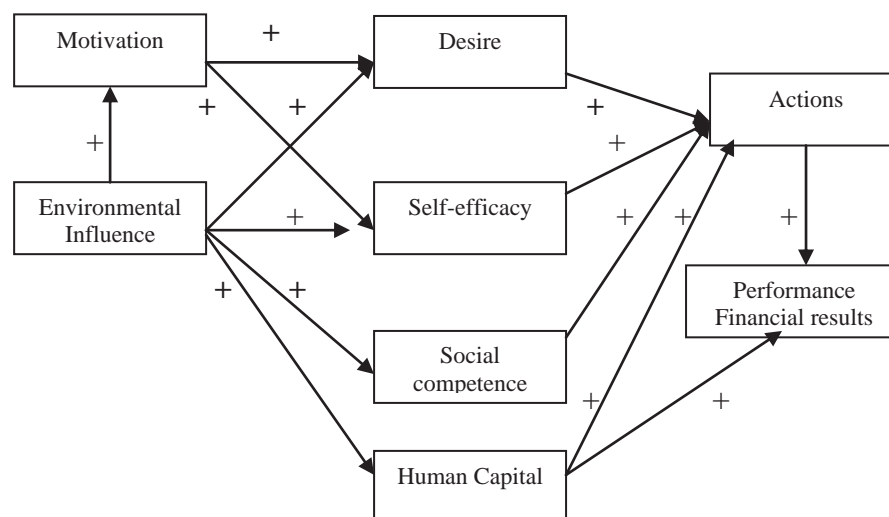
- 1) *How does the motivation of the immigrant network marketers affect their desire for entrepreneurial opportunities?*
- 2) *How does the motivation of the immigrant network marketers affect their self-efficacy?*
- 3) *How does the influence of social environment in the NMO impact the desire for network marketing opportunity, self-efficacy, social competence and human capital, which in turn, impacts the immigrant network marketers' actions undertaken in conducting network marketing business?*
- 4) *How do the actions undertaken by immigrant network marketers in conducting their network marketing business impact their performance?*

In addressing these problems, the research question in the current study is brought to the fore: “*What factors determine immigrant network marketer's performance in conducting their network marketing business?*” Essentially, this study hypothesizes that the network marketers' desire for network marketing business opportunities, their self-efficacy, social competence and human capital, positively affect the actions undertaken, which in turn positively influences the financial performance outcomes arising from their network marketing business.

In order to effectively address the aforementioned research problems, the application of the Social Cognitive Theory to management areas has been investigated. The Theory of Planned Behaviour (Ajzen, 1991) and the literature of immigrant entrepreneurship (Chaganti & Greene, 2002; Henrekson, 2005; Sequeira & Rasheed,

2006; Ley, 2006; Bergmann & Sternberg, 2007) are incorporated as supplements to Social Cognitive Theory (Bandura, 1986).

Figure 1.3: Research Framework



Taken together, Social Cognitive Theory, Theory of Planned Behaviour, and the literature of immigrant entrepreneurship provide the foundation for developing the research framework and hypotheses in the current study. Figure 1.3 shows the basic research framework. Several clear foci drive the hypothesised relationship in the research framework. The theories, and their contributions to the above framework, are described next.

1.3.1 Social Cognitive Theory

Social Cognitive Theory describes human functioning in terms of a model of triadic reciprocity in which behaviour, cognitive and other personal factors, and environmental events all operate as interacting determinants of each other (Bandura, 1986). With Social Cognitive Theory, this study intends to explain how Chinese immigrants become network marketers and explore entrepreneurial opportunities in network marketing business in three dimensions: the influence of the social environment in NMOs, personal and cognitive factors (self-efficacy, social competence and human capital), factors of behaviours (motivation, desire for opportunity and actions undertaken in conducting a network marketing business). In the current study, social environment refers to the social setting of the NMO in which the members of the

organization collaborate, interact and develop business (Biggart, 1989; Sparks & Schenk, 2006).

In the causal structure of Social Cognitive Theory (Bandura, 1986), self-efficacy occupies a pivotal role. Self-efficacy theory posits that people's level of motivation, affective states, and actions are based more on what they believe than on what is objectively true (Bandura, 1997). People's judgments of their capabilities influence their thought patterns and emotional reactions during actual and anticipated transactions with their environment (Bandura, 1986; 1997). People with high self-efficacy tend to perform better in tasks about which they hold this belief and less well in tasks about which they believe they have low self-efficacy (Forbes, 2005). Bandura (1986) points out that: "the stronger the perceived self-efficacy, the more likely are persons to select challenging tasks, the longer they persist at them, and the more likely they are to perform successfully" (p. 397). Evidence in empirical studies (e. g. Krishnam, Netemeyer & Boles, 2003; Brown, Jones, & Leigh, 2005; Luthans & Ibrayeva, 2006; Moores, Chang, & Smith, 2006) supports the positive relationship between self-efficacy and performance.

Self-efficacy theory posits that self-efficacy beliefs are constructed from four principal sources of information: i) enactive mastery experiences that serve as indicators of capability; ii) vicarious experiences that alter efficacy beliefs through the transmission of competencies and by comparison with the attainments of others; iii) verbal persuasion; and iv) physiological and affective states from which people partly judge the strength of their capabilities, and their vulnerability to dysfunction (Bandura, 1997).

The main contribution of Social Cognitive Theory to the current research is to supply a foundation for the theoretical framework. From this foundation the research framework and hypotheses are developed.

1.3.2 Theory of Planned Behaviour

The Theory of Planned Behaviour (Ajzen, 1991) is one of several influential theories being applied to the study of entrepreneurial intention (e.g. Boyd & Vozikis, 1994; Krueger, 2000; Peterman & Kennedy, 2003). It is designed to predict and explain human behaviour in specific contexts (Ajzen, 1991). A central factor in the Theory of Planned Behaviour is the individual's intention to perform a given behaviour. This

theory, as outlined by Ajzen (1991), postulates three conceptually independent determinants of intention. The first is the attitude towards the behaviour; it refers to the degree to which a person has a favourable or unfavourable evaluation or appraisal of the behaviour in question (Ajzen, 1991). The second predictor is the subjective norm; it refers to the perceived social pressure to perform or not to perform the behaviour. The third is the degree of perceived behavioural control; it refers to the perceived ease or difficulty of performing the behaviour and is assumed to reflect past experience as well as anticipated impediments and obstacles (Ajzen, 1991). Perceived behavioural control is most compatible with Bandura's (1986) concept of perceived self-efficacy (Peterman & Kennedy, 2003).

Researchers (e.g. Krueger, 1993; Boyd & Vozikis, 1994; Krueger & Brazeal, 1994; Krueger, 2000; Krueger & Reilly, Carsrud, 2000; Peterman & Kennedy, 2003) have applied the Theory of Planned Behaviour to develop different models of entrepreneurial intentions. Some researchers (Peterman & Kennedy, 2003; Li, 2007) applied these entrepreneurial intention models to explain the influence of entrepreneurial education on students' perception of entrepreneurship. In the models of entrepreneurial intentions, the attitude towards the behaviour and social norm proposed by Ajzen (1991) were replaced by perceived desirability, and the perceived behavioural control was replaced by perceived self-efficacy (feasibility) (Krueger, 1993).

The concept of perceived self-efficacy is not only one of the determinants in the Theory of Planned Behaviour (Ajzen, 1991), but also occupies a pivotal role in the causal structure of Social Cognitive Theory (Bandura, 2001). Therefore, the current research applies these two theories together via perceived self-efficacy to construct the research framework and predict a network marketer's actions in operating their network marketing business.

1.3.3 Immigrant Entrepreneurship

A substantial amount of theoretical development has occurred in identifying the significance of immigrant entrepreneurship. Researchers explain that the main incentive for immigrants to pursue self-employment and finally become more established business-people is that they are disadvantaged in the labour market because of their inadequacy in the host country's language, lack of education and specific career-related

skills, the depreciation of human capital, and so on (Iyer & Shapiro, 1999; Chaganti & Greene, 2002; Zhou, 2004; Ley, 2006;

Sequeira & Rasheed, 2006). These explanations are supported by the literature of necessity entrepreneurship (e.g. Henrekson, 2005; Bergmann & Sternberg, 2007; Block & Keollinger, 2009). According to necessity theory, immigrants are pushed into entrepreneurship because they have no better choices for work or for making a living (Henrekson, 2005; Bergmann & Sternberg, 2007).

An immigrant's social network is a key determinant in his/her ability to launch a self-employed business, as well as its subsequent success (Sequeira & Rasheed, 2006). An immigrant's family provides a convenient and low cost source of support to the business (Iyer & Shapiro, 1999). However, many immigrants have no access to resources to start up their own business (Stevenson-Yang, 1996; Warner 1996). Many of these immigrants responded to the appeal to the promotion of entrepreneurship promoted and have joined NMOs (Lin, 2007).

1.4 Justification for the Research

NMO has occurred in business for over fifty years and made substantial contributions to the business world (World Federal Direct Selling Association, 2009; Kuntze, 2001; Biggart, 1989; Sparks & Schenk, 2001, 2006). Pursuing entrepreneurship is one of the motivators for network marketers to be involved in a network marketing business (Kuntze, 2001). Review of the literature suggests a large number of studies on entrepreneurship have been conducted; however, the examination of entrepreneurship process for NMOs has been neglected. NMO researchers (e.g. Biggart, 1989; Kuntze, 2001; Sparks & Schenk, 2001; Sparks & Schenk, 2006) have overlooked the assessment of the network marketers' motivation, self-efficacy, desire for opportunities, social competence, human capital and the influence of social environment in NMO, as well as the network marketing business entrepreneurial actions undertaken as central tenets of network marketers' performances in their network marketing businesses. Having searched in the databases, no prior research in this domain has studied an NMO using such a theoretical foundation. While previous research has proven insightful with respect to identifying the topic, it has not shed light on the dynamics of network marketers' performance. Thus, this study is theoretically significant, as it expands entrepreneurship studies into the realm of the NMO.

With respect to the practical significance of this study, network marketing firms will benefit from the results of this study, helping managers of network marketing firms to understand how network marketers perform their business activities. Based on such understanding, managers of network marketing firms will be able to develop more effective business strategies.

1.5 Research Methodology

In this research a deductive research strategy was used, a cross-sectional research design was adopted and the quantitative method was supplemented with focus group study as a qualitative method to validate the measurement. To address the research problems, a sample of Chinese immigrants was selected from amongst network marketers in NMOs in the Australian States of New South Wales, Victoria and Queensland. The data collection process involved four stages. First, NMOs, and issues associated with Chinese immigrant network marketer behaviours, were researched. This stage was included to familiarize the researcher with business operations in a NMO, immigrant entrepreneurship, and the motivation for conducting a network marketing business. Second, questionnaires were developed and refined based on the needs of the sample. The measurement method and questionnaire were developed following literature review and focus group studies. Considering the limits of the number of studies on NMO, four focus group studies were conducted to validate the questions and statements in the questionnaire. Third, the questionnaire instruments were translated from English into Chinese and pretested in a pilot study. Finally the instrument was administered and subsequently analysed.

1.6 Main Findings and Contributions

Findings from the current research show that the influence of the social environment within the NMO positively leads to the development of immigrants' self-efficacy in network marketing business, their desire for opportunities, social competence, and human capital. These factors lead to an increase in the actions undertaken by Chinese immigrant network marketers in conducting their business. Social environment also positively impacts their motivation to participate in a network marketing business. These factors have a positive influence on the resultant performance.

The current study makes several theoretical and empirical contributions. First, the process of how network marketing organizations develop the Chinese network marketers as part of the training and development process, results in these individuals actively participating in network marketing organization activities. The social environment in network marketing organizations is found to lead to the development of the Chinese network marketers' desire for opportunities from network marketing business as well as self-efficacy, social competence and human capital.

The second contribution is the identification of factors which explained immigrants' performance in network marketing business. The current study identifies that self-efficacy and the desire for opportunity are two of the factors that directly result in actions being undertaken by network marketers to participate in network marketing activities, which is positively related to the financial performance outcomes.

The current study shows that those network marketers who possess a higher level of social competence tend to undertake more entrepreneurial actions in the network marketing business context, and it is found to lead to a higher level of financial performance. This study also provides the empirical evidence to show the causal link from human capital and entrepreneurial actions to financial performance. The third contribution is the operationalisation of several factors as formative constructs and the application of *SmartPLS* in the current research.

The study has practical contributions and implications. The results obtained in the current study will assist the management of network marketing firms in understanding the behaviours of their network marketers in operating their business. Such understanding is essential as the main sales forces in network marketing firms are network marketers (Harris, 2004) and the critical factor in a network marketing firm's success is its ability to engage the energies of many network marketers and shape them into a highly productive organization (Biggart, 1989). The practical implications of the current study include: i) creating a favourable business environment to attract new network marketers and motivate existing network marketers; ii) providing effective training to raise network marketer's self-efficacy, which in turn increase actions which result in higher level of performance; iii) improving management's ability to engage a large number of network marketers; and vi) building reliable sales forces and maintaining customer loyalty.

1.7 Outline of the Thesis

Five chapters follow this introductory chapter. Chapter Two, literature review and hypotheses, provides the theoretical foundation for the thesis, and raises the research question and establishes the hypotheses. Chapter Three, research methodology, presents a detailed description of the research design, research methods, the sample, survey instrument, data collection, and data analyses employed. Chapter Four, results of analysis of the hypotheses and testing of the proposed model, demonstrates the correlations and variables, and describes the results of testing the hypotheses and the proposed model. Chapter Five, discussion and implications, comprehensively discusses the current research and presents the theoretical contributions and their implications. Chapter Six, conclusion, is the last chapter of this thesis. It reiterates the background of the current research, presents the practical implications of the current research and limitations. This chapter also suggests the future research implications. At the end, the conclusion of the current research is presented.

1.8 Chapter Summary

The first chapter of this thesis briefly describes the research background, research theory problem, theories and hypotheses. It also presents the justification for this study, the research methodology, and research findings and contributions. Section 1.7 outlines the structure and content of the thesis. The entire chapter serves as a road map for the thesis.

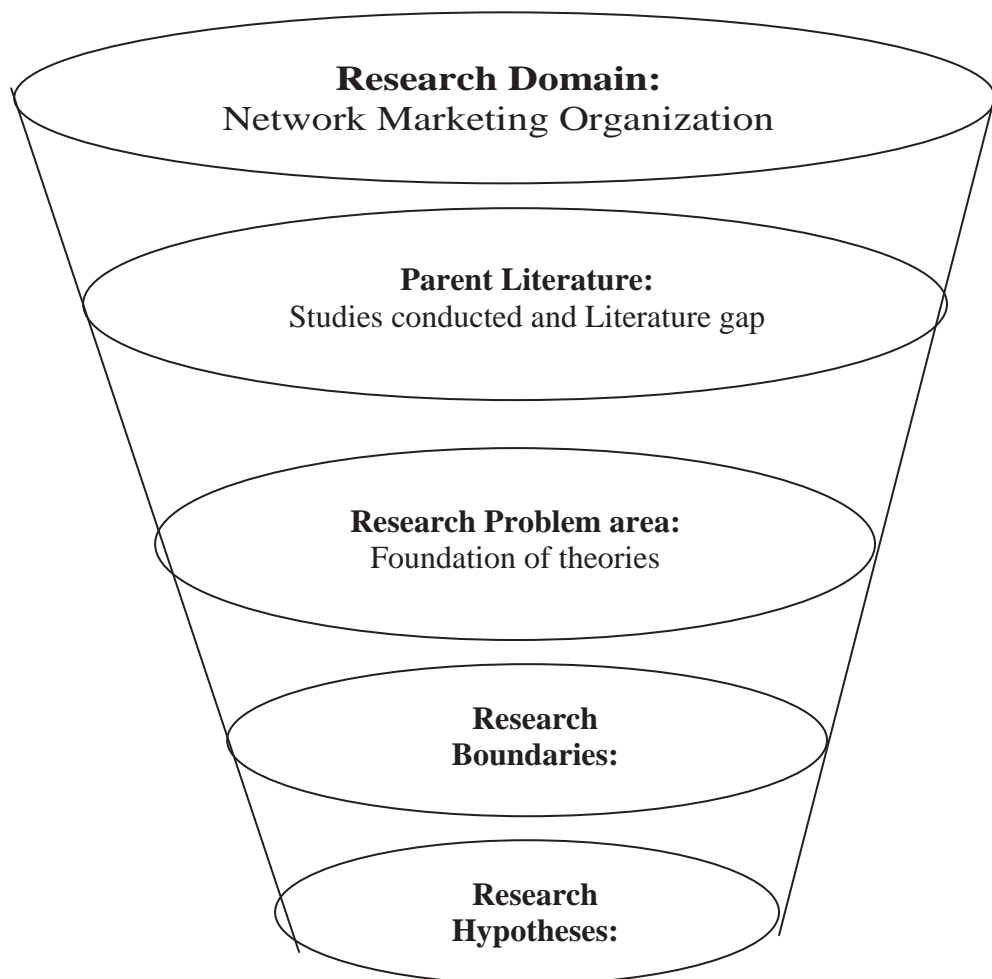
Chapter Two

LITERATURE REVIEW AND HYPOTHESES

2.1 Introduction to the Chapter

Chapter 1 provided an introduction to the research problem and an overview of the thesis. Chapter Two extends the introduction by building a theoretical foundation for the thesis. This will be accomplished through a review of the extant literature on MNO, entrepreneurship (immigrant entrepreneurship), and the application of Social Cognitive Theory to the area of management research. The chapter is organized into sections following a model of the theoretical framework for the thesis (Figure 2.1).

Figure 2.1: Model of the Theoretical Framework for the Thesis



As depicted in the model (Figure 2.1), there are five major topic areas included in this chapter: i) introduction to NMOs (the research domain); ii) a review of the previous studies conducted in NMOs (the parent literature); iii) a description of the theories utilised to develop the model and the current research on network marketing specific entrepreneurial actions (research area); iv) a summary of the research boundaries; and v) developing the research hypotheses (the questions that have not been answered by previous research).

2.2 Network Marketing Organizations

Network marketing, also known as direct selling or multilevel marketing, is a system in which a manufacturer pays people outside the company to sell its products and services directly to consumers (Harris, 2004). In return, each salesperson is given the opportunity to build his or her own independent sales force, or NMO, by recruiting, training and motivating others to sell the same products and services (Vander Nat & Keep, 2002; Harris, 2004). Network marketing gives several distinct advantages, such as, securing distribution and sales quickly at a relatively low fixed cost, gaining consumer acceptance for a new product particularly when this involves a new entrant in that product industry, gaining entrance to a market while avoiding excessive promotional and advertising expenses as well as potential price wars and earning a potentially higher rate of return on sales by eliminating large outlays for media advertising (Granfield & Nicols, 1975).

Some scholars describe network marketing as a method of non-store retailing (e.g., Kustin & Jones, 1995; Msweli & Sargeant, 2001) because it involves face-to-face communication between a sales representative and a potential buyer (Vander Nat & Keep, 2002). Almost all salespersons representing network marketing firms operate as independent contractors rather than employees (Vander Nat & Keep, 2002). The major area of competition between the network marketing firms occurs in the labour market and they vigorously compete against each other to attract full- and part-time independent contractors (Granfield & Nicols, 1975).

NMOs are based on one or both of two substantive values: a belief in entrepreneurialism and a belief in the transformative power of products (Biggart, 1989) to attract newcomers to the business. They claim themselves as a way for the “ordinary” person to attain wealth and status without such barriers to entry as an Ivy

League education, high social position, or significant inheritance (Kuntze, 2001). According to Biggart (1989), NMOs open their doors to everyone who wants to try.

In the NMO, the sales force is generally paid through a commission system (Kustin & Jones, 1995; Vander Nat & Keep, 2002; Harris, 2004) which provides maximum selling motivation in terms of monetary compensation. NMOs have to provide continuous training in order to motivate their sales force as a result of the difficulties in conducting network marketing business (Vander Nat & Keep, 2002) and high turnover among salespersons (Msweli & Sargeant, 2001; Vander Nat & Keep, 2002). A lack of motivation, poor training and high sales forces turnover can have a detrimental effect on operating expenses, sales, and customer loyalty (Vander Nat & Keep, 2002). NMOs have long been an active part of the business landscape in some countries (Sparks & Schenk, 2001), including Australia (World Federal Direct Selling Association, 2006), which has attracted the attention of various scholars (Table 2.3).

Biggart (1989) identified the differences between an NMO and a bureaucratic organization which are listed in table 2.2. She points out that bureaucratic organizations seek to exclude non-work social relations in order to control workers, whereas the network marketing industry pursues profits in the opposite way, by making social networks serve business ends (Biggart, 1986). The critical factor in a network marketing company's success is its ability to engage the energies of thousand of people and shape them into a highly productive organization (NMO) (Biggart, 1989). In network marketing business, network marketers are independents contractors who have no obligations to comply with the instructions of the management in network marketing firms (Msweli and Sargeant, 2001; Harris, 2004), and most network marketers earn negligible amount from their distributorship (Sparks and Schenk, 2006). Challenges, a network marketing organizations facing, are how to overcome the obstacle of negative public image (Bloch, 1996; Koehn, 2001), attract as many people as possible to join the sales force of the network marketing business, and maintain and control the sales force (Msweli and Sargeant 2001, Wotruba, 1990).

Table 2.2: Bureaucratic and Network Marketing Types of Organization

	Bureaucratic Organization	Network Marketing Organization
Legitimation	Universal Rules, laws	Mission: substantive philosophy of founder and belief in moral value of entrepreneurialism
Membership	Bureaucratic officials	Followers
Differentiation	Horizontal differentiation by functions; vertical differentiation by expertise	Minimal differentiation of sales work; administration separated and may be differentiated by function
Stratification	Hierarchical distribution of authority, rewards, status	Undifferentiated authority structure joined to status hierarchy; administration may be hierarchical
Recruitment	Universalist appointment based on expertise and experiences	Particularist recruitment for commitment potential, affective bonds
Compensation	Financial rewards, especially salary	Combination of material, purposive and solidary incentives
Character of Tenure	Career	Way of life

Adopted from Biggart (1989, pp. 131)

2.3. Studies on Network Marketing Organization and Literature Gaps

Because of negative public image or lack of understanding of its economic impact (Peterson, Albaum & Ridgway, 1989), only a small number of empirical studies on NMO were conducted (Table 2.3). From these studies, some major issues related to organization studies are identified, which cover the areas of controversy and negative perceptions (Peterson et al., 1989; Kustin & Jones, 1995), transformational leadership (Sparks & Schenk, 2001), organizational socialization (Bhattacharya & Mehta, 2000; Sparks and Schenk, 2006), organizational citizenship (Sparks & Schenk, 2006), organizational identification (Pratt, 2000; Sparks & Schenk, 2006), entrepreneurial motivation (Kuntze, 2001), immigrant entrepreneurship (Lin, 2007) and working place spirituality (Groß, 2010). In the literature, a study of NMOs from a sociological perspective (Biggart, 1989) was also found.

Table 2.3: Studies of Network Marketing Business Found in Literature

Management Issues	Perception	Organizational Identification	Entrepreneurship	Chinese Immigrant Entrepreneurship	Transformational Leadership	Organizational Socialization	Organizational Citizenship	General Knowledge
Authors/type of articles								
Granfield and Nicols, 1975 Empirical study								X
Grant, 1988 Descriptive	X							
Biggart, 1989 Empirical study		X	X					X
Peterson, Albaum and Ridgway, 1989 Empirical study	X							
Kustin and Jones, 1995 Empirical study	X							
Bloch, 1996 Descriptive	X							
Anonymous, 1997 Descriptive	X							
Barkacs, 1997 Descriptive	X							
Johnson, 1999 Descriptive	X	X						
Bhattacharya and Mehta (2000) Empirical Study						X		

Table 2.3: Studies of Network Marketing Business Found in Literature – Cont.

Management Issues	Negative Perception	Organizational Identification	Entrepreneurship	Chinese Immigrant Entrepreneurship	Transformational Leadership	Organizational Socialization	Organizational Citizenship	General Knowledge
Authors/type of articles								
Pratt, 2000 Empirical Study		X						X
Koehn, 2001 Descriptive	X							
Kuntze, 2001 Empirical Study	X	X						X
Sparks and Schenk, 2001 Empirical study					X			X
Vander Nat and Keep, 2002 Descriptive	X							
Harris, 2004 Descriptive	X							
Chang and Tseng, 2005 Descriptive								X
Sparks and Schenk, 2006 Empirical study		X				X	X	X
Lin, X, 2007				X				
Groß, 2010* Empirical study								

* Groß (2010) studied NMOs from the perspective of workplace spirituality.

2.3.1 Empirical Studies of NMOs

Studies of NMOs reviewed in Table 2.3 suggested an important strategy applied by NMOs to attract the members is to create a social environment to meet their members' social needs (Bhattacharya & Mehta, 2000), which was labelled the human being's spiritual needs by Groß (2010). In this environment, the values of organizational cohesion (Sparks & Schenk, 2001), mutual supports between the members (Sparks & Schenk, 2001, 2006) have been promoted; the members of NMOs are able to obtain a sense of belonging (Pratt, 2000; Sparks & Schenk, 2006; Groß, 2010).

Network marketers are independent home-based business owners who are responsible for the costs and profits in operating their business (Biggart, 1989; Sparks & Schenk, 2001). To achieve the success, network marketers need to attract as many people as possible to join them and establish their new network marketing business (Granfield & Nicols, 1975). The launch of a new business can be a long and difficult process; all sorts of hurdles (such as lack of resources, compliance costs, hard reality) exist (Schaper & Volery, 2004, p. 33). If new network marketers conduct their businesses independently, many of them may find the barriers to the launch of the business are too high, due to lack of experience and/or resources (Biggart, 1989; Kuntze, 2001). If a group of network marketers work together and share their experiences and resources with each other, they should be able to overcome these barriers.

Issues such as how a group of network marketers work together, how network marketers are motivated, how people are attracted to join NMOs, why some people want to do network marketing business and others not, and how to build a successful network marketing business, are challenges for NMO researchers. Empirical studies from perspectives of transformational leadership (Sparks & Schenk, 2001), organizational socialization, citizenship and identification (Sparks & Schenk, 2006), sense breaking and sense making (Pratt, 2000) and entrepreneurial motivations (Kuntze, 2001) found in the literature, have partly answered these questions.

Sparks and Schenk (2001) provided several reasons to select transformational leadership in their study of NMOs. First, transformational leadership can be examined in relative isolation of other leadership styles, and network marketers do not have normal supervisory tools that typically accompany leadership positions and therefore

limits their choice of leadership styles (Sparks & Schenk, 2001). Second, many network marketers connect their NMO participation to a variety of “higher-order values” that extend beyond profit-making or financial success (Sparks & Schenk, 2001). Finally, NMOs represent a growing yet under researched organizational context in which transformational leadership may play a particularly important role in explaining and predicting their performance (Sparks & Schenk, 2001).

Transformational leadership is a process of building commitment to organizational objectives and then empowering followers to accomplish those objectives (Stone, Russell & Patterson, 2004). They transform the personal values of followers to support the vision and goals of the organization by fostering an environment where relationships can be formed and visions can be shared (Bass, 1985; Sparks & Schenk, 2001; Stone et al. 2004). In their study, Sparks and Schenk (2001) identified four major characteristics demonstrated by experienced network marketers in leading their new network marketers: i) articulating the vision of the business; ii) setting the appropriate role models for new network marketers; iii) having high expectations from new network marketers; and iv) supporting network marketers on the individual basis. These characteristics are similar to that of transformational leadership (Stone et al., 2004).

According to Sparks and Schenk (2001, p. 853), network marketer’s transformational leadership behaviours positively correlate to their job satisfaction and organization cohesion in NMOs and the positive influence of transformational leadership by network marketers on effort and performance is mediated by new network marketers’ beliefs that their work serves some higher purpose than simply making money.

Review of the literature suggests that network marketers work collectively to create an inspirational environment and overcome challenges derived from conducting business (Biggart, 1989; Bhattacharya & Mehta, 2000). Sparks and Schenk’s (2001) study, however, only covered transformational leadership on an individual basis of network marketer-new network marketer, which obviously leaves a gap in the literature of NMO studies. In 2006, Sparks and Schenk published another paper which partly fills this gap.

The premise of Sparks and Schenk’s (2006) study is to define the mechanisms created by NMOs in cultivating the social dimensions, including the social network.

Social relations in NMOs frequently exert a great influence on network marketer behaviours than economic rationality (Biggart, 1989; Bhattacharya & Mehta, 2000; Pratt, 2000). The theories applied by Sparks and Schenk (2006) in their study include organizational socialization, organizational citizenship, and organizational identification.

In order to explain the attraction of NMOs to some individuals, Bhattacharya and Mehta (2000) studied organizational socialization within the context of NMOs. Organizational socialization refers to the process by which an individual learns the norms, values, procedures, and expected behaviours necessary to function as an organizational member (Van Maanen, 1976; Louis, 1980; Sparks & Schenk, 2006). Bhattacharya and Mehta (2000) assert that individuals maximize satisfaction from economic as well as social consumption using all available resources. Through interacting with each other on their jobs, individuals generate some social satisfaction (Bhattacharya & Mehta, 2000), which partly explains why average network marketers earn very little money but seem to devote a disproportionately high amount of their resources to NMO activities (Lin, 2007).

Sparks and Schenk's (2006) study, instead of investigating the socialization process per se, examined how the tools of socialization – namely communication – produce certain outcomes among network marketers. Their model incorporates the variable “socialization communication”. According to Sparks and Schenk (2006), socialization communication is defined as “communication content and practice directed toward teaching organizational members the information necessary to function in their organizations” (Sparks & Schenk, 2006; p. 166). The results of Sparks and Schenk's (2006) study demonstrate that socialization communication is positively associated with organizational citizenship behaviour and organizational cohesion.

Sparks and Schenk (2006) take the concept of organizational citizenship as one of the variables in their study. Organizational citizenship is defined as: “discretionary, not directly or explicitly defined by the formal system, and that in the aggregate promote the effective functioning of the organization” (Organ, 1988; p. 4). Sparks and Schenk (2006) named the behaviours comprising organizational citizenship as an “extra role” (p. 166) behaviour. “Extra role” behaviours are particularly important in NMOs, because many of these behaviours largely operationalize the co-operative culture of network marketing businesses (Sparks & Schenk, 2006). Network marketers “own their

distributorships and have no obligation to participate in the life of their network marketing social networks. By definition, all cooperative behaviours could qualify as extra-role and therefore as organizational citizenship” (Sparks & Schenk, 2006, p. 166). One of the findings in Sparks and Schenk’s (2006, p. 175) study is the positive association between socialization communication and organizational citizenship behaviours.

Social identity theory is an important foundation for Sparks and Schenk’s (2006) theoretical model. This theory seeks to explain how and why people learn to identify with the organizations or groups to which they claim membership (Tajifel & Turner, 1985; Ashforth & Mael, 1989; Sparks & Schenk, 2006). Sparks and Schenk (2006) claim that social identity theory supports their study in two important ways: i) it explicitly recognizes the role of socialization into groups as a mechanism for new members to build their self-definition; and ii) social identity theory points to specific outcomes of social identification with an organization or group. With organization identity theory, Pratt (2000) also developed the model of managing identification by managing sense making in the context of a network marketing context. According to Pratt (2000), NMO manages identification by using two types of practices: sense-breaking practices that break down meaning and sense-giving practices that provide meaning. When both sense breaking and sense giving practice are successful, members positively identify with the organization (Pratt, 2000).

Promoting entrepreneurship is another important strategy utilized by NMOs to attract new members (Biggart, 1989; Kuntze, 2001). However, only one empirical study (Kuntze, 2001) was found discussing entrepreneurship in the context of the NMO. In his study, Kuntze (2001) identifies the differences of the characteristics between ordinary entrepreneurs and network marketers. Kuntze (2001) suggests the major differences between traditional entrepreneurs and network marketers include: i) network marketers are less innovative than traditional entrepreneurs; and ii) network marketers’ need for achievement is extrinsically motivated but traditional entrepreneurs exhibit intrinsic motivation in terms of career achievement; iii) network marketers have more an external locus of control compare to traditional entrepreneurs; and iv) network marketers have more symbolic (rather than rational) motivations to approach the entrepreneurial function than do traditional entrepreneurs.

Kuntze (2001) applied symbolic self-completion theory to explain network marketers' motivations. Symbolic self-completion theory suggests that when important symbols – indicators of self-definition – are lacking, individuals will use indicators of attainment to define themselves as competent and accomplished in these self-defining areas (Wicklund & Gollwitzer, 1981). Kuntze (2001) suggests that network marketers are entrepreneurial dreamers rather than real entrepreneurs, because network marketers prefer the title of entrepreneurship over actually doing what it entails (Kuntze, 2001).

However, some points made by Kuntze (2001) in his study are arguable. First, Kuntze suggests network marketers are far less innovative than successful entrepreneurs, because there is no need for them to invent or conceptualize a new type of business. Network marketers just get the products from a network marketing firm and sell them to whomever they know (Kuntze, 2001). Biggart (1989) argues, however, entrepreneurship in network marketing industry is more than a type of economic action. “It is a powerful social ideal that came about with the emergence of capitalism” (Biggart 1989, p. 163). Network marketing approach is bound up in the idea about patriotism (in the context of the USA), equality, freedom, and free enterprise (Biggart, 1989). According to Biggart (1989), the sense of innovation of the network marketer is reflected in pursuing a better life with creative ways. Network marketing entrepreneurs experience the sense of alignment between their personal values and their NMO's mission and purpose (Milliman, Czaplewski & Ferguson, 2003). Alignment with organizational values involve the concept that individuals desire to work in an organization whose goal is not just to be a good corporate citizen, but an organization that seeks to have a high sense of ethics or integrity and make a larger contribution to the welfare of stakeholders and society (Milliman, Czaplewski & Ferguson, 2003). Through conducting network marketing business, network marketers' inner life can be nourished (Bhattacharya & Mehta, 2000). Inner life is about coming to understand one's own divine power and how to use that divine power to live a more satisfying and fuller outer life (Ashmos & Duchon, 2000). Groß (2010) explained this divine power as workplace spirituality.

Although the definition for workplace spirituality is still blurred in the literature, two characteristics of working place spirituality, transcendence and community are identified by Groß (2010). Transcendence refers to “the question of whether life has a meaning and whether there is an ultimate goal of life” (Groß, 2010, p. 62). The

community refers to “the need for belonging, integrity, and brotherly love among human beings” (Groß, 2010, p. 62). According to (Groß, 2010), working place spirituality is a possible method of creating the commitment of members in the organization and enhancing their productivity.

Second, the sample used in Kuntze’s (2001) study is questionable. NMOs open their door to welcome anyone willing to try (Biggart, 1989), but only a certain proportion of these people will stay and eventually become the real network marketers, while many others will leave the organization after short period of joining (Msweli & Sargeant 2001, Wotruba, 1990). In Kuntze’s sample, non-real network marketers may occupy a substantial proportion of the respondents in the sample due to the relatively short period of subjects’ experience in conducting network marketing business (ranging between 4-6 months). The result of measuring these comparably new subjects’ needs for achievement may not reflect the real network marketers’ achievement needs.

Researchers suggest that conducting network marketing business needs sophisticated skills and knowledge (Sparks & Schenk, 2001; 2006). People need to learn these skills and knowledge when they start their businesses. However, learning is a complicated process (Bandura, 1986) and it may not be realistic for people to obtain these skills and knowledge within 4 to 6 months. Social Cognitive Theory suggests: “Learning is largely an information-processing activity in which information about the structure of behaviour and about environmental events is transformed into symbolic representations that serves as guides for action” (Bandura, 1989, p. 51). Bandura (1986) has discussed how people learn from two perspectives: observational learning and enactive learning. The observational learning goes through several processes, such as the attention process, retention process, production process, and motivational process (Bandura, 1986). Enactive learning is a toilsome and costly process, which involves informational analysis of enactive experiences (Bandura, 1986). Learning is a complicated process. Discussion about learning is beyond the current research. Due to the complicated learning process, the current study argues that four to six months’ time is too short for an inexperienced person to learn the complicated network marketing business skills and become a real network marketer. Thus, the validity of Kuntze’s (2001) results may be open to challenge.

2.3.2 Summary of Network Organization Studies and the Gap in the Literature

Although network marketing businesses have a history of over fifty years (Pratt, 2000) and the NMO has become one of the most successful types of organizations in business (Sparks & Schenk, 2001; 2006), only a small number of empirical studies in this area have been published in the literature, due to the negative perception or lack of understanding of NMOs' economic impacts. Besides the study of NMO conducted by Biggart (1989) from a sociological perspective, the existing empirical studies in the literature mainly cover areas of transformational leadership (Sparks & Schenk, 2001), organizational socialization (Bhattacharya & Mehta, 2000; Sparks & Schenk, 2006), organizational citizenship (Sparks & Schenk, 2006), organizational identification (Pratt, 2000; Sparks & Schenk, 2006), and entrepreneurial motivation (Kuntze, 2001). Evidence in the literature shows that many Chinese immigrants have been attracted to network marketing business to pursue entrepreneurial opportunities (Lin, 2007), but none of previous studies have explained what factors influence these immigrants undertaking actions and achieving their successes, which leaves a gap in the literature. From the literature, the main strategy utilized by NMOs can be identified as to create a favourable environment to bring people in and motivate them (Biggart, 1989; Kuntze, 2001; Sparks & Schenk 2006). However, the relationship between the influence of the social environment in NMO and individual network marketers' behaviours and personal factors is still unknown.

2.4 Research Problem area and Foundation of Theories

In order to investigate the relationship between the influences of the social environment in NMOs and the actions of Chinese immigrant network marketers' to conduct network marketing business and answer the research question, the current study has reviewed the literature of entrepreneurship, immigrant entrepreneurship and the application of social cognitive theory to management studies.

2.4.1 Entrepreneurship

Entrepreneurship is one of salient features promoted by NMOs and pursued by network marketers (Biggart, 1989; Kuntze, 2001). Entrepreneurship is often equated with small business ownership and management (Carland, Hoy, Boulton & Carland, 1984), and is an innovative behaviour allied to a strategic orientation in the pursuit of

profitability and growth (Sadler-Smith, Hampson, Chaston & Badger, 2003; Carland et al., 1984). It is concerned with the discovery and exploitation of profitable opportunities (Shane & Venkataraman, 2000).

There are two basic schools of thought in the literature which has shaped the profile of the entrepreneur: the economists who consider the entrepreneur as an agent who possesses certain attributes and specializes in certain roles, and the behaviourists who concentrate on the creative and intuitive characteristics of entrepreneurs (Schaper & Volery, 2004; McMullen & Shepherd, 2006). From an economic point of view, the status of the entrepreneur is analysed in terms of the division of labour; its roles are explained as risk bearer, arbitrageur, innovator and coordinator of scarce resources (Schaper & Volery, 2004, p. 33). The behaviourists focus on the psychological characteristics and personality of the individual as the determinants of entrepreneurial behaviour (Schaper & Volery, 2004, p. 31). The traits of entrepreneurs include a higher level of need for achievement, innovation, internal locus of control, and need for autonomy (Kuntze, 2001). These characteristics are widely considered as the classic hallmarks of the entrepreneur (Kuntze, 2001). Schaper and Volery (2004) point out that only three entrepreneurial traits have received wide attention and show a high level of validity: the need for achievement, an internal locus control, and risk-taking propensity. According to Schaper and Volery (2004), entrepreneurs tend to be better educated, come from families where parents owned a business, start ventures related to their previous work, and locate where they are already living and working (Schaper & Volery, 2004, p. 36).

Researchers claim that the most important trait for the success of entrepreneurs is the need for achievement (e.g. Johnson, 1990; Stewart, Watson, Carland & Carland, 1998; Lee & Tsang, 2001; Collins, Hanges & Locke, 2004; Baum & Locke, 2004; Zhao & Seibert, 2006; Stewart & Roth, 2007). For example, in the study, Johnson (1990) reviewed twenty-three previous studies and found that twenty of them demonstrated the consistent relationship between achievement motivation and entrepreneurship. In their study, Lee and Tsang (2001) investigated the effects of entrepreneurial personality traits, background and network activities on venture growth among 168 Chinese entrepreneurs in small and medium sized business in Singapore. The result suggests that the need for achievement is the personality trait that has the greatest impact on venture performance (Lee & Tsang, 2001). Collins et al. (2004)

found achievement motivation was significantly correlated with both choice of an entrepreneurial career and entrepreneurial performance. The results in Stewart and Roth's (2007) study indicate that entrepreneurs are higher in achievement motivation than are managers, and that growth-oriented entrepreneurs display greater achievement motivation than do those business owners who focus on producing current income.

McClelland (1961), the first researcher to publish a stream of research concerning entrepreneurial traits, posited that the high need for achievement predisposes someone to behave entrepreneurially to attain more achievement satisfaction than could be derived from other type of positions. Entrepreneurial positions allow individuals, who are high in need for achievement, to control the outcome of their careers (Collins, Hanges & Locke, 2004). McClelland's (1961) view of entrepreneurs' high level of needs for achievement has been supported by other researchers (e.g. Stewart et al. 1998; Kuntze, 2001; Collins et al., 2004; Zhao & Seibert, 2006; Stewart & Roth, 2007). One of Stewart et al.'s (1998) findings show that entrepreneurs demonstrate a greater need for achievement than do corporate managers. Collins et al. (2004) and Stewart and Roth (2007) have conducted meta-analysis of achievement motivation and entrepreneurial behaviours respectively. Collins et al. (2004) revealed the significant correlation between the high need for achievement and the choice of entrepreneurship as careers. Stewart and Roth's (2007) results demonstrate that a high level of achievement motivation is consistent with the demands of the entrepreneurial role. More evidences (e.g. Baum, Locke & Smith, 2001; Zhao & Seibert, 2006) found in the literature also suggest that motivational traits are an important factor in entrepreneurial activities and success. Therefore, achievement motivation represents a constellation of psychological antecedents that is associated with entrepreneurial behaviour (Stewart & Roth, 2007).

Theoretically, it is difficult to define entrepreneurship (Shane & Venkataraman, 2000), for three reasons identified in the literature: i) entrepreneurship is a multifaceted phenomenon that spans many disciplinary boundaries (Schaper & Volery, 2004, p. 4); ii) its definition has undergone considerable revisions (Ensley, Pearce & Himieleski, 2006); and iii) different studies of entrepreneurship have adopted different theoretical perspectives, units of analysis and methodologies (Bull & Willard, 1993; Schaper & Volery, 2004).

A review of literature indicates that the core components of entrepreneurship involve discovering and exploring opportunities (Shane & Venkataraman, 2000; Ensley, Pearce & Himieleski, 2006; McMullen & Shepherd, 2006; Pretorius, Millard & Kruger, 2006; Plummer, Haynie & Godesiabios, 2007). “Entrepreneurial opportunities are those situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production” (Shane & Venkataraman, 2000, p. 220). An individual can only earn profits if he or she recognizes that the opportunity exists and has value (Shane & Venkataraman, 2000) and then takes action (McMullen & Shepherd, 2006). Identifying entrepreneurial opportunities is the first step in the process of entrepreneurship (Pretorius, Millard & Kruger, 2006).

Entrepreneurial opportunities do not present themselves openly and have to be actively sought (Pretorius et al., 2006). In explaining why some people and not others discover a particular entrepreneurial opportunity, Shane and Venkataraman (2000, p. 222) suggest two broad categories of factors that influence the probability that particular people will discover particular opportunities: (1) the possession of the prior information necessary to identify an opportunity; and (2) the cognitive properties necessary to value it.

According to Shane and Venkataraman (2000), human beings possess different stocks of information and these stocks of information influence their ability to recognize particular opportunities. However, even if a person possesses the prior information necessary to discover an opportunity, he or she may fail to take entrepreneurial action because of an inability to see new means-ends relationships (Kirzner, 1997; Shane & Venkataraman, 2000) or large amount of perceived uncertainty (McMullen & Shepherd, 2006). The amount of uncertainty is considered to be the barrier between prospective entrepreneurs and entrepreneurial action (McMullen & Shepherd, 2006). McMullen and Shepherd (2006) suggest that many theoretical explanations as to why prospective entrepreneurs choose to pursue a possible opportunity can be classified into two simple conceptualizations of the role that uncertainty plays in preventing action: i) the amount of uncertainty perceived; and ii) the willingness to bear uncertainty. In their studies, researchers are fundamentally concerned with three sets of questions about entrepreneurship: i) why, when, and how opportunities for the creation of goods and services come into existence; ii) why, when, and how some people and not others discover and exploit these opportunities; and iii) why, when, and how different modes of action are used to exploit entrepreneurial

opportunities (Shane & Venkataraman, 2000; Plummer, Haynie & Godesiabois, 2007). Shane and Venkataraman (2000) claimed that the answer to these questions “appears to be a function of the joint characteristics of the opportunity and nature of the individual” (p. 222).

2.4.2 Immigrant Entrepreneurship

In past decades, substantial theoretical development has occurred in identifying the significance of immigrant entrepreneurship (Iyer & Shapiro, 1999; Chaganti & Greene, 2002; Zhou, 2004; Ley, 2006; Sequeira & Rasheed, 2006). Chaganti and Greene (2002, p. 128) define the immigrant entrepreneurs as “Individuals who, as recent arrivals in the country, start a business as a means of economic survival”. The existence of large immigrant populations in global cities enlarges the scale of the ethnic enclave economy and the options for formal and informal entrepreneurialism (Ley, 2006). The enclave is a source of social cohesion and economic support because it provides the immigrants with opportunities to socialize and associate with co-ethnic peers, buy ethnic products and services, find employment in co-ethnic business as well as start business of their own (Sequeira & Rasheed, 2006). An immigrant’s social network is a key determinant of his/her ability to launch a start-up as well as of its subsequent success (Sequeira & Rasheed, 2006).

Researchers explain the main reason for immigrants to pursue self-employment and finally become more established businesspeople is that they are disadvantaged in the labour market because of their inadequacy in the host country’s language skills, their relative lack of education and specific career-related skills, the depreciation of human capital, etc. (Iyer & Shapiro, 1999; Chaganti & Greene, 2002; Zhou, 2004; Ley, 2006; Sequeira & Rasheed, 2006). These explanations are supported by the literature of necessity entrepreneurship (e.g. Henrekson, 2005; Bergmann & Sternberg, 2007; Block & Keollinger, 2009). Necessity theory suggests immigrant entrepreneurs are pushed into entrepreneurship because they have no better choices for work or for making a living (Henrekson, 2005; Bergmann & Sternberg, 2007).

The willingness to become entrepreneurs for a particular immigrant group is affected by the group size and the percentage of adults in this group who are not fluent in the host country’s language (Evans, 1989). Immigrant business development may go through three stages, such as pre start-up, start-up and growth (Sequeira & Rasheed,

2006). In the pre start-up stage, the prospective entrepreneur is becoming familiar with the environment and accumulating social capital (Sequeira & Rasheed, 2006).

In the start-up stage, substantial resources are required (Sequeira & Rasheed, 2006). Immigrant entrepreneurs acquire the resources from two major sources: families and social networks in their ethnic enclave (Sequeira & Rasheed, 2006). For financial capital, the majority of immigrant entrepreneurs depend upon their families as well as loans from relatives and friends (Sequeira & Rasheed, 2006). The family provides convenient and low cost sources of support (Iyer & Shapiro, 1999). Strong ties are critical to the immigrant entrepreneur in the start-up phase, but these ties may constrain the entrepreneur's opportunities for growth and possible horizontal expansion into the non-ethnic market (Sequeira & Rasheed, 2006). Immigrant entrepreneurs need to choose between, within and beyond the ethnic enclave to develop their businesses (Sequeira & Rasheed, 2006).

Piperopoulos (2010) identified four main approaches of study immigrant entrepreneurship, which were i) the cultural thesis, ii) the block mobility thesis, iii) the opportunity structures thesis, and iv) the ethnic resource thesis. According to Piperopoulos (2010), the culture thesis is about “special skills, cultural predilection, personal motivations, values, attitudes, aspirations for achievement, and heritage that the immigrant entrepreneur brings to the host society are often translated into entrepreneurial activities and behaviour around particular business environment” (Piperopoulos, 2010, p. 141).

The block mobility thesis views entrepreneurship as an immigrants' escape route from unemployment, low wages or unstrained labour market opportunities (Hammarstedt, 2001; Piperopoulos, 2010). The opportunity structures thesis argues that immigrant entrepreneurs who have the knowledge of the specific needs and heritage of their co-ethnic consumers are allured to entrepreneurship and self-employment by moving into niche, saturated spatial markets that require low financial or human capital and are largely ignored by mass retailing enterprises due to security problems or low-purchasing power of the unattractive and poorer minority areas (Heilbrunn & Kushnirovich, 2008; Piperopoulos, 2010). In the ethnic resources thesis, the scholars suggest that ethnic entrepreneurs make use of extensive networks of identity, family and community resources to acquire business information and inside knowledge of

market opportunities that facilitate business start-up (Sequeira & Rasheed, 2006; Piperopoulos, 2010).

The four approaches of study immigrant entrepreneurship (the cultural thesis, the block mobility thesis, the opportunity structures thesis, and the ethnic resources thesis) summarized by Piperopoulos (2010) are relevant to the immigrants pursuing entrepreneurial opportunities network marketing business. For examples, studies of Groß (2010), Sparks and Schenk (2001, 2006) and Biggart (1989) explained the motivations of network marketers for conducting their business from the perspectives of workplace spirituality (Groß, 2010), organisation identity and citizenship (Sparks & Schenk, 2001, 2006), and sociology (Biggart, 1989). According to Groß (2010), Sparks and Schenk (2001, 2006) and Biggaret (1989), the motivations of immigrant network marketers are about cultural predilection (Groß, 2010), personal motivations, values, attitudes (Sparks & Schenck, 2001, 2006), aspirations for achievement (Biggaret, 1989), and heritage that the immigrant entrepreneur brings to the host society (Groß, 2010). The Lin's (2007) explanation about Chinese immigrant network marketers is relevant to the block mobility thesis and the ethnic resources thesis.

From a social network marketing business perspective, Lin (2007) studied immigrant entrepreneurs in NMOs. Lin (2007) suggests that immigrant network marketers rely on social networks to generate sales and to recruit new members (the ethnic resources thesis). He also notes that immigrants take the advantages of network marketing business to earn more incomes or avoid unemployment (the block mobility thesis).

Kuntz's (2001) study is more or less relevant to the opportunity structures thesis. Kuntze (2001) claims those who are socially disadvantaged are more likely to pursue entrepreneurial opportunities from network marketing business. Immigrants are socially disadvantaged caused by their incompetence in their new home country's language skills, their lack of education and specific career-related skills, and the depreciation of human capital (Iyer & Shapiro, 1999; Chaganti & Greene, 2002; Zhou, 2004; Ley, 2006; Sequeira & Rasheed, 2006), they are more likely to run network marketing business as this type of business is available to everybody who wants to try (Biggart, 1989). Further to previous studies, the current study intends to apply Social Cognitive Theory of Bandura (1986) to investigate the factors underlying immigrant network

marketers' actions in conducting their network marketing business and achieving successes (see Section 2.4.4).

2.4.3 Applications of the Social Cognitive Theory

In section 1.3.1, the concept of Social Cognitive Theory was presented. In this section, the applications of Social Cognitive Theory to the managerial areas in previous studies are demonstrated. Bandura's Social Cognitive Theory assumes that "human function is explained in terms of a model of triadic reciprocity in which behaviour, cognitive and other personal factors, and environmental events all operate as interacting determinants of each other" (Bandura, 1986, p. 18). This theory stems from the social learning theory (Brown, 1999). Having introduced several predominant social learning theorists, Brown (1999) pointed out that Bandura had led the efforts on cognitive social learning theory development and renamed his social learning theory as Social Cognitive Theory.

Social Cognitive Theory explains how people acquire and maintain certain behaviour patterns and provides the basis for intervention strategies (Bandura, 1997). Social Cognitive Theory is the framework for designing, implementing and evaluating programs that change people's behaviours (Wood & Bandura, 1989; Bandura, 1997). Brown (1999) summarized the key constructs of social cognitive theory as: reciprocal determinism, symbolizing capability, vicarious capability, forethought capability, self-regulatory capability, and self-reflective capability. "Social cognitive theory favours a conception of interaction based on triadic reciprocity" (Bandura, 1986, p. 23). This reciprocal interaction does not imply that all sources of influence are of equal strength (Bandura, 1986; Brown 1999).

In the discussion of the determinants of human behaviours, Bandura (1986) argues that when environmental conditions exercise powerful constraints on behaviour, they emerge as the overriding determinants; when situational constraints are weak, personal factors serve as the predominant influence in the regulatory system; the activation and maintenance of defensive behaviour are an illustration in which cognition exerts the foremost influence. Behaviour is powerfully controlled by beliefs (Bandura, 1986). Efficacy beliefs play a key role in shaping the course that individual lives take (Bandura, 2001).

The present study reviews the applications of Bandura's (1986) Social Cognitive Theory to organization and management studies. Since Social Cognitive Theory was introduced by Bandura (1986), it has inspired a large and diverse body of research in social psychology (McCormick & Martinko, 2004). This theory has been used as a conceptual framework for explaining a variety of human phenomenon including academic performance, achievement behaviour, alcohol and drug abstinence, career choice, decision making, gender difference in performances, sport and motor performance, and different forms of political participation (McCormick & Martinko, 2004).

In order to thoroughly investigate the application of Social Cognitive Theory to the field of management and organization studies, a search of databases of ABI/Inform Global (ProQuest) for articles containing the terms of "Social Cognitive Theory" and "management" was conducted in the current study. From the search, 1168 articles were found to have cited and/or utilized Bandura's Social Cognitive Theory. They covered broad areas in management and organizations studies, such as, performance (Appelbaum & Hare, 1996; Tierney & Farmer 2002; Semadar, Robins & Ferris, 2006), entrepreneurship (Baum, Locke & Smith, 2001; Zhao, Seibert & Hills, 2005; Trevelyan, 2011); leadership (McCormick & Martinko, 2004; Neubert, Carlson, Kacmar, Roberts & Chonko, 2009; Kempster & Cope, 2010), motivation (Parker, Williams & Turner, 2006), work stress (Jex & Gudanowski, 1992), organizational management (Wood & Bandura, 1989), business ethics (Jensen & Wygant, 1990), empowerment (Conger & Kanungo, 1988), workplace environment (Schepers & van den Berg, 2006) and occupational health and safety (e.g. Cooper & Phillips, 1995; Cooper, 2000; Choudhry, Fang & Mohamed, 2007).

A review of these articles suggests the concept of self-efficacy is the most frequently applied by researchers to study organizations/management (e. g. Tobertson & Sadri, 1993; Cole & Hopkins, 1995; Appelbaum & Hare, 1996; Chen, Greene & Crick, 1998; Tierney & Farmer, 2002; Zhao, Seibert & Hills, 2005; Bryant, 2006; De Carolis & Saporito, 2006; Semadar, Robins & Ferris, 2006; Carsrud, & Brännback, 2011; Trevelyan, 2011). "Perceived self-efficacy occupies a pivotal role in the causal structure of Social Cognitive Theory (Bandura, 1986) because efficacy beliefs affect adaptation and change not only in their own right, but through their impact on other determinants" (Bandura, 2001, p. 10).

Self-efficacy refers to individual's cognitive estimate of his or her capability to mobilize motivation, cognitive resources, and courses of action needed to exercise control over events in their lives (Bandura, 1986; Wood & Bandura, 1989; Bandura 1997). In the literature, the concept of self-efficacy is applied to management studies in a wide range of situations including: organizational performance (e. g. Appelbaum & Hare, 1996; Tierney & Farmer, 2002), leadership (McCormick & Martinko, 2004; Semadar, Robins & Ferris, 2006), entrepreneurship (Carsrud, & Brännback, 2011; Trevelyan, 2011), motivation (Parker, et al., 2006), and work stress (Jex & Gudanowski, 1992).

Based on Social Cognitive Theory (Bandura, 1986), Cooper and Phillips (1995) and Cooper (2000) developed a model of reciprocally determined safety culture which recognizes the presence of an interactive or reciprocal relationship between psychological, situational and behavioural factors for accident causation. This model contains three elements which encompass subjective internal factors, observable ongoing safety-related behaviours and objective situational features (Cooper, 2000). The justification for applying Social Cognitive Theory (Bandura, 1986) to the current study is outlined in the next section.

2.4.4. Justification for Applying the Social Cognitive Theory to the Current Study

NMOs are different from bureaucratic organizations (Biggart, 1989). Bureaucratic organizations seek to exclude non-work social relations in order to control workers; in contrast the network marketing organization pursues profits by making social networks to serve business ends (Sparks & Schenk, 2006; Bhattacharya & Mehta, 2000; Pratt, 2000; Biggart, 1986). The critical factor for a network marketing organization's success is its ability to engage the energies of thousands of people and shape them into a highly productive organization (Biggart, 1989).

As mentioned before, network marketers are independent contractors who have no obligation to comply with the instructions of management (Msweli & Sargeant, 2001; Harris, 2004), and most network marketers earn negligible amounts from their distributorship (Bhattacharya & Mehta, 2000; Sparks & Schenk, 2006). Challenges for a NMO are how to overcome a negative public image (Bloch, 1996; Koehn, 2001), attract as many people as possible to join the sales force of the NMO, and maintain and influence the sales force (Msweli & Sargeant 2001; Wotruba, 1990) through creating a

favourable social environment, promoting entrepreneurial opportunities, and influencing recruits' behaviours (Bhattacharya & Mehta, 2000; Pratt, 2000; Sparks & Schenk, 2001; 2006).

2.4.4.1 Creating a Favourable Social Environment

A review of the literature suggests that the main strategies adopted by NMOs in creating a favourable social environment could be classified as macro- and micro-level strategies. At the macro-level, the main strategy is to create a non-competitive business environment within it and network marketers are taught to help each other rather than compete with each other (Bhattacharya & Mehta, 2000; Pratt, 2000); i.e. to promote the golden rule: "do unto others as you would have them do unto you" (Biggart, 1989, p. 3). The important parts of macro-strategy are the minds and hearts of the dispersed workforce management (Pratt, 2000) and the ideological base of conducting network marketing business (Biggart, 1998). With the minds and hearts of the dispersed workforce management, NMOs develop educational programs to change the network marketers' way of thinking and feeling about themselves in relation to their organization (Pratt, 2000). Kuntze (2001) describes such strategies as quirky distribution and marketing system characterized by eccentric products and firms, evangelistic sales and cult-like "brainwashed" distributors.

The micro-level strategies focus on network marketing business specific communications, working attitudes and the relationship between individual network marketers (Sparks & Schenk, 2001; 2006). Sparks and Schenk (2006) examined socialization communication, organizational citizenship behaviours and sales in NMOs. They found a positive correlation between sponsors' socialization communications and their recruits' organizational citizenship behaviours and feelings of unit cohesion. According to Sparks and Schenk (2006), organizational citizenship includes a set of discretionary behaviours that are not directly or explicitly defined by the formal reward system, and that in aggregate promote the effective functioning of the organization. They assume that organizational citizenship is particularly important in network marketing business. Similar to Biggart (1989), Sparks and Schenk (2006) also believe that a cooperative social network lies at the heart of the network marketing business model, and one of results in their study suggests that cooperation in and of itself does not hinder the financial performance of individual distributorship.

A study of the relationship between individual sponsors and recruits is also found in the literature (Sparks & Shenk, 2001). It suggests that network marketing firms establish elaborate systems of support through which network marketers receive guidance and leadership from each other. This study also points out two components of the organizational support systems, including the relationship between sponsors and recruits and informal work groups of network marketers created by sponsors for their recruits, which play crucial roles in the work relationship among network marketers (Sparks & Shenk, 2001). Although network marketers operate their businesses independently, the groups of network marketers “provide a tangible organization through which members create and maintain a sense of belonging, develop a feeling of *esprit de corps*, and acquire resources helpful to their individual distributorships” (Sparks & Shenk, 2001, p. 851). In their study, Sparks and Schenk (2001) have explored the impact of sponsors’ transformational leadership on recruits’ job satisfaction, perception of their group’s network marketing members, and a belief in the purpose of their work, finding positive correlations between them.

The main theme of strategies at macro- and micro-levels may be summarized as to create a favourable sense of social environment within NMO. Biggart (1989, p. 9) describes such social environment as:

The melding of personal and pecuniary relationship is ideologically supported and maintained.... It gives them not a job, but a worldview, a community of like-minded others, and a self-concept. DSOs (*the other name of Network Marketing Organizations* – author’s comment) are businesses run very much like social movement.

2.4.4.2 Promoting Entrepreneurial Opportunities

The major area of competition between network marketing firms occurs in the labour market (Granfield & Nicols, 1975). NMOs vigorously compete against each other to attract full and part time sales people (Granfield & Nicols, 1975). In order to attract people into their businesses, most NMOs have no recruitment criteria at all and anyone willing to try is welcomed through their open door policy (Biggart, 1989; Kuntze, 2001). Many network marketers do not have any experience in sales prior to joining the NMO (Biggart, 1989). NMOs often promote their programs through appeals to the entrepreneurial spirit and wealth creation impetus to attract ordinary people (Biggart, 1989; Barkacs, 1997; Kuntze, 2001). Many NMOs position network marketing as an opportunity for one to become “entrepreneur” without the substantial

up-front cost in time and money typical in starting his/her own business or buying into a franchise (Kuntze, 2001), they have traded heavily as an easy way of entry into entrepreneurship (Biggart, 1989). Entrepreneurial opportunity for Chinese immigrants becomes the driving force in the corporate cultures and the promotion of NMOs (Biggart, 1989; Kuntze, 2001).

The concept of entrepreneurship in the area of network marketing business is different to that of the ordinary business area (Biggart, 1989; Kuntze, 2001). Normally, entrepreneurship, often equated with small business ownership and management (Carland et al., 1984), is classed as an innovative behaviour allied to a strategic orientation in pursuit of profitability and growth (Carland et al., 1984; Sadler-Smith et al., 2003). The core components of entrepreneurship involve discovering and exploring opportunities (Ensley, Pearce & Himieleski, 2006). Entrepreneurship requires action; it typically involves a meso-level phenomenon, in which personal initiative influences system-wide activity and outcome (McMullen & Shepherd, 2006). An entrepreneur is to act on the possibility that one has identified an opportunity worth pursuing (McMullen & Shepherd, 2006). Uncertainty constitutes a conceptual cornerstone for most theories of the entrepreneur (McMullen & Shepherd, 2006). McMullen and Shepherd (2006) suggest that many theoretical explanations as to why prospective entrepreneurs choose to pursue a possible opportunity can be classified into two simple conceptualizations of the role that uncertainty plays in preventing action: i) the amount of uncertainty perceived, ii) the willingness to bear uncertainty.

High needs for achievement is the most important trait of entrepreneurs (Kisfalvi, 2002; Collins, Hanges & Locke, 2004; Zhao & Seibert, 2006). The need for achievement refers to the concern for long-term involvement, competition against some standard of excellence, and unique accomplishment (Choi, 2006). A high need for achievement would drive individuals to become entrepreneurs primarily because of their preference for situations in which performance is due to their own efforts rather than to others factors (Zhao & Seibert, 2006). Such need is characterized by: i) a high interest in tasks which require a considerable level of skill and problem-solving ability; ii) a tendency to set moderately difficult goals; iii) a preference for concrete and quantitative feedback; and iv) a pursuit of satisfaction which is derived from the task itself and task performance (Zhao & Seibert, 2006).

However, entering into the business world as the owner-manager of a firm is a complicated, time-consuming activity (Schaper & Volery, 2004). Business requires the entrepreneur to have, or obtain, numerous resources. Access to resources can be a key determinant of the business option chosen (Schaper & Volery, 2004). In a way, network marketing business is the option for those who do not have access to resources and want to enter the business, because it does not require substantial resources (Biggart, 1989; Kuntze, 2001).

Traditional entrepreneurs pursue economic rationality, whereas network marketing entrepreneurs pursue value rationality, which makes such an organization unusual and unique in today's economy (Biggart, 1989; Bhattacharya & Mehta, 2000). Value rationality is a belief not in efficiency or profitability. "Organizations based on values exist to enact and further a systematized set of norms or an ideology. A central ideal serves both as a source of commitment to members and as a guide to action within the organization" (Biggart, 1989, p. 101). Belief in entrepreneurialism is an important value, which infuses moral and social meaning into network marketing business (Biggart, 1989; Pratt, 2000). Entrepreneurialism in network marketing business transforms purely economic character into a value-laden, even transcendental stance (Biggart, 1989; Groß, 2010). The way of promoting entrepreneurship adopted by network marketing particularly appeals to those individuals, who are entrepreneurship oriented with less education, or inexperienced, or being short of adequate financial resources (Kuntze, 2001).

2.4.4.3 NMO Influences on Network Marketers' Behaviour

NMOs are mainly composed of independent distributors (Kustin & Jones, 1995; Vander Nat & Keep, 2002) and customers (Biggart, 1989; Harris, 2004); the relationship between network marketers and the NMO is neither an employment relationship nor a franchise relationship (Vander Nat & Keep, 2002). The only option for NMOs to regulate network marketers' performance behaviours is to influence their network marketers through creating a social environment, rather than to regulate the network marketers' behaviours through established policies (Biggart, 1989). NMOs organize various training activities to help network marketers to obtain business competencies (Biggart, 1989; Pratt, 2000). One important outcome of these social influences and training activities is to increase individual network marketers' self-

efficacy in conducting their network marketing businesses (Bandura, 1986; Bandura, 1997). Self-efficacy refers to individuals' conscious belief in their own ability to bring about desired results in the performance of a particular task (Bandura, 1997). Social cognitive theory asserts:

self-efficacy beliefs are constructed from four principal sources of information: enactive mastery experiences that are indicators of capability; vicarious experiences that alter efficacy beliefs through transmission of competencies and comparison with attainments of other; verbal persuasion and allied types of social influences that one possesses certain capabilities; and physiological and affective states from which people partly judge their capableness, strength, and vulnerability to dysfunction (Bandura, 1997, p. 79).

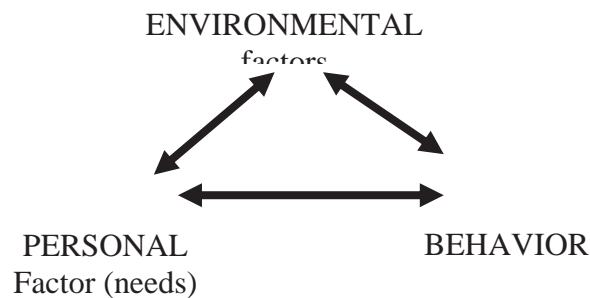
Applying Bandura's (1986) Social Cognitive Theory, the current study deduces that training activities and social influences in the context of NMOs are two principal sources of information (enactive mastery experiences and vicarious experiences) from which network marketers may obtain their self-efficacy beliefs in conducting network marketing businesses. Self-efficacy influences the course of action people choose to pursue, how much effort they put into given endeavours, and how long they will persevere in the face of obstacles and failures (Bandura, 1997).

2.4.4.4 Applying Social Cognitive Theory

The above discussions indicate that the strategies used by NMOs include creating a favourable social environment, promoting entrepreneurial opportunities, and influencing recruits' behaviour (Bhattacharya & Mehta, 2000; Pratt, 2000; Sparks & Schenk, 2001; 2006). However, individuals are neither deterministically controlled by their environment nor entirely self-determining (Bandura, 1986; Cooper, 2000). Instead, they exist in a state of reciprocal determinism with their environments whereby they and their environments influence one another in a perpetual dynamic interplay (Cooper, 2000). Social Cognitive Theory (Bandura, 1986) explains psychological functioning in terms of triadic reciprocal causation, whereby individual internal psychological factors, their environment and the behaviour they engage in, all operate as interacting determinants that influence each other bi-directionally (Figure 2.4.4.4a). This bi-directionality of influence means that people are both products and producers of their

environment (Cooper, 2000). In other words, environments are as much the function of the person as the person's behaviour is a function of the environment (Cooper, 2000).

Figure 2.4.4.4a: The Relationships between the Environment, Personal Factors and Behaviour in Triadic Reciprocal Causation.



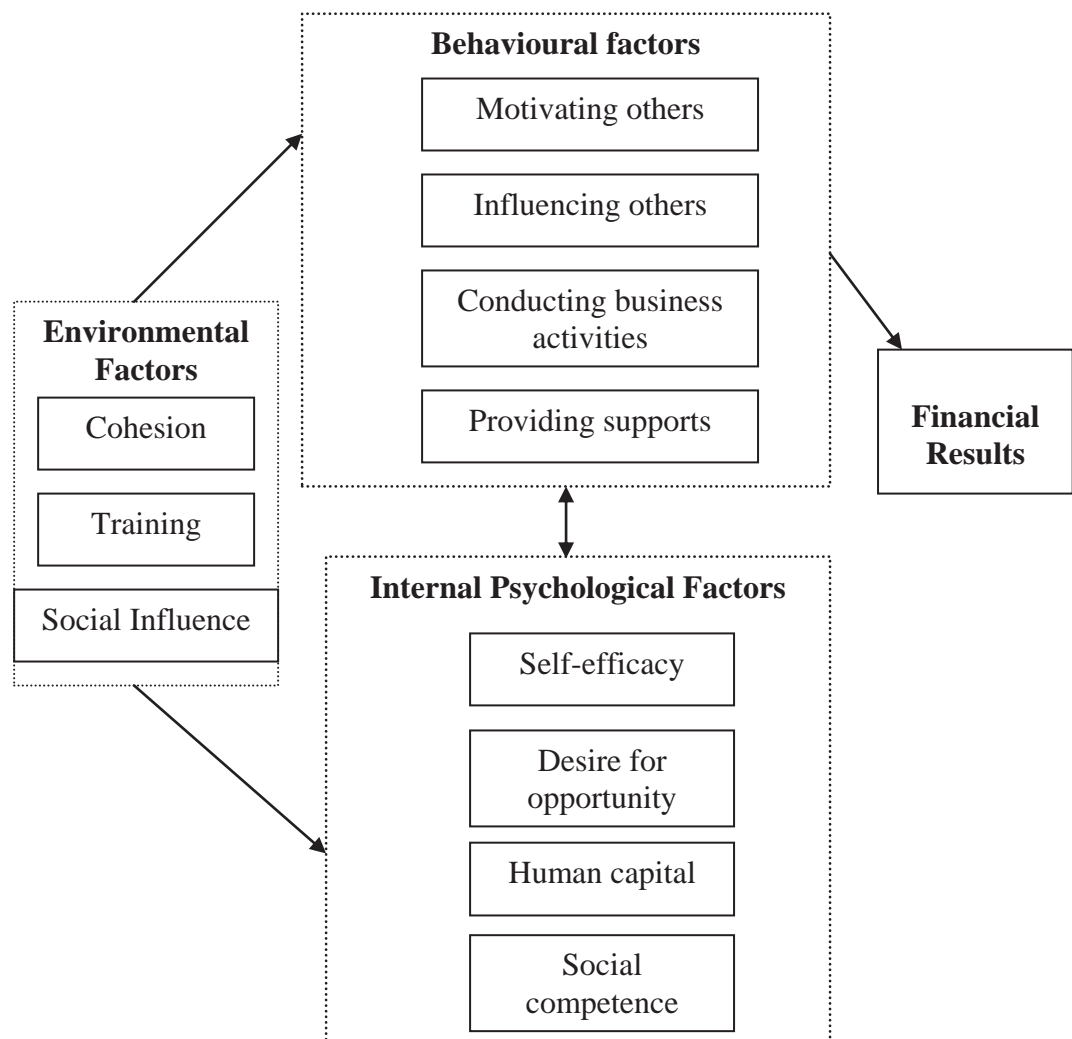
Adapted from Bandura (1986, pp. 23–24).

However, social cognitive theory ignores potential changes in behaviour and the impact of these changes on subsequent cognitive process (Bolt, Killough & Koh, 2001; Huang & Chiu, 2006). Consequently, the application of the theory is likely to focus on one or two concepts such as self-efficacy (Compeau, Higgins & Huff, 1999; Bolt, et al., 2001). For examples, Gibson (1999) used the concept of self-efficacy in studying the relationship between group efficacy and group effectiveness; Markman, Balkin & Baron (2002) applied the concept of self-efficacy to the field of entrepreneurship.

Similar to previous studies, the current study uses the concept of the impact of the environmental factor on internal psychological factors (self-efficacy, desire for opportunity, human capital and social competence), which in turn, affect the behavioural factor (such as, undertaking actions in conducting network marketing business activities) to investigate the factors that determine the performance of immigrants in conducting their network marketing business rather than implement the theory in its entirety. According to strategies applied by NMOs and the content of Social Cognitive Theory (Bandura, 1986), the current study argues that the causative relationship between psychological, behavioural and environmental elements of the model can comprehensively explain how immigrants are attracted to the network marketing business, take actions and achieve their successes.

As mentioned in Chapter 1, the research question in the present study is: *What factors determine immigrant network marketer's performance in conducting their network marketing business?* The simple answer to this question is that the performance is determined by actions, as with no action, no entrepreneurial results will be achieved (Shane & Venkataraman, 2000). Drawing upon Social Cognitive Theory (Bandura, 1986), the present study argues that the effectiveness of the actions in pursuing entrepreneurship from network marketing business is determined by the network marketers' personal factors (self-efficacy, desire for entrepreneurial opportunity, motivations, social competence and human capitals) and their environment. And according to Social Cognitive Theory (Bandura, 1986) together with the strategies utilized by NMOs, the framework for the present study is described as in Figure 2.4.4.4b.

Figure 2.4.4.4b A Framework Derived from Social Cognitive Theory



2.4.5 Research Model

The Theory of Planned Behaviour (Ajzen, 1991) suggested three independent determinants of behavioural intention, which are: i) attitude towards the behaviour; ii) the subjective norm; and iii) the degree of perceived behavioural control. Based on this theory, the model of entrepreneurial intention was developed (Krueger, 1993; Krueger and Brazeal, 1994; Krueger, 2000). In the model of entrepreneurial intention, the attitude towards the behaviour and the social norms proposed by Ajzen (1991) are replaced by perceived desirability, and the perceived behavioural control is replaced by perceived self-efficacy (feasibility) (Krueger, 1993). The model of entrepreneurial intention suggests that entrepreneurial intention is determined by perceived desirability and perceived self-efficacy (feasibility) (Krueger, 1993; Krueger & Brazeal, 1994; Krueger, 2000). Evidence shows that intention is positively correlated to the resultant action (Hooft et al., 2005; Westaby, 2005). Thus, the present study argues that Chinese immigrants' desire for opportunity from network marketing business and their self-efficacy in conducting network marketing business determine their actions in conducting their network marketing business.

One of the salient characteristics in the social environment of NMO is cohesion (Sparks & Schenk, 2006). The way for NMOs to conduct their business activities is similar to running a social movement through network marketer's social networks (Biggart, 1989). "A key to maintaining a successful social network lies in developing cohesion among network members" (Spark & Schenk, 2006, p. 166).

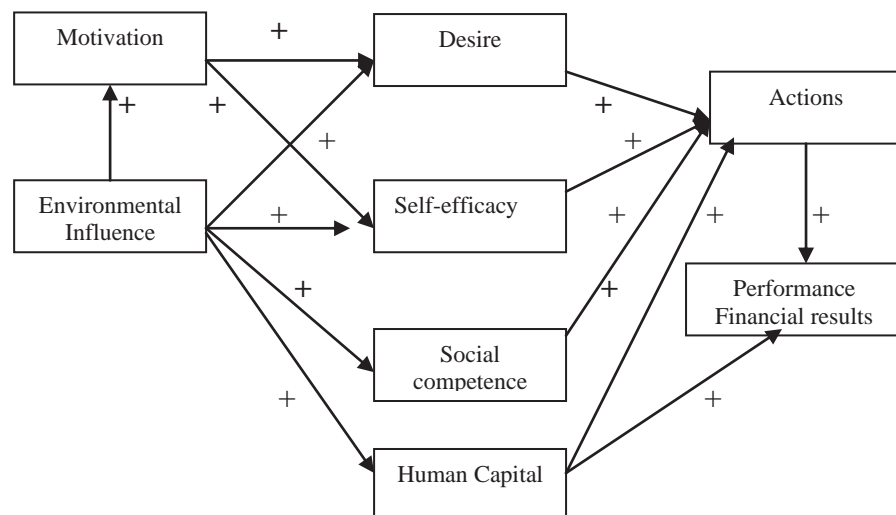
In spite of the fact that each of the network marketers is responsible for his/her profit and loss in operating their businesses, network marketers work together and operate their businesses collectively (Biggart, 1989, Bhattacharya & Mehta, 2000), which allows them to share resources and risks in operating their business (Biggart, 1989; Bhattacharya & Mehta, 2000). Working together substantially reduces the barriers or hurdles for Chinese immigrants to start their network marketing businesses (Bhattacharya & Mehta, 2000). Therefore, social competence is an important capability to enable network marketers to foster cohesion and work together effectively, which should be related to the action in conducting network marketing business.

The factor of motivation for the network marketer to conduct network marketing business is also considered in developing the research model. According to

Social Cognitive Theory (Bandura, 1986), motivation is affected by the desire for opportunity and self-efficacy.

Based on the framework presented in Figure 2.4.4.4b, the Social Cognitive Theory (Bandura, 1986), the Theory of Planned Behaviour (Ajzen, 1991), the model of entrepreneurial intention (Krueger, 1993; Krueger & Brazeal, 1994; Krueger, 2000) and the evidence from the literature (Hooft et al., 2005; Westaby, 2005), the theoretical framework of the influence of environment–personal psychological and behavioural factors – performance is designed and presented in Figure 2.4.4.5. This model proposes that the influence of the social environment in a NMO is positively related to the factors of Chinese immigrants’ network marketing business specific motivation, self-efficacy, desire for entrepreneurial opportunity, social competence and human capital. Motivation is positively related to the desire for opportunity and self-efficacy. Self-efficacy, desire for entrepreneurial opportunity, social competence and human capital are positively related to network marketing business specific entrepreneurial actions. This theoretical model also proposes that the financial results are determined by actions undertaken in conducting network marketing business activities and the human capital.

Figure 2.4.4.5 The Environment – Personal Psychological and Behavioural Factors – Performance Framework



2.5 Research Boundaries

The focus of this thesis is on the influence of the social environment in NMOs the, motivations, desire for opportunities, network work marketing specific self-efficacy, social competence, network marketer's human capital, entrepreneurial actions undertaken in conducting network marketing business and the performance. Two explicit boundaries for this research are the types of constructs examined and the selection criteria for the sample of network marketers. The types of the constructs examined will be discussed first then selection criteria are explained.

2.5.1 Types of Constructs Examined

The influence of social environment in NMO is characterized as the cohesive atmosphere in the organization, training provided by the organization, encouragement and support between network marketers (Biggart, 1989; Sparks & Schenk, 2001). Three issues relate to the influence of the social environment in NMOs under investigation in this thesis: i) cohesion in network marketing organizations; ii) organizational training provided by NMOs; and iii) the peer supports/influence.

With respect to the first issue, cohesion in network marketing organizations, three types of cohesions will be considered: i) degree of trust; ii) cooperation; and iii) dependability members feel from other members in their organization (Sparks & Schenk, 2006). The second issue is the training provided by the network marketing organization. In the literature of organizational training, two types of organizational training have been identified: i) general training; and ii) firm specific training (Becker, 1975; Gattiker, 1995). This thesis will focus on network marketing organization specific training. For the third issue, the peer support/influence, this thesis will focus on: i) information provided by peers; ii) examples set by peers; and iii) supports offered by peers (Sparks & Schenk, 2001; 2006).

In this thesis, three issues will be examined related to motivation (extrinsic motivations, intrinsic motivations and business attractiveness); two issue related to network marketing specific self-efficacy (perceived difficulty and confidence) (Krueger,1993); four issues related to social competence (social perception, social adaptability, expressiveness, and impression management) (Baron & Markman, 2003); and three issues related to desire in pursuing network marketing business (tense, love and enthusiasms) (Krueger,1993). Issues related to entrepreneurial actions under

investigation will be the actions undertaken in conducting network marketing business, such as, recruiting, products selling, and training related actions. The aspect of performance under investigation will be the weekly income earned by network marketers.

2.5.2 Selection Criteria for the Sample

The second boundary for this research is its sample. The sample comprises network marketers who migrated to Australia from the People's Republic of China from the 1980s and are conducting a network marketing business in Australia. The network marketers in this study are native Mandarin speakers. Three states in Australia (New South Wales, Victoria, and Queensland) were selected. These three States were selected because most Chinese immigrants live and work there after arriving in Australia (ABS, 2006).

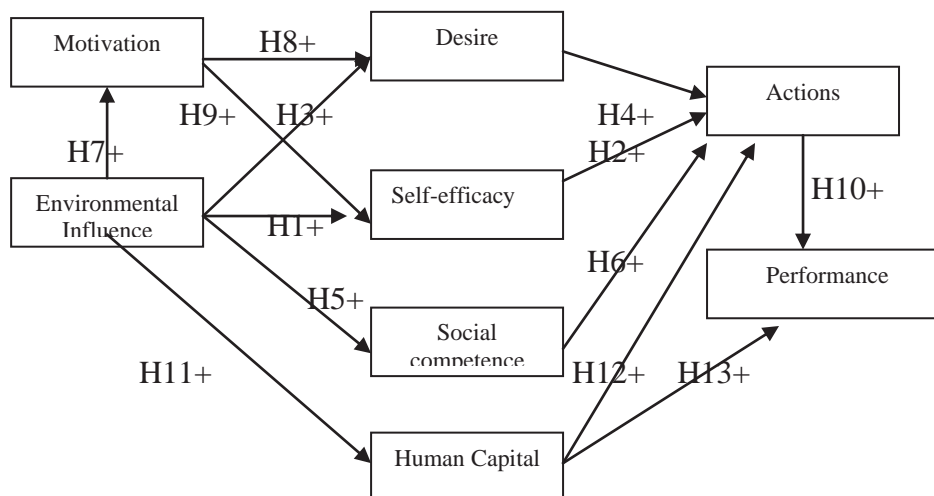
In summary, this research focuses on understanding the performance of a sample of Chinese immigrant network marketers living in Australia in the suburban areas of New South Wales, Victoria, and Queensland. The participants are affiliated with NMOs. The reasons for examining the achievement of performance results were environmental influence, motivation, desire for establishing one's own business, network marketing specific self-efficacy, social competence and network marketing business specific entrepreneurial action.

The research domain, the parent literature, the research problem area, and the research boundaries have all been described. With theoretical and practical foundations in place, the research model and hypotheses will be presented next.

2.6 Research Hypotheses

To effectively understand the specific hypotheses presented, the research problem and introductory model highlighted in Chapter 1 are reviewed. The research question serving as the catalyst for the hypotheses is: *What factors determine Chinese immigrant network marketer's performance in conducting their network marketing business?* Figure 2.6 shows the model proposed to address this research question (also shown in Figure 1.3).

Figure 2.6 Model of Network Marketing Business Entrepreneurial Performance



The model has eight components: (1) the influence of social environment in NMO; (2) motivation; (3) network marketing business specific self-efficacy; (4) desire for opportunity; (5) social competence; (6) network marketing business specific entrepreneurial actions undertaken; (7) performance; and (8) human capital. Specific hypotheses for the model of network marketing business entrepreneurial performance process are described next. The first set of hypotheses (H1, H2, H3, H4, H5, H6, H7, H8, H9, H11, and H12) relates to actions undertaken. These hypotheses specify relationships between the influence of the social environment in NMOs, motivation, desire for opportunity, network marketing business specific self-efficacy, social competence, human capital and network marketing specific entrepreneurial actions undertaken. The second set of hypotheses (H10 and H13) relates to network marketers' performances; these hypotheses specify the predictive relationship between performance, actions undertaken and human capital.

Impact of NMO social environment on Entrepreneur's Behaviours

In this study, the influence of the social environment in NMOs is defined as the influence of training/events (activities) organized by network marketing organizations and the role models set by other network marketers. In order to overcome the obstacle of negative perceptions, network marketing organizations endeavour to create a favourable social environment (Biggart, 1989; Sparks & Schenk, 2006). In this environment, network marketers feel connected to each other, supportive of each other,

and influence each other (Biggart, 1989; Sparks & Shenk, 2001; 2006), and explore entrepreneurial opportunities (Biggart, 1989; Kantz, 2001). Cohesion is one of the important characteristics in such environments (Sparks & Schenk, 2006).

The environmental influence on the decision to pursue entrepreneurial opportunities has been discussed and investigated by numerous authors (e.g. Kassicieh, Radosevich & Umbarger, 1996; O'Grady, 2002; Korunka, Frank, Lueger & Mugler, 2003; Minniti, 2005; Elbanna & Child, 2007; Taormina & Lao, 2007). The result of these studies exhibits a broad range of opinions about the meaning of the term *environment*, which variables should be measured and how they should be measured and understood (O'Grady, 2002). Gartner (1985) posits that the creation of a new business is based on four dimensions: environment, process, organization and the individual(s). These dimensions relate in various ways to each of the other three. Gartner (1985) views the environment from two principal perspectives: environmental determinism (which sees the environment as an outside set of conditions to which the organization adapts), and strategic choice (which sees the environment as a reality that organizations create via the selectivity of their own perceptions). Gartner (1985) stresses the importance of the environment in addition to individual characteristics.

Based on Gartner's (1985) four dimensions framework, Gelderen, Thurik and Bosma (2006) suggest that the environment can be divided into network, financial, and ecological approaches. In the network approach, the emphasis is on relationships between people. Networks are important, as individuals do not set up firms solely by themselves (Gelderen et al. 2006). The financial approach is concerned with the sources and size of capital of the new firm, and in the ecological approach attention is given to the environmental conditions that generate variations in the number of start-ups over time (Gelderen et al., 2006).

Korunka et al. (2003) use the "configurational" approach to study the impact of the external environment. This describes the environment of business setup processes which include the micro-social (e.g. family restrictions, support) and macro-social aspects (e.g. social networks based on earlier occupational experiences). Strong environmental influences could result in a push condition (Korunka et al., 2003). Korunka et al. (2003) defined this push condition as a specific strong necessity to start a new business, "for instance, because of a previous job loss" (p. 27). Korunka et al. (2003) also suggest that the existence (or non-existence) of role models, both in the

micro-social (parents as entrepreneurs) and macro-social context, is another social influence that attracts individuals to pursuing entrepreneurial careers.

Network marketers are independent network marketing business owners (Biggart, 1989; Sparks & Schenk, 2001); their behaviours are also affected by both the micro-social and macro-social environments (Korunka et al., 2003). The network marketers' macro-social environment is mainly composed of other network marketers (Pratt, 2000). In this macro-social environment, entrepreneurship has been broadly promoted (Biggart, 1989, Kuntze, 2001).

Biggart (1989) points out that NMOs are based on one or both of two substantive values: a belief in entrepreneurialism and a belief in the transformative power of products. Some NMOs promote themselves as a way for the "ordinary" person to attain wealth and status without such barriers to entry as an Ivy League education, high social position, or significant inheritance (Kuntze, 2001) through sharing individuals' experiences (Biggart, 1989; Bhattacharya & Mehta, 2000; Pratt, 2000). It is predictable that individual network marketers' behaviours are affected by such promotion (Bandura, 1986; Korunka, et al., 2003). The underlying rationale of this prediction is Social Cognitive Theory (Bandura, 1986). The current study investigates how the NMO social environment affects the immigrant network marketer's self-efficacy, human capital, desire for pursuing opportunities, the social competences, and motivations in conducting their network marketing businesses.

2.6.1 Influence of Social Environment in NMO on Network Marketing Business Specific Self-efficacy

Entrepreneurship requires decision and action (McMullen & Shepherd, 2006). Entrepreneurial action is affected by the extent of uncertainty and the willingness to bear uncertainty (McMullen & Shepherd, 2006). Whether the entrepreneurship occurs however, depends on how much one must rely on one's judgment, which, in turn, depends on the degree of uncertainty experienced in deciding whether to act (McMullen & Shepherd, 2006). However, people's judgments are not objectively rational (Bandura, 1986). Judgment relies on a belief in their own efficacy, which influences the course of action that people choose to pursue (Bandura, 1997). Self-efficacy is "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391).

Network marketing business specific self-efficacy in the present study is, therefore, defined as network marketers' beliefs in their capabilities to attain the expected results in carrying out network marketing business activities.

Social Cognitive Theory suggests that an individual's self-efficacy is related to the attainments of others: "...seeing or visualizing people similar to oneself perform successfully typically raises efficacy beliefs in observers that they themselves possess the capabilities to master comparable activities" (Bandura, 1997; p. 87). For many activities, there are no absolute measures of adequacy; therefore people must appraise their capabilities in relation to the attainments of others. When the capabilities are gauged largely in relation to the performance of others, social comparison operates as a primary factor in the self-appraisal of capabilities (Bandura, 1997). When people see or visualize others similar to oneself perform successfully, this typically raises efficacy beliefs in observers that they themselves possess the capability to master comparable activities; they persuade themselves that if others can do it, they too have the capability to raise their performance (Bandura, 1997). Thus, an individual's action is influenced by one's social environment (Bandura, 1986). In the present study, the influence of social environment in a NMO is characterized as the entrepreneurial atmosphere, training, encouragement and support between network marketers (Biggart, 1989; Sparks & Schenk, 2001).

NMOs recruit people who want to make money, but they must compete with salary-paying employers in satisfying workers' financial needs (Biggart, 1989). Unable to give a pay check, NMOs offer network marketers something employers cannot give: a socially valued, independent status (Biggart, 1989). NMOs make ordinary people into "entrepreneurs" (Biggart, 1989). A review of the literature shows much research on the entrepreneur's personality has been carried out and its major constructs have been identified as: need for achievement (e.g. Collins, Hanges & Locke, 2004; Zhao & Seibert, 2006); mindset of innovation (e.g. Buttner & Gyskiewicz, 1993); locus and control (e.g. Miner, 1990); and need for autonomy (e.g. Lee & Tsang, 2001; Kisfalvi 2002). It is reasonable to believe that immigrant network marketers, who are pursuing entrepreneurial opportunities from network marketing business, should have similar attributes to those of entrepreneurs.

Kuntze (2001) suggests that network marketers are entrepreneurial dreamers rather than entrepreneurs because they perform highly routine selling and recruiting

behaviours; innovation is neither necessary nor welcome. Contrary to Kuntze's suggestion, Biggart (1989) comments that entrepreneurship in the network marketing industry is more than a type of economic action: "It is a powerful social ideal that came about with emergence of capitalism" (p. 163). The network marketing approach is bound up in the idea about patriotism (in the context of the USA), equality, freedom, and free enterprise (Biggart, 1989). The sense of innovation for network marketers is reflected in pursuing "opportunities" in creative ways (Biggart, 1989). From the studies by Biggart (1989) and Kuntze (2001), it is predictable that network marketers in the environment of NMOs are diversified, and who are influencing each other.

According to Social Cognitive Theory (Bandura, 1986), the network marketer's perceptions on network marketing business should be affected by the NMO social environment. The present study predicts that network marketers' self-efficacy in pursuing entrepreneurial opportunities from network marketing business is positively influenced by their social environment in an NMO.

One of the most popular activities in a NMO social environment is the organizational training provided by the NMO and other network marketers (Biggart, 1989; Pratt, 2000; Spark and Schenk, 2001). Under the philosophy of "anyone can do it" promoted by NMO (Biggart, 1989; Pratt, 2000), many inexperienced people have been attracted to NMOs (Kuntze, 2001). Organizational training is essential for the success of a NMO and its network marketers (Spark & Schenk, 2001), as it helps network marketers obtain business skills and knowledge (Gist, 1989; Eden & Aviram, 1993; Schwoerer, May, Hollensbe, & Mencl, 2005; Zhao et al., 2005; Tai, 2006).

Researchers divided the organizational training offered by firms into two main types: i) general training; and ii) firm specific training (Becker, 1975; Gattiker, 1995). General training provides trainees with skills that are useful in more than one job or firm (Becker, 1975), while firm specific training tends to the on-the-job, which specifically increases trainees' productivity only in the firm that is providing the training (Becker, 1975; Mainga, Hirschsohn & Shakantu, 2009). Private firms are reluctant to provide general training, as it enhances the market value of employees' skills to outside options and may cause employee turnover (Leuven, 2005; Mainga et al., 2009).

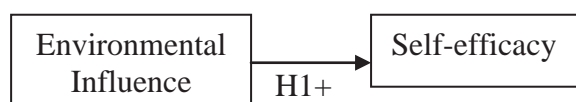
Training in NMOs has several unique features: i) the trainees are independent network marketers who own the network marketing businesses and personally take

responsibility for them (Biggart, 1989, Sparks & Schenk, 2001); ii) most training is provided by other network marketers (Sparks & Schenk, 2001); iii) network marketers share the knowledge and skills with each other (Pratt, 2000); and iv) in some circumstances, organizational training is used as a method to attract (motivate) new network marketers (Bhattacharya & Mehta, 2000). Organizational training in NMOs provides two sources for trainees to raise their self-efficacy. First, it provides opportunities for trainees to be exposed to successful network marketers and obtain vicarious experiences (Bandura, 1986, 1997). Second, it lets trainees practice business skills and knowledge and obtain the mastery experience (Bandura, 1986, 1997).

Researchers suggest that many training programs and efforts are aimed at changing individuals' efficacy belief (Malone, 2001; Choi, Price & Vinokur, 2003). The underlying rationale of this argument is Bandura's (1986) notion that enactive mastery, defined as repeated performance accomplishments, is an important pre-condition for the development of self-efficacy (Axtell & Parker, 2003; Bandura, 1986). Schwoerer et al. (2005) found that training experiences designed to equip participants to cope independently with a challenging work situation had a positive influence on self-efficacy. Tai's (2006) findings, for example, suggest that trainees' familiarity with the training content is positively related to their self-efficacy and training motivation. Thus, self-efficacy is malleable (Eden & Aviram, 1993). Based on Social Cognitive Theory (Bandura, 1986), the current study argues that training positively influences a network marketer's self-efficacy in conducting network marketing business (Figure 2.6.1). Thus, Hypothesis 1 is proposed as:

Figure 2.6.1

The Relationship between Environmental Influence and Network Marketing Specific Self-efficacy



Hypothesis 1: Social environmental influence of a NMO is positively associated with immigrant network marketers' self-efficacy in achieving business success.

2.6.2 Network Marketing Business Specific Self-efficacy and Entrepreneurial Action

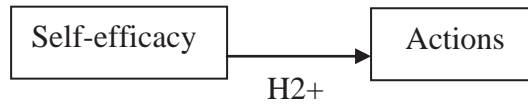
Entrepreneurial actions are any newly fashioned behaviours through which entrepreneurs exploit opportunities that others have not noticed or aggressively pursued (Kuratko, Ireland & Hornsby, 2001). In the present study, entrepreneurial action is defined as the extent of activities undertaken by network marketers in conducting their businesses. Bandura (1997) suggests that “people’s level of motivation, affective states, and action are based more on what they believe than on what is objectively true” (p. 2). People’s belief in their efficacy influences the course of action they choose to pursue, how much effort they apply to given endeavours, and how long they will persevere in the face of obstacles and failures (Bandura, 2001). “Unless people believe they can produce desired effects by their actions, they have little incentive to act” (Bandura, 1997, pp. 2–3). Therefore, self-efficacy is an important determinant of actions (Forbes, 2005).

Individuals tend to avoid tasks about which they have low self-efficacy and, conversely, are drawn towards tasks for which they have high self-efficacy (Bandura, 1986; Forbes, 2005). Self-efficacy is a significant determinant of performance that operates partially independent of underlying skills (Bandura, 1986; 1991). The positive relationship between self-efficacy and actions is also supported by the evidence obtained from the study of entrepreneurship (Trevelyan, 2011). According to Trevelyan, self-efficacy is positively associated with effort on action undertaken in pursuing entrepreneurship. Thus, this study anticipates that the level of Chinese immigrants’ network marketing specific self-efficacy is positively associated with their entrepreneurial actions undertaken in conducting network marketing business (Figure 2.6.2). Hypothesis 2 is proposed as follows:

Hypothesis 2: immigrant network marketers’ self-efficacy is positively associated with their entrepreneurial actions undertaken in conducting network business.

Figure 2.6.2

The Relationship between Network Marketing Specific Self-efficacy and Actions Undertaken



2.6.3 Influence of Social Environment in a NMO and Desire for Opportunity

One important trait of the entrepreneur is the desire for profitable opportunities (Shane & Venkataraman, 2000; McMullen & Shepherd, 2006). Discovery of an entrepreneurial opportunity is the pre-condition for entrepreneurship (Shane & Venkataraman, 2000; Echhardt & Shane, 2003; McMullen & Shepherd, 2006). The characteristics of opportunities influence the willingness of people to exploit these opportunities (Shane & Venkataraman, 2000; Echhardt & Shane, 2003). The exploitation of an entrepreneurial opportunity requires the entrepreneur to believe that the expected value of the entrepreneurial profit will be large enough to compensate for the opportunity cost of other alternatives (Shane & Venkataraman, 2000).

Desire for profitable opportunities from conducting network marketing business is one of the traits for network marketers (Biggart, 1989; Sparks & Schenk, 2001; Stewart & Roth, 2007). The desire for opportunities from conducting network marketing business is defined as the extent to which a network marketer wants to make profits from conducting network marketing business.

The Longman dictionary defines desire as a sense of hoping for a desirable (positive) outcome. The development of a desire to act is influenced by personal factors (e.g. emotions and self-efficacy) that are in turn dependent upon the social environment (Bandura, 1986; Sekerka & Bagozzi, 2007). Sekerka and Bagozzi, (2007) suggest that desire is influenced by group norms. They claim that group norms add social pressures to act so as to achieve an outcome.

Evidence in the literature shows that a person's desire is affected by his/her social environment (Messick & Thorngate, 1967; Malhotra, 2010). For example, Messick and Thorngate (1967) found that people may pursue relative gains more vigorously than personal gains because they do not like receiving less than referent others. Malhotra (2010) claims that competitive environments can trigger the desire to

win. The essence of the desire to win is not just to succeed, but also includes the notion that others must consequently fail (Ku, Malhortra & Murnighan, 2005).

Under the social environment in NMOs, events are hosted regularly and successful network marketers emotionally share their personal stories with others (Biggart, 1989; Kuntze, 2001). The impression given of network marketers is of a group of disadvantaged people in society (Kuntze, 2001). For example, Kuntze (2001) claims those who are socially disadvantaged are more likely to respond to network marketing organizations' entrepreneurship promotions and Biggart (1989) suggests that most network marketers are women. Many researchers suggest that women are in disadvantaged positions in the organizations (e.g. Stroh, Brett & Reilly, 1996; Cotter, Hermsen, Ovadia & Vanneman, 2001; Kirchmeyer, 2005). Immigrants are also a group of disadvantaged people in terms of pursuing employment opportunities in the host country (Chaganti & Greene, 2002). Disadvantaged people are apt to be influenced by those "successful" network marketers (Kuntze, 2001).

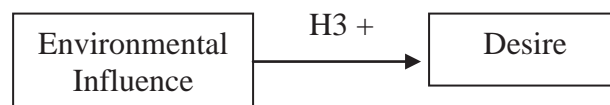
As mentioned above, the entrepreneurship promoted by NMOs is particularly attractive to Chinese immigrants coming from the People's Republic of China (PRC) (Lin, 2007) because NMOs claim network marketing business as a way for ordinary persons to attain wealth and status (Biggart, 1989; Pratt, 2000; Kuntze, 2001). Many Chinese immigrants coming from the PRC lack financial resources and/or basic knowledge of conducting private businesses in the western world (Wan, 2001; Brown, 2007), but they are able to develop social networks and organize events in their communities (Wan, 2001; Brown, 2007; Lin, 2007).

In addition, the strategy of creating a favourable environment in NMOs (Bhattacharya & Mehta, 2000; Pratt, 2000; Sparks & Schenk, 2001; 2006) may also affect Chinese immigrants' desire for opportunities from network marketing business. According to Social Cognitive Theory (Bandura, 1986), examples and stories told by successful Chinese immigrant network marketers (Biggart, 1989; Sparks & Schenk, 2001) will influence other Chinese immigrants in the NMO social environment. Thus, it can be predicted that the NMO social environmental influence in NMOs is positively related to immigrant network marketers' desire for entrepreneurial opportunities from network marketing business (Figure 2.6.3).

Hypothesis 3: Social environment influence in NMO is positively associated with immigrant network marketers' desire for pursuing opportunities from network marketing business.

Figure 2.6.3

The Relationship between Environmental Influence and the Desire for Entrepreneurial Opportunity



2.6.4 The Desire for Entrepreneurial Opportunity and Entrepreneurial Action

The Theory of Planned Behaviour suggests that attitudes towards the behaviour and subjective norms are important predictors of behavioural intention (Ajzen, 1991). Attitude is viewed as the first determinant of behavioural intentions (Ajzen, 1991; Carr and Sequeria, 2007). In general, the more positive the attitude towards a behaviour, the stronger the intention the individuals have to perform that behaviour (Armitage and Conner, 2001; Carr & Sequeria, 2007).

Armitage and Conner (2001) suggest that attitude is one of the best predictors of desires. When they were applying the Theory of Planned Behaviour to the area of entrepreneurship, researchers translated attitude into desirability to develop entrepreneurial intention models (Krueger, 1993; Krueger & Brazeal, 1994; Krueger et al., 2000; Armitage & Conner, 2001; Peterman & Kennedy, 2003). Krueger and Brazeal (1994) claim that the “constructs of perceived desirability subsume the two attractiveness components of Theory Planned Behaviour, ‘attitude toward the act’ and social norms” (p. 96).

Shapero’s model of entrepreneurial intentions suggests that the decision to initiate a new venture requires credibility (Krueger, 1993). In turn, credibility requires at least a threshold level of perceptions of feasibility and desirability plus some propensity to act upon the opportunity (Krueger, 1993). Perceived desirability partly drives entrepreneurial activity (Shapero, 1975; Krueger, 1993) and affects intentions (Krueger, 1993). In his study, Krueger (1993) tested the Shapero model of

entrepreneurial intention and found the perception of desirability is one of the sources for entrepreneurial intentions.

Peterman and Kennedy (2003) suggest that dominant models of entrepreneurial intentions are largely homologous in that they all focus on the pre-entrepreneurial event and integrate attitude and behaviour theory (Ajzen, 1991) and self-efficacy and Social Cognitive Theory (Bandura, 1986; 1997). Dimov (2007) suggests that individual intention and action involves a configuration of self-efficacy beliefs and desires.

According to the Theory of Planned Behaviour advocated by Ajzen (1991), entrepreneurial actions undertaken in conducting network marketing business could be predicted by the network marketer's entrepreneurial intention to conduct network marketing business. A few articles related to the study of the relationship between intentions and actions are found in the literature (Ajzen, 2001; Hooft, Born, Taris, Flir & Blonk, 2005; Westaby, 2005). The positive relationship between intention and behaviour (action) has been supported by empirical studies (e.g. Hooft et al., 2005; Westaby, 2005). In their study, Hooft et al. (2005) found that the intention to search for a job was significantly predictive of job search behaviours, while Westaby's (2005) study demonstrates the intention predicts the behaviour of keeping work. In the entrepreneurship literature, many studies also support the positive relationship between entrepreneurial intention and entrepreneurial action (e.g. Bird & Jelinek, 1988; Krueger, 1993; Jung, Ehrlich & Noble, 2001; Choo & Wong, 2006). Choo and Wong (2006) point out that entrepreneurial intention is the single best predictor of entrepreneurial behaviours. Individuals with intentions to start a business can be identified and studied as they progress through the entrepreneurial process much more readily than people without an initial intention. Jung, Ehrlich and Noble's (2001) study also demonstrates the positive relationship between entrepreneurial intention and entrepreneurial action.

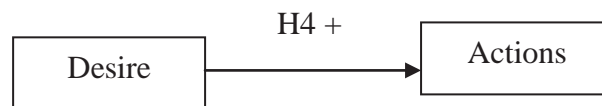
According to Social Cognitive Theory (Bandura, 1986), desire for opportunity equals a personal factor, which describes a person's psychological status; entrepreneurial action undertaken in conducting network marketing business equals to the behaviour in conducting a network marketing business. It is rational to predict that immigrant network marketers' desire for entrepreneurial opportunity is positively

related to their actions undertaken to conduct network marketing business (Figure 2.6.4). Thus, Hypothesis 4 is proposed as below:

Hypothesis 4: The stronger the desire for entrepreneurial opportunity in NMOs that immigrant network marketers have, the more entrepreneurial actions they will take in conducting network marketing business.

Figure 2.6.4

The Relationship between Desire for Entrepreneurial Opportunity and Actions



2.6.5 Influence of Social Environment in NMO and Social Competence

Social competence is considered as the ability of a person to communicate and cooperate with others (Kauffeld, 2006); it is defined as the overall effectiveness of a person’s performance in interacting with others on a face-to-face basis (Zhang, Souitaris, Soh & Wong, 2008). In a business context, social competence is defined in terms of four areas: i) social perception; ii) impression management; iii) persuasiveness; and iv) social adaptability (Baron & Markman 2003). Zhang et al. (2008) argue that socially competent people are able to read other persons accurately, to make a good first impression, to be persuasive and have lower psychological barriers to exchanging private information with strangers. Importantly, Hoehn-Weiss, Brush and Baron (2004) assert that social competence can be learned.

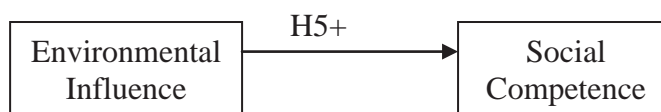
Social Cognitive Theory suggests most human behaviour is learned by observation (Bandura, 1986). “By observing others, one forms rules of behaviour, and on future occasions this coded information serves as guide for action” (p. 47). Observing the actual performances of others and the consequences of them fosters the social learning (Bandura, 1986). As mentioned before, a NMO is mainly composed of network marketers. Large numbers of interactions between network marketers with diversified backgrounds are involved in the business activities (Spark & Schenk, 2001; 2006). Learning from each other is one of the routines in NMOs (Biggart, 1989;

Bhattacharya & Mehta, 2000; Pratt, 2000). The present study argues that social competence should be one of the skills network marketers can learn from others in NMOs. The underlying element of this argument is Social Cognitive Theory (Bandura, 1986). This argument is also supported by evidence in the literature (Schoenrock, Bell, Sun & Avery, 1999; Soenens & Vansteenkiste, 2005). Therefore, the present study hypothesises that the NMO social environment influence positively affects immigrant network marketers' social competencies (Figure 2.6.5).

Hypothesis 5: Social environmental influence of NMO is positively associated with immigrant network marketer's social competence.

Figure 2.6.5

The Relationship between Environmental Influence and Social Competence

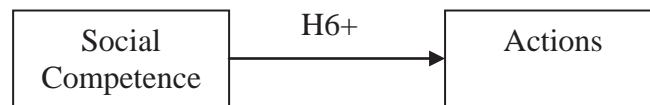


2.6.6 Social Competence and Action

Evidence in the literature shows social competence is positively related to entrepreneurial success (Baron & Markman 2003) and business performance (Porath & Bateman, 2006). Business performance relies on actions undertaken in conducting business activities. Without actions, nothing will happen (McMullen & Shepherd, 2006). The main actions taken by network marketers in conducting their network marketing business are selling products, recruiting new network marketers and supporting and training them to do those things (Granfield & Nicols, 1975; Biggart, 1989; Bloch, 1996; Pratt, 2000; Koehn, 2001; Sparks & Schenk, 2001; 2006), which involve many interactions between network marketers and their prospects. The effectiveness in interacting with others is the mark of social competence (Baron & Markman, 2003). Social competence is one of the important abilities for network marketers to conduct their business. Thus, the present study anticipates the higher the level of social competence a network marketer possesses, the more actions he/she will take to conduct his/her business activities (Figure 2.6.6).

Hypothesis 6: The higher the level of an immigrant network marketers' social competence, the more actions he/she will take in conducting the network marketing business.

Figure 2.6.6
The Relationship between Social Competence and Actions



2.6.7 Influence of Social Environment in NMO and Motivations

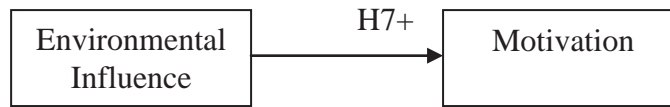
Bandura (1986) suggests that actions bringing rewards are generally repeated, whereas those that bring unrewarding or punishing outcomes tend to be discarded. “People guide their actions by both observed consequences and the consequences they create for themselves.” (Bandura, 1986, p. 228). Social reactions are the predictors of primary consequences; people will do things for the approval of others and refrain from actions that arouse the wrath of others (Bandura, 1986). According to Social Cognitive Theory (Bandura, 1986), it can be inferred that people’s motivation is influenced by their social environment.

Evidences of environmental influence affecting motivation are found in the literature. For example, in his study of trainees’ characteristics on training effectiveness, Noe (1986) suggests that trainees’ perceptions of the favourability of the work environment influence the motivation to learn. In the study on Chinese entrepreneurial motivations, Taormina and Lao (2007) found that Chinese entrepreneurs’ motivation to start a business is positively influenced by their environment (Figure 2.6.7). Thus, in this research, the hypothesis is proposed as below:

Hypothesis 7: Social environmental influence of a NMO is positively associated with immigrant network marketers' motivations in conducting their network marketing business.

Figure 2.6.7

The Relationship between Environmental Influence and Motivations



2.6.8 Motivations and Desire for Network Marketing Opportunities

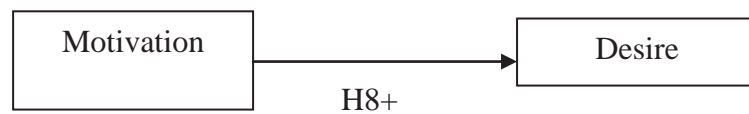
Social Cognitive Theory suggests that “personal determinants are not disembodied from the person presiding over them and his or her physical characteristics” (Bandura, 1986, p. 26). People evoke different reactions from their social environment simply by their physical characteristics, such as their age, size, race, sex, and physical attractiveness (Bandura, 1986). As mentioned before, those, socially disadvantaged, are more likely to respond to network marketing organizations’ entrepreneurship promotions (Biggart, 1989; Kuntze, 2001), Chinese immigrants are socially disadvantaged in terms of employment in the labour market (refer to Section 2.4.2). However, not all Chinese immigrants are attracted by the entrepreneurial opportunities in network marketing businesses, because the evidence shows that some people love network marketing business and some hate it (Pratt, 2000).

A review of the literature mentioned before shows that there is a large volume of research into the entrepreneurial personality. The major constructs of entrepreneurial personality include the: need for achievement, mindset of innovation, locus control, and need for autonomy (e. g. Kuntze, 2001; Lee & Tsang, 2001; Kisfalvi 2002; Collins, Baum & Locke, 2004; Hanges & Locke, 2004; Zhao & Seibert, 2006). Among these constructs, the need for achievement is the most important entrepreneurial trait. Many researchers support McClelland’s (1961) view on this entrepreneurial trait and suggest that achievement motivation positively correlates to entrepreneurial activity (e.g. 1995; Johnson, 1990; Shaver, 1995; Kuntze, 2001; Collins, Hanges & Locke, 2004). For example, Zhao and Seibert (2006) suggest that the achievement motivation is positively correlated to entrepreneurial activities. Therefore, it is predictable that there is a positive relationship between motivation and the desire for exploring entrepreneurial opportunities (Figure 2.6.8). Thus, this study proposes a hypothesis as follows:

Hypothesis 8: immigrant network marketers' level of motivation in conducting network marketing business is positively related to their desire for conducting network marketing businesses.

Figure 2.6.8

The Relationship between Motivation and the Desire for Conducting Network Marketing Businesses



2.6.9 Motivation and Network Marketing Business Self-efficacy

Social Cognitive Theory suggests people select a course of action within their perceived capabilities (Bandura, 1986). “Unless people believe they can produce desired results and forestall detrimental ones by their actions, they have little incentive to act or to persevere in the face of difficulties” (Bandura, 2001, p. 10). People’s level of motivation is based more on what they believe than on what is objectively true (Bandura, 1997). Therefore, the present study argues that there is a positive relationship between self-efficacy and motivation. Review of the literature shows that this argument is supported by several empirical studies.

Empirical studies in the area of organization training have demonstrated that a trainee’s self-efficacy belief positively influences his/her motivation to learn (Quiñones, 1995; Carlson et al., 2000; Tracey, Hinkin, Tannenbaum, & Mathieu, 2001; Tai, 2006). Quiñones (1995) found a significant positive relationship between trainees’ self-efficacy and the motivation to learn. Tracey et al. replicated Quiñones’s (1995) study and confirmed his findings. One of the findings in Tracey et al.’s (2001) study shows that trainees’ pre-training self-efficacy positively influences their pre-training motivation to learn ($r = 0.35, p < 0.01$). Carlson et al. (2000) argue that persons high in training self-efficacy would experience higher levels of training motivation than persons low in training efficacy. One of Carlson et al.’s (2000) results reveals that self-efficacy is positively related to achievement motivation. The positive influence of self-efficacy on training motivation has also been proven by Tai’s (2006) study.

Self-efficacy describes a personal factor of Chinese immigrant network marketers in pursuing entrepreneurial opportunities from network marketing business (section 2.4.4.4). Motivation describes a behaviour of the entrepreneurially oriented Chinese immigrants in pursuing entrepreneurial opportunities from network marketing business (section 2.4.4.4). Social Cognitive Theory (Bandura, 1986) asserts both the behaviour factor (motivation) and the personal factor (self-efficacy) affect reciprocally. It means that the higher level of self-efficacy will cause a higher level of motivation, and in turn, a higher level of motivation will also cause a higher level of self-efficacy. Therefore, the current study argues that motivation is positively related to self-efficacy.

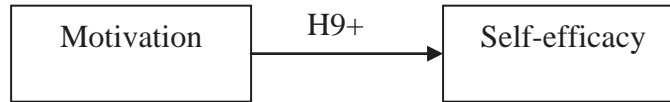
In accordance with the literature of necessity entrepreneurship (Bergmann & Sternberg, 2007; Block & Keollinger, 2009), immigrant entrepreneurship (Chaganti & Greene, 2002; Sequeira & Rasheed, 2006) and the NMO study (Biggart, 1989; Lin 2007), the current study argues that entrepreneurship is the initial motivation for Chinese immigrants to pursue network marketing business. Compared to other Chinese immigrants, those Chinese immigrants who pursue entrepreneurship are more willing to face challenges and take actions to establish their own ventures (McMullen & Shepherd, 2006).

Compared to establishing other business ventures, establishing a network marketing business is claimed as the easiest way to start one's own business, because it does not need much resource and special skills at start-up (Biggart, 1989; Kuntze, 2001; Sparks & Schenk, 2001; 2006). Therefore, the higher the level of motivation for pursuing entrepreneurship that an immigrant has, the higher the level of self-efficacy he/ she will have in an operating network marketing business. Thus the motivation for pursuing entrepreneurship in network marketing business positively affects network marketing specific self-efficacy.

Hypothesis 9: The level of motivation in conducting network marketing business is positively associated with network marketing business specific self-efficacy.

Figure 2.6.9

The Relationship between Motivation and Network Marketing Self-efficacy



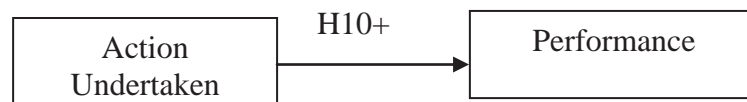
2.6.10 Action Undertaken and Performance

In order to answer the research question (refer to Chapter 1), the outcome of entrepreneurial actions undertaken by network marketers should be examined. A review of the literature shows that one of the important objectives for entrepreneurial activities is to pursue profitability (Carland et al., 1984; Sadler-Smith et al., 2003). Some authors point out that NMOs promote themselves as a way for ordinary people to pursue entrepreneurial opportunities and attain wealth (Biggart, 1989; Kuntze, 2001), but evidence shows that most network marketers make little or no money from their network marketing business (Bhattacharya & Mehta, 2000; Sparks & Schenk, 2006). Some authors suggest that only a small number of network marketers who joined an NMO early and are on the top of the organizational structure make money (e.g. Block, 1996; Johnson, 1999; Koehn, 2001). However, anecdotal evidence (*Sing Tao Daily*, 19th October 2005; 28 September 2007) indicates that many Chinese immigrant network marketers in Australia who joined an NMO much later than others have achieved better financial results. The theoretical and empirical implication is obvious in examining the relationship between actions undertaken by Chinese immigrant network marketers and the financial outcome they have achieved. In the present study, the financial outcome is defined as the income earned by a network marketer from his/her network marketing business.

Section 2.6.2 defines entrepreneurial action as the volume of activities taken by network marketers in their businesses. The main activities undertaken by network marketers include selling products, recruiting new network marketers and providing supporting/training to them (Granfield & Nicols, 1975; Biggart, 1989; Sparks & Schenck, 2001; 2006; Lin, 2007). To achieve entrepreneurial results, entrepreneurial actions must be taken (McMullen & Shepherd, 2006). Entrepreneurial actions remain at the core of how an entrepreneur stretches to reach an objective and improve the

performance (Kuratko et al., 2001). Without action, nothing will happen. The present study predicts that an immigrant network marketer's entrepreneurial actions are positively related to their performance (Figure 2.6.10).

Figure 2.6.10
The Relationship between Action Undertaken and Performance



Hypothesis 10: immigrant network marketers' entrepreneurial actions in conducting network marketing business are positively related to their performance.

2.6.11 Relationship between the Influences of Social Environment in NMO, Human Capital and Actions

One of the most popular activities in an NMO social environment is the organizational training (Biggart, 1989; Pratt, 2000; Spark & Schenk, 2001). Organizational training refers to a planned effort made by an organization to facilitate its members in learning the relevant skills (De Cieri & Kramar, 2003). It is generally assumed that training leads to improved competence (Eikebrokk & Olsen, 2009). In their study to investigate the relationship between training supply, e-business competence and e-business performance in European small and medium-sized enterprises, Eikebrokk and Olsen (2009) provide evidence of the positive association between training and e-business related competence. Paloniemi (2006) also find that on-job training is one of the important ways to obtain job competence. Therefore, the present study argues that the outcomes of the training provided by NMOs directly relate to the improvement in individual Chinese network marketers' competence in conducting their network marketing business activities.

Researchers suggest that competence is one of important components of human capital (Hayton & Kelley, 2006). Human capital refers to the stock of competences, knowledge and personality attributes embodied in the ability to perform work so as to

produce economic value (Youndt, et al., 1996; Hitt et al., 2001). It is the attributes gained by an individual through training, education and experience (Gimeno, Folta, Cooper, & Woo, 1997). In the current research, training is one of three characteristics of the influence of social environment in NMO. Thus, the present study anticipates the environmental influence positively affects the Chinese immigrant network marketers' human capital through training. According to Social Cognitive Theory (Bandura, 1986), the higher the level of human capital the more it generates self-efficacy, which in turn leads to more actions.

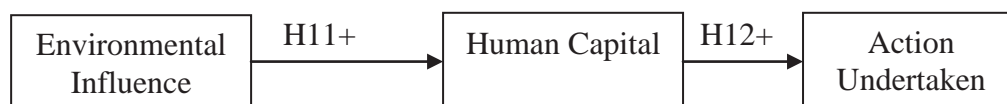
Thus, the present study predicts NMO environmental influence is positively related to immigrant network marketers' human capital, which in turn is positively related to actions undertaken in conducting network marketing business (Figure 2.6.11). Based on this prediction, Hypotheses 11 and 12 are proposed as:

Hypothesis 11: Social environmental influence of NMO is positively related to immigrant network marketers' human capital.

Hypothesis 12: The more human capital an immigrant network marketer possesses, the more actions in conducting network marketing business he/she will take.

Figure 2.6.11

The Relationship between Environmental Influence, Human Capital and Actions



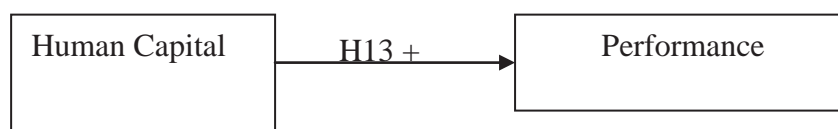
2.6.12 Human Capital and Performance

Human capital theory suggests that experience is a valuable asset that has been shown to increase the productivity and economic value of the organization (Shrader & Siegel, 2007). In the literature review, no study was found on the relationship between human capital and performance conducted in the context of network marketing business, but much of the research has been conducted in the area of organization and

entrepreneurship studies (Youndt et al., 1996; Hitt et al., 2001; Hitt, Uhlenbruck, Shimizu, 2006; Shrader & Siegel, 2007). The positive relationship between human capital and entrepreneurial performance has been proven by many studies (Gimeno, et al., 1997; Hitt, et al., 2001; Hitt, et al., 2006; Shrader & Siegel, 2007), except the study of NMOs. For examples, Gimeno, et al. (1997) found that an entrepreneur’s general human capital is positively related to the economic performance of the venture. Hitt, et al.’s (2006) study indicates that human capital is positively associated to the firm’s performance. Shrader and Siegel (2007) suggest that the more experiences a manager has, the better performance the firm will achieve. The positive correlations between human capital and performance are also supported by the studies conducted by Youndt, et al., (1996) and Hitt, et al. (2001). Based on the results obtained from previous studies on the relationship between human capital and performance, the present study predicts that immigrant network marketer’s human capital is positively related to their performance (Figure 2.6.12).

Figure 2.6.12

The Relationship between Human Capital and Performance



Hypothesis 13: immigrant network marketing specific human capital is positively related to his/her performance.

2.7 Chapter Summary

This chapter presented the information from NMOs and the research domain, described relevant literature and the application of social Cognitive Theory to management studies, identified the research problem area as one in which entrepreneurship literatures and Social Cognitive Theory would be applied to the context of NMOs, reviewed the research boundaries, and finally developed the research hypotheses and model. As a result, the research question: *What factors determine immigrant network marketer’s performance in conducting their network marketing business?* will be answered through examining the following hypotheses:

Hypothesis 1: Social environmental influence of a NMO is positively associated with immigrant network marketers' self-efficacy in achieving business success.

Hypothesis 2: immigrant network marketers' self-efficacy is positively associated with their entrepreneurial actions undertaken in conducting network business.

Hypothesis 3: Social environment influence in NMO is positively associated with immigrant network marketers' desire for pursuing opportunities from network marketing business.

Hypothesis 4: The stronger the desire for entrepreneurial opportunity in NMOs that immigrant network marketers have, the more entrepreneurial actions they will take in conducting network marketing business.

Hypothesis 5: Social environmental influence of NMO is positively associated with immigrant network marketer's social competence.

Hypothesis 6: The higher the level of an immigrant network marketers' social competence, the more actions he/she will take in conducting the network marketing business.

Hypothesis 7: Social environmental influence of a NMO is positively associated with immigrant network marketers' motivations in conducting their network marketing business.

Hypothesis 8: immigrant network marketers' level of motivation in conducting network marketing business is positively related to their desire for conducting network marketing businesses.

Hypothesis 9: The level of motivation in conducting network marketing business is positively associated with network marketing business specific self-efficacy.

Hypothesis 10: immigrant network marketers' entrepreneurial actions in conducting network marketing business are positively related to their performance.

Hypothesis 11: Social environmental influence of NMO is positively related to immigrant network marketers' human capital.

Hypothesis 12: The more human capital an immigrant network marketer possesses, the more actions in conducting network marketing business he/she will take.

Hypothesis 13: immigrant network marketing specific human capital is positively related to his/her performance.

To develop these hypotheses, the concepts of Social Cognitive Theory, and the Planned Behaviour Theory, as well as the literature of NMO studies, entrepreneurship, and immigrant entrepreneurship, were applied. The purpose of developing these hypotheses is to fill the gap in the literature. The review of literature shows that none of previous studies have explained what factors influence network marketers to undertake actions and achieve their successes in the network marketing business, which leaves a significant gap in the literature. In chapter 3, the thesis will proceed with a detailed description of the research methodology used to test these hypotheses.

Chapter Three

DEVELOPMENT OF THE RESEARCH INSTRUMENT AND METHODOLOGY

3.1 Chapter Introduction

The research question has been raised and the foci of this thesis have been clarified in previous chapters. This chapter explains the research design and research method. The purpose of this chapter is to serve as a theoretical foundation for the findings from the current research, which will be presented in Chapter Four. Cross sectional study with deductive strategy are chosen for this research design as it can effectively answer the research question: *What factors determine Chinese immigrant network marketer's performance in conducting their network marketing business?*

This chapter is organized as follows: chapter introduction, research design, questionnaire development, measures, reflective versus formative constructs, data collection, development of measurement models for reflective constructs, estimation of measurement models using PLS, and the structures of measurement models and the research model. The chapter concludes with a summary.

3.2 Research Design

The quality of the research design is a crucial element in management and business research (Grunow, 1995). In order to answer the research question effectively, the current research was carefully designed with due consideration to issues of logical structure, methodological processes and the validity of the outcomes.

Bryman and Bell (2007) outline five different research designs: 1) experimental design; 2) cross-sectional or social survey design; 3) longitudinal design; 4) case study design; and 5) comparative design. The current research adopts the cross-sectional design (Bryman & Bell, 2007, p. 71).

The cross-sectional design entails the collection of data for more than one case (usually quite a lot more than one) and at a single point in time in order to collect a body of quantitative or quantifiable data in connection with two or more variables (usually many more than two), which are then examined to detect patterns of association (p. 55).

The main reason for choosing a cross-sectional design rather than an experimental one is because it is impossible to manipulate the variables in the current study (Bryman & Bell, 2007). The research design selected is explained from the perspective of the nature of the current research, research strategy, research method, justification of the research method, and research setting.

3.2.1 The Nature of the Current Research

Bryman and Bell (2007) put forward two major and different views on the nature of management and business research. The first view argues that the application of management and business research is not a primary purpose to which management and business research should be directed (pp. 5–6). The second view suggests that management and business research can be understood only as an applied field because it is concerned not only with understanding the nature of organizations but also with solving problems that are related to managerial practice (pp. 5–6). Debate concerning the nature of management and business research frames a series of questions (Tranfield & Starkey, 1998; Bryman & Bell, 2007), such as, management and business research is “concerned not only with ‘knowing what’, but goes to beyond this to consider questions associated with ‘knowing how’” (Tranfield & Starkey, 1998, p. 346). The second view of management and business research is relevant to the current research, as this research not only studies what factors affect network marketers’ performance, but also how they impact on the performance.

Bryman and Bell (2007) cited two different models of a knowledge-production system (model 1 and model 2) from Gibbons et al. (1994) in explaining the nature of management and business research. According to Gibbons et al. (1994), model 1 is a university-based model. This model suggests knowledge production is driven primarily by an academic agenda; discoveries tend to build upon existing knowledge in a linear fashion. This model also distinguishes theoretical purity from applied knowledge, the latter being where theoretical insights are translated into practice (Bryman & Bell, 2007, p. 6).

Model 2 requires trans-disciplinarity in research. It assumes that research is driven by a process that causes the boundaries of single contributing disciplines to be exceeded (Gibbons et al., 1994). Findings are closely related to context and may not be easily replicated, so knowledge production is less of a linear process (Gibbons et al.,

1994). Model 2 suggests the production of knowledge is not confined to academic institutions; it involves academics, policy makers, and practitioners (Bryman & Bell, 2007, p. 6). Management and business research is more suited to the ‘model 2’ of knowledge production (Tranfield & Starkey, 1998) because:

A distinguishing characteristic of management research is that it engages with both the world of theory and the world of practice. ... The problems addressed by management research should grow out of the interaction between the world of practice and the world of theory, rather than out of either one alone (p. 353).

According to Tranfield and Starkey (1998), the current research is more suitable to the ‘model 2’ proposition. This research engages with the world of theory (e.g. Social Cognitive Theory, the Planned Behaviour Theory and Entrepreneurship Theory) and the world of practice (the performance of Chinese immigrant network marketers in conducting network marketing business) to develop a model to examine a range of factors impacting the performance of Chinese immigrants in network marketing business in the host country.

3.2.2 Research Strategy

Two major research strategies, deductive and inductive, have been adopted by management and business researchers (Sedmak & Longhurst, 2010). These research strategies provide a set of steps in order to answer research questions (Sedmak & Longhurst, 2010). With a deductive strategy, the researcher deduces a hypothesis (hypotheses) on the basis of what is known about a particular domain and of theoretical considerations in relation to that domain (Bryman & Bell, 2007). Starting from hypotheses deduced from theory, the data are found to either confirm the hypotheses (in a way support the theory), or does not confirm the hypotheses thus the theory needs to be appropriately modified or rejected (Blaikie, 2000). “The deductive process appears very linear – one step follows the others in a clear, logical sequence” (Bryman & Bell, 2007, p. 13).

An inductive research strategy involves a movement that is in the opposite direction from deduction (Bryman & Bell, 2007, p. 14); it involves the building of theories based on the data (Sedmak & Longhurst, 2010). “With an inductive stance, theory is the outcome of research. In other words, the process of induction involves drawing generalizable inferences out of observations” (Bryman & Bell, 2007, p. 14).

From deductive and inductive perspectives, theory can be broadly defined as any coherent description or explanation of observed or experienced phenomena (Gioia and Pitre, 1990). Theory emphasizes the nature of causal relationships, identifying what comes first as well as the timing of such events (Sutton & Staw, 1995). Sutton and Staw (1995) argue that strong theory delves into underlying processes so as to understand the systematic reasons for a particular occurrence or non-occurrence. A good theory explains, predicts, and delights (Sutton & Straw, 1995). This thesis achieves all these characteristics in accord with Sutton and Straw (1995).

Theory development comprises four essential building blocks (Whetten, 1989). The first block is *what* factors logically should be considered in the explanation of phenomena; the second is *how* these factors are related; the third is *why* the casual relationships between the factors are rational; and the last block is *who, where, when* the conditions place limitations on the positions generated from a theoretical model (Whetten, 1989). In accord with Whetten (1989), the current study considers these factors in attempting an explanation of the network marketer's performance in terms of the influence of the social environment in the NMO; the network marketer's motivation in conducting network marketing business; their desire for opportunity from network marketing business, self-efficacy, social competence, experiences and actions undertaken in conducting network marketing business. The research framework (Chapter Two) shows social environment in a NMO leads to the development of desire for opportunities from network marketing business and self-efficacy, social competence and human capital, which in turn, predict actions undertaken. Network marketer's performance is directly predicted by the actions undertaken. The current study underpins the rationality of the casual relationship between these factors with Social Cognitive Theory, the Planned Behaviour Theory and the literature of immigrant entrepreneurship. The application of the theoretical model developed in the current study is limited to immigrants pursuing entrepreneurial opportunities from network marketing business in their host country.

3.2.3 Research Method

One of the most common ways to classify research method is to make a distinction between quantitative and qualitative research (Myers, 2009). The method used in this research is to ensure that reliable knowledge will be obtained through the

research process, which is directly related to the prevailing epistemology (Sedmak & Longhurst, 2010). The “epistemological issue concerns the question of what is (or should be) regarded as acceptable knowledge in a discipline” (Bryman & Bell, 2007, p. 16).

In general, quantitative research is associated with a positivist research perspective, while qualitative research is associated with an interpretive research perspective (Schwaninger, 2004). “Positivist researchers generally assume that reality is objectively given and can be described by measurable properties, which are independent of the observer (researcher) and his or her instrument” (Myers, 2009, p. 37). “They emphasize instrumental rationality, and cultivate structuralist–functionalist approaches” (Schwaninger, 2004, p. 412).

“Interpretive researchers assume that access to reality (given or socially constructed) is only through social constructions such as language, consciousness, shared meaning, and instruments” (Myers, 2009, p. 38). They focus on interpretations of phenomena or facts (Schwaninger, 2004). The methodologies of interpretive stream of practice and research highlight the subjectivity of observers perceiving and interpreting the world (Schwaninger, 2004). The data interpretive researchers obtain is in the form of words and observations, rather than numbers (Sedmak & Longhurst, 2010).

The current study is a quantitative research, because the reality of the phenomena (the influence of social environment in NMOs, motivation, self-efficacy, desire for opportunity, social competence, action undertaken and performance) in NMO is assumed to be objectively given; and these phenomena can be described by measurable properties. In addition, the current study emphasizes the instrumental rationality.

Quantitative research methods were originally developed in the natural sciences to study natural phenomena (Myers, 2009, p. 8). The advantages of quantitative research include theory testing, replicability and generalizability (Johnson & Harris, 2002). It is best if the researcher wants to have a large sample size and generalize to a large population. “A major disadvantage of quantitative research is that, as a general rule, many of the social and cultural aspects of organizations are lost or are treated in a superficial manner” (Myers, 2009, p. 9).

If the researcher wants to study a particular subject in depth, qualitative research is the best. Qualitative method is good for exploratory research: “when the particular topic is new and there is not much previously published research on that topic” (Myers, 2009, p. 9). The major disadvantage of qualitative research is that it is difficult to generalize to a larger population (Myer, 2009). Considering the advantages and disadvantages in both quantitative and qualitative research and the reality of the area in NMO studies, the current study also uses qualitative methods (focus group interview) as a means to validate the survey instrument.

3.2.4 Justification of the Research Method

A review of the literature in the current study suggests the Social Cognitive Theory as proposed by Bandura (1986) has been well established and broadly applied to the field of management and business research (refer to Chapter 2). According to the strategies implemented by NMOs (as discussed in Chapter 2), the current research asserts that Social Cognitive Theory is applicable to the current study. In addition, much research into entrepreneurship and immigrant entrepreneurship has been conducted and many relevant publications exist. The literature has provided an adequate source of publications dealing with the application of Social Cognitive Theory to business research and the research of entrepreneurship for the current study to generate appropriate hypotheses. Therefore, the current study is conducted on the basis of deductive theory.

Chapter 2 suggests that each network marketer is an independent network marketing business owner. Using a large sample size to investigate Chinese immigrant network marketers’ performances should be the proper way to effectively answer the research question (Zikmund, 1997). As Myers (2009, p. 9) considered quantitative research was the best method for research with a large sample size generalized to a large population), the current study has also adopted the quantitative method as the most suitable research method. The data is collected through a field survey using a questionnaire as the data collection instrument.

According to the literature review in Chapter 2, empirical research into NMOs is limited, which suggests that the study of this area is still in its infancy. The existing measurements for network marketers’ behaviours are limited. In order to measure the variables in the current study, the measurements for each variable were developed. In

the process of developing the measurements, the interview (a qualitative method) was adopted to supplement the quantitative analysis.

In the literature, two different interview techniques (focus group and depth interview) are identified (Zikmund, 1997, pp. 109–122). Each of these interview methods has their advantages and shortcomings. The main advantages for the focus group as outlined by Zikmund (1997, pp. 110–111) include: i) producing a wider range of information; ii) developing the idea to its full significance; iii) triggering a chain of responses from other participants; iv) stimulation; v) a sense of security; vi) spontaneity; vii) specialization; viii) scrutiny; ix) structure; and x) speed. The main shortcomings of the focus group interview is that individual participants may dominant the session and cause a “halo” effect on attitudes toward the concept or the topic of discussion (Zikmund, 1997, p. 115). Compared to a focus group, the main advantage for in depth personal interviews is that the interviewer may steer the respondent a little, by picking up on the cues and themes raised by the respondent (Fisher, 2007), although the main disadvantage is that the depth interviews consumes much more time than the focus group interview (Zikmund, 1997, p. 122). In the current research, multiple focus groups were conducted for the purpose of overcoming the shortcomings of the focus group without sacrificing the advantages of focus group.

3.2.5 Research Setting

In order to answer the research question effectively, the process of deciding the research setting was carefully determined. The issues considered included the location of the research conducted, the main research method, the biases derived from the data collections, and the representative sample.

Research location: This research was conducted among Chinese immigrant network marketers in Australia. The reasons for selecting Australia as the research location are threefold. First, Australia is one of the main destinations of Chinese immigrants (Embassy of the People’s Republic of China in the United States of America, 2007) and the Chinese immigrant entrepreneurs have played a major role in the history of Chinese immigrants in Australia (Collins, 2002). Second, the human and cultural environment of Australia is similar to that of the other major Western countries, such as, Canada, Ireland, New Zealand, South Africa, United Kingdom and the United States (Daniels & Radebaugh, 1995). The current research assumes that the influence of

the social environment on the Chinese immigrant entrepreneurs' behaviours in both Australia and other Western countries is similar. Therefore, the findings from the current research conducted in Australia should be generalizable in the context of other major Western countries. The third reason for selecting Australia as the research location is because the researcher is located in Sydney, Australia. It is economically and practically more feasible for the researcher to collect data in this location.

Main research method and issues of bias: As mentioned in section 3.2, the current research design is a cross-sectional design. One of major challenges to this type of design is the common method variance (CMV) (Podsakoff, Mackenzie, Lee and Podsakoff, 2003; Spector, 2006). Podsakoff et al. (2003) present two techniques for controlling CMV: i) the design of the study's procedures; and ii) statistical controls. In terms of the design of the study's procedures, Podsakoff et al. (2003) suggest the need to obtain measures of the predictor and criterion variables from different sources. They explain: one of the major causes of CMV is obtaining the measures of both predictor and criterion variables from the same rater or source; one way of controlling for it is to collect the measures of the variables from different sources (Podsakoff, et al. 2003).

In according with Podsakoff et al. (2003), the data used to examine the model in the current research was collected from two different sources: the questionnaire survey and the database provided by an organization (to protect the privacy of respondents, their names and the nature of the organization were concealed). The measures for independent variables (the influence of social environment in NMOs, motivation for conducting network marketing business, network marketing business specific self-efficacy, desire for opportunities from network marketing business, social competence, human capital, and actions undertaken in conducting network marketing business), were all obtained from questionnaire survey. The measure for the dependent variable (performance — financial outcome) was obtained from the database of a direct selling firm (objective data). The measure for the dependent variable is an objective measure, which may be resistant to many of the biases that can distort human judgment and observations (Spector, 2006).

In order to link the data obtained from the questionnaire survey to the data obtained from the database, the Chinese immigrant network marketers' Associateship ID number was used. In the survey questionnaire, the participants were requested to provide their Associateship ID numbers. Usually, direct selling firms issue the

identification number to each of their network marketers. According to this number, the direct selling firms pay the commission to their network marketers. To protect the interests of the related direct selling firm and its network marketers, the questionnaire survey was conducted among the Chinese immigrant network markers who belonged to one particular direct selling firm. The Associateship ID number was deleted immediately after the data was collected from the questionnaire survey and matched with the database. In addition, ethical clearance was received from the Human Research Ethics Committee, University of Technology, Sydney.

The representative sample: In the current research, the issue of a representative sample has been carefully considered. The study object of the current research is Chinese immigrant network marketers in Australia. To understand the population of Chinese immigrants as a whole in Australia is essential.

According to the reports, the Australian population in early 2006 was over 21 million (ABS, 2006), and about 700,000 Australians (over 3 percent) were involved in network marketing business either as network marketers or consumers of products sold through network marketing business channels (World Federal Direct Selling Association 2006). ABS (2006) suggests that nearly 300,000 Australians were born in China (including Hong Kong and Taiwan) and migrated to Australia. Because 3% of Australians are involved in network marketing business, the current study assumes there are 9,000 (3%) Chinese immigrants are involved in network marketing business.

The database in the selected direct selling firm shows that over 5,500 Chinese immigrants have registered as network marketers in the organisation which provided access for the current study. According to the figure obtained from the database the current research estimates that the firm selected in the current research has attracted 61% of the Chinese immigrant network marketers in Australia. The sample selected from this firm should be representative in the context of Australia.

3.3 Questionnaire Development

Following Hinkin (1995), the development of the questionnaire went through two major steps: i) item generation; ii) finalising the questionnaire. The processes of item generation are: i) reviewing the literature and generating items used to measure variables; ii) conducting focus groups; iii) drafting the preliminary questionnaire; iv)

translating the preliminary questionnaire from English to Chinese; and v) conducting the pilot study.

3.3.1 Item Generation

Literature Review and Item Generation: The main objective of this step was to search for the existing measurements for the variables and generate proper items for the scales used to measure the variables. From the literature, the measurements for some variables have been found. The measurement developed by Sparks and Schenk (2001; 2006) was adopted to measure the *influence of social environment in NMOs*. The variable of *motivation for conducting network marketing business* was scale with the measurements developed by Kuntze (2001). No existing items used to measure network marketing specific self-efficacy, desire for opportunity in network marketing business, social competence and human capital in the context of NMOs were found in the literature. To measure network marketing business specific self-efficacy and desire for opportunities in network marketing business, items developed by Krueger (1993) were adopted. Items developed by Baron and Markman (2003) were used to develop the measurement for Social Competence. Concepts from Gimeno et al., (1997) and Shrader and Siegel (2007), were introduced to develop the measurements for human capital.

Focus groups: In order to confirm the face validity of items generated from the literature review and explore new factors in the context of Chinese immigrants conducting network marketing business in Australia, focus groups were conducted (Bryman & Bell, 2007). To overcome the limitations of focus group interviews, such as the “halo” effect (Zikmund, 1997, p.115) on attitudes towards the concept or the topic of discussion, four different focus group interviews were conducted. To ensure the quality of the information obtained from each of the focus group interviews, the participants were carefully selected based on the following criteria: i) experience in conducting network marketing business; ii) conducting full time network marketing business; and iii) having a solid income earned from the business (Bryman & Bell, 2007, p. 520).

According to the criteria set for the focus group participants, all participants had to have at least three years’ experience in conducting network marketing business and had built solid businesses. One of the focus groups contained six participants (two

males, four females); two groups had seven (one group had five females and two males, the other one had one male and six females) and one had eight (five females and three males). Each focus group session lasted about 90 minutes and the audio recorder was used to catch the information. The language used in the focus group interviews was Mandarin.

In the focus groups, the questions asked were as follows:

- Why did you get involved in network marketing business?
- Have you been influenced by the social environment in your NMO? If yes, in what way?
- How do you describe your desire for opportunities from network marketing business?
- What skills and knowledge do you need to build a successful network marketing business? How confident were you in obtaining these skills and knowledge?
- Is it difficult to build a successful network marketing business?
- What actions have you taken in conducting the network marketing business?
- What is the best way to build a successful network marketing business?

The process of analysing data obtained from the focus groups included several steps: i) listening to the recorded scripts at least three times; ii) transcribing the script recorded from the focus groups; iii) reading the transcriptions carefully; and iv) identifying the main themes from the focus groups. Those issues mentioned three times in two or more different groups were treated as the themes of the focus group interviews. The findings of the focus group interviews are presented below.

The main reasons for getting involved in network marketing business include: i) personal development; ii) enjoying products; iii) pursuing entrepreneurship with low cost; iv) making a lot of money and enjoying a better life; and v) having financial and time, freedom.

The main influences of the social environment in NMOs are: i) examples set by other network marketers; ii) the atmosphere of the environment of NMO; and iii) training provided by others.

The main actions undertaken include: i) presenting products and business opportunities to prospects; ii) motivating and training others to present the products and business; and iii) selling the products.

As the results of the data analysed from focus group interviews became available, the scales for measuring the variables were formed and the preliminary questionnaire was developed. In the process of translating the preliminary questionnaire into Chinese, the approach involved the adoption of four steps of scrupulous translation: forward translation, assessment, backward translation, and assessment (Song, 2008). The professional translators and an academic professional in management were invited to check the accuracy of the translations.

Pilot study: The objectives of the pilot study in the current research were: i) to examine the face validity of preliminary questionnaire items; ii) to make sure the instructions in the questionnaire were adequate; and iii) to determine the sample size for the present research.

In the pilot study, 32 Chinese immigrant network marketers who had more than three years of network marketing business experience were invited to complete the questionnaires. The results of the pilot study showed that questionnaire items were understandable, which confirmed the face validity of questionnaire items and that the instructions in the questionnaire were adequate.

Using SPSS version 17, the means and standard deviations of the variables (motivation for conducting network marketing business, the influence of social environment in NMOs, desire for opportunity from network marketing business, network marketing specific self-efficacy, social competence, actions undertaken in conducting network marketing business) were calculated with the following outcomes: (Motivation: Mean = 3.53, SD = 0.718; Environmental Influence: Mean = 4.27, SD = 0.517 ; Desire for Opportunity: Mean = 4.43, SD = 0.362 ; Self-efficacy: Mean = 3.17 , SD = 0.581, Social Competence: Mean = 3.44, SD = 0.460 ; Actions Undertaken: Mean = 2.98, SD = 0.618). The standard deviations obtained in the present pilot study were only the estimated values, which were used to determine the sample size for the present study (Zikmund, 1997). The survey data were tested for significant correlations between questionnaire items. Some of the Kaiser-Meyer-Olkin statistics were below and far below the recommended minimum threshold of 0.6: (Motivation: KMO = 0.273; Environment Influence: KMO = 0.738; Desire: KMO = 0.667; Self-Efficacy: KMO = 0.731; Social Competence: KMO = 0.613; Action: KMO = 0.568) (Lynn, Naughton & Veen, 2009). Thus, conducting factor analysis was not appropriate for the pilot study data.

In order to determine the research sample size, the formula $(n = (ZS/E)^2)$, n: sample size, Z: confidence level; S: estimate of the population Standard deviation, E: acceptable magnitude of error) recommended by Zikmund (1997, p. 473) was adopted. According to Zikmund (1997), the sample size was determined by three factors: 1) estimated standard deviation of the population obtained from the result of the pilot study; 2) the desired magnitude of error (2% or 0.1 in the current research) determined by the researcher; and 3) the confidence level (95% was selected).

The calculated estimates of the population standard deviations for different variables shows that the standard deviation of motivation was the highest (SD = 0.718). To ensure the sample size is suitable for all variables, the variable with the highest standard deviation should be used to calculate the sample size. Therefore, the value of the standard deviation of motivation (SD = 0.718) was used to calculate the sample size. The calculation shows the sample size in the current research should be greater than 197.

3.3.2 Finalising the Questionnaire

Based on the results of the literature review, focus group interviews, and the pilot study, items used to investigate the motivation in conducting network marketing business, the influence of social environment in NMOs, network marketing specific self-efficacy, desire for opportunity, social competence and the action undertaken in conducting network marketing business were designed and included in the questionnaire (Appendix D). The questions about participant's personal details, such as, network marketer's identification, weekly working hours on the network marketing business, started date of conducting network marketing business, were also included in the questionnaire. On the front of the questionnaire a cover letter was provided, which presented the researcher's identity, the purpose of the research and ethical clearance number (UTS HREC REF NO. 2008-238A). In the cover letter, the strategy of protecting participant's privacy was also explained.

3.4 Measures

For items used to investigate constructs such as the motivation in conducting network marketing business, the influence of social environment, network marketing specific self-efficacy, desire for opportunity, social competence and the action

undertaken in conducting network marketing business, the preliminary measurements were established.

Motivation: According to the literature review (Chapter Two), motivation in conducting network marketing includes three concepts: i) extrinsic motivation (Kuntze, 2001); ii) intrinsic motivation (Hanges & Locke, 2004; Zhao & Seibert, 2006); and iii) business attractiveness (Chaganti & Greene, 2002; Henrekson, 2005; Sequeira & Rasheed, 2006; Ley, 2006; Bergmann & Sternberg, 2007). These concepts are the sub-constructs of motivation.

Items used to measure *extrinsic motivation* were adopted from Kuntze (2001) and presented as follows:

1. To make a lot of money
2. To get rich quickly
3. To be free to name my own hours
4. To be free to work wherever I want-including from home
5. To have influence over and create a positive impact upon my community
6. To be able to have lavish lifestyle
7. To buy all of the toys, cars, boats, vacation homes – have always wanted
8. To have financial security
9. To be able to vacation more often- and in more exotic locations
10. To have power to call my own shots
11. To be known as a successful “entrepreneur” or business person.

To measure the degree of the extrinsic motivation, a five point Likert scale was used: 1, not important at all; 2, slightly important; 3, moderately important; 4, important; and 5, very important.

Items used to measure *intrinsic motivation* are presented as follows:

1. To directly contribute to a company’s success
2. To keep learning
3. To be challenged
4. To be innovative
5. For personal accomplishment
6. To have fun

7. To better use my skills
8. In my work with this network marketing organization, I feel I'm part of a "cause" that's about more than earning money
9. While earning money is nice, there are other more important reasons for my work with this network marketing organization.

Among these items, the first seven were adopted from Kuntze (2001); the last two were generated from focus groups conducted in the current research. To measure the degree of the intrinsic motivation, a five point Likert scale was used, ranging from: 1, not important at all; to 5, very important.

Items used to measure *business attractiveness* are presented as follows:

1. To start up my own small business with lowest investment and risks
2. It doesn't really matter if I fail in my network marketing business, because I have only invested a little money in it.
3. It is a good opportunity for me to learn how to start up my own business, because it only cost a little money.
4. To start up my own business without financial pressure.

These items were generated from focus groups. To measure the degree of the business attractiveness, a five point Likert scale was used, ranging from: 1, not important at all; to 5, very important.

The influence of social environment in NMOs: The review of literature shows that three concepts comprise the construct of influence of social environment in NMOs. The first concept is cohesion (Biggart, 1989; Bhattacharya and Mehta, 2000; Pratt, 2000); the second is social influence (Sparks & Schenk, 2001; 2002); and the last is training (Biggart, 1989; Sparks and Schenk, 2001). These three concepts are the sub-constructs of the influence of social environment in NMOs.

Items used to measure *cohesion* were cited from Sparks and Schenk (2006). Wording of these items were altered slightly, and are presented as follows:

1. There is a great deal of trust among fellow members in my organization

2. The members of my organization are very cooperative with each other
3. The members of my organization believe we can depend on each other for advice and support concerning our distributorships
4. The members of my organization support each other's work.

To measure the influence of *cohesive* social environment in NMOs, a five point Likert scale was used: 1: strongly disagree, 2: disagree, 3: neutral, 4: agree, and 5: strongly agree.

Items used to measure *social influence* are presented as below:

1. My sponsor and other uplines are able to get me committed to a positive vision of the future with this network marketing organization
2. My sponsor and other uplines paint a positive picture of my possible future with this network marketing organization
3. My sponsor and other uplines help me see a positive future for myself as a member of this network marketing organization
4. I receive valuable information from my sponsor and other uplines about how to make the most of being a member of this network marketing organization
5. My sponsor and other uplines are excellent sources of information about being a successful member of this network marketing organization
6. When it comes to making a success of my distributorship, I am satisfied with information I receive from my sponsor and other uplines
7. My sponsor and other uplines lead by "doing" rather than "telling"
8. My sponsor and other uplines lead by example
9. I look to my sponsor and other uplines as examples of how to be an effective network marketing organization member.

Among them, items 1–3 and items 7–9 were cited from Sparks and Schenk (2001), and items 4–6 were cited from Sparks and Schenk (2006). To measure the influence of *social influence*, a five point Likert scale was used: 1: strongly disagree, 2: disagree, 3: neutral, 4: agree, and 5: strongly agree.

Items used to measure *training* are presented as below:

1. Much of the training I received as a network marketer came from other network marketers in this network marketing organization

2. The training I received in this network marketing organization are effective
3. Training provide by this network marketing organization is essential for me to operate my network marketing business
4. Through the training provided by this network marketing organization, I have obtained a large amount of knowledge about network marketing business
5. Without training provided by the network marketing orgnaisation, I won't be also to establish my network marketing business successfully.

These items were generated from focus groups. To measure the influence of *training*, a five point Likert scale was used ranging from: 1, strongly disagree; to 5, strongly agree.

Self-efficacy: According to the review of literature, the construct of self-efficacy is expressed with two themes: i) *perceived degree of difficulty*; and ii) *confidence* (Krueger, 1993). These two themes are the sub-constructs of self-efficacy.

Items used to measure *perceived degree of difficulty* are presented as follows:

1. How easy do you think it would be to conduct your current network marketing business?
2. How easy do you think it would be to introduce your current network marketing business to others?
3. How easy do you think it would be to sell the products to others?
4. How easy do you think it would be to recruit others to participate in your organization?
5. How easy do you think it would be to train others to conduct their business?
6. How easy do you think it would be to lead a network marketing organization?
7. How easy do you think it would be to make a public speech?

These items are generated on the basis of the measurements developed by Krueger (1993) and confirmed with the focus groups. To measure the *perceived degree of difficulty*, a five point Likert scale was used: 1, very hard; 2, hard; 3, neutral; 4, easy; and 5, very easy.

Items used to measure *confidence* are presented as follows:

1. How certain of success are you in the conduct of your current network marketing business?

2. How overworked would you be in conducting your current network marketing business?
3. Do you know enough to conduct network marketing business?
4. How sure of yourself are you in communicating with others effectively?
5. How sure of yourself are you in developing new leaders in your organization?

These items are generated on the basis of the measurements developed by Krueger (1993) and confirmed with the focus groups. To measure confidence, a five point Likert scale was used: 1, not confident at all; 2, little confident; 3, normal; 4, confident; and 5, very confident.

Desire for opportunity: According to the review of literature, the construct of desire for opportunity is expressed with three themes: i) *love*; ii) *tense*; and iii) *enthusiastic* (Krueger, 1993). These three themes are the sub-constructs of desire for opportunity.

Items used to measure *love* in network marketing business are presented as follows:

1. I would love conducting my current network marketing business
2. I would love sharing the opportunity of the network marketing business with others
3. I would love sharing the products sold by this network marketing organization with others
4. I would love learning skills and knowledge about how to conduct network marketing business.

These items are generated on the basis of the measurements developed by Krueger (1993) and confirmed with the focus groups. To measure the degree of loving network marketing business, a five point Likert scale was used: 1, strongly disagree; 2, disagree; 3, neutral; 4, agree; and 5, strongly agree.

Items used to measure *tense* in conducting network marketing business are presented as follows:

1. How tense would you be in conducting your current network marketing business?

2. How tense would you be in sharing the opportunity of the network marketing business with others?
3. How tense would you be in sharing the products sold by this network marketing organization with others?
4. How tense would you be in learning skills and knowledge about how to conduct network marketing business?

These items are generated on the basis of the measurements developed by Krueger (1993) and confirmed with the focus groups. To measure the degree of tense in conducting network marketing business, a five point Likert scale was used: 1, not tense at all; 2, little tense; 3, normal; 4, tense; and 5, very tense.

Items used to measure *enthusiastic* in conducting network marketing business are presented as follows:

1. How enthusiastic would you be in your current network marketing business?
2. How enthusiastic would you be in sharing the opportunity of the network marketing business with others?
3. How enthusiastic would you be in sharing the products sold by this network marketing organization with others?
4. How enthusiastic would you be in learning skills and knowledge about how to conduct network marketing business?

These items are generated on the basis of the measurements developed by Krueger (1993) and confirmed with the focus groups. To measure the degree of enthusiastic in conducting network marketing business, a five point Likert scale was used: 1, not enthusiastic at all; 2, little enthusiastic; 3, neutral; 4, enthusiastic; and 5, very enthusiastic.

Social competence: The construct of social competence was adopted from Baron and Markman (2003), which is composed of four sub-constructs: i) social perception; ii) social adaptability; iii) expressiveness; and iv) impression management.

Items used to measure *social perception* are:

1. I am a good judge of other people
2. I can usually recognize others' traits accurately by observing their behaviour

3. I can usually read others well – tell how they are feeling in a given situation
4. I can tell why people have acted the way they have in most situations
5. I generally know when it is the right time to ask someone for a favour.

These items were cited from Baron and Markman (2003). To measure the competence of social perception, a five point Likert scale was used: 1, strongly disagree; 2, disagree; 3, neutral; 4, agree; and 5, strongly agree.

Items used to measure *social adaptability* are:

1. I can easily adjust to being in just about any social situation
2. I can be comfortable with all types of people – young or old, people from the same or different backgrounds as myself
3. I can talk to anybody about almost anything
4. People tell me that I am sensitive and understanding
5. I have no problems introducing myself to strangers.

These items were cited from Baron and Markman (2003). To measure the competence of social adaptability, a five point Likert scale was used: 1, strongly disagree; 2, disagree; 3, neutral; 4, agree; and 5, strongly agree.

Items used to measure *expressiveness* are:

1. People can always read my emotions even if I try to cover them up
2. Whatever emotion I feel on the inside tends to show on the outside
3. Other people can usually tell pretty much how I feel at a given time
4. I am very sensitive to criticism from others
5. I am often concerned about what others think of me.

These items were cited from Baron and Markman (2003). To measure the competence of expressiveness, a five point Likert scale was used: 1, strongly disagree; 2, disagree; 3, neutral; 4, agree; and 5, strongly agree.

Items used to measure *impression management* are:

1. I'm good at flattery and can use it to my advantage when I wish
2. I can appear to like someone even when I don't.

These items were cited from Baron and Markman (2003). To measure the competence of impression management, a five point Likert scale was used: 1, strongly disagree; 2, disagree; 3, neutral; 4, agree; and 5, strongly agree.

Human capital: The review of literature shows that no measurement for human capital has been developed in the context of NMOs. In order to measure Chinese immigrant network marketer's human capital, the concept of human capital developed in other areas is adopted.

Human capital refers to the stock of competences, knowledge and personality attributes embodied in the ability to perform work so as to produce economic value (Youndt et al., 1996; Hitt et al., 2001). It is considered to be the attributes gained by an individual through training, education and experience (Gimeno, Folta, Cooper, & Woo, 1997). Training activity is one of most popular activities conducted in NMOs (Biggart, 1989; Schenk & Sparks, 2001), referring to planned efforts by an organization to facilitate its member's learning related competencies (De Cieri & Kramar, 2003, p. 420). Evidence has proved the positive relationship between training and competence (Paloniemi, 2006; Eikebrokk & Olsen, 2009).

The current study assumes that the longer a Chinese immigrant network marketer stays in his/her business, the more training he/she will receive from the NMO, as training provided by NMOs is on a continuous basis (Biggart, 1989; Sparks & Schenk, 2001). Thus, the present study measured human capital with the experience of conducting network marketing business.

Network marketers are independent small business owners who have no obligation to listen to others' instructions about how to operate their business (Sparks & Schenk, 2001). Some Chinese immigrant network marketers operate their business on a full time basis, and others on a part time basis. Each of them spends different hours conducting his/her network marketing business every week. Focus group interviews indicate that some Chinese immigrant network marketers have engaged with network marketing business for a long time, but they are not as experienced as those who have stayed with the business for a much shorter time. In order to measure the experience of each Chinese immigrant network marketer objectively, the number of weekly working hours multiplied by the number of months is used.

Actions undertaken in conducting network marketing business: Sparks and Schenk (2001) measured the effort of network marketers in conducting their business with the number of hours per week devoted to distributorship work, and the number of sales workshops held per month (Sparks & Schenk, 2001, p. 860). The current study expanded these two items to seven items to express the actions undertaken by Chinese network marketers in conducting their network marketing business. This expansion was based on the themes found from the answers to the question in focus groups: *What actions have you taken in conducting the network marketing business?*. The decision rule for finding themes in the focus groups was that any issues mentioned three times in two or more different groups, were treated as the themes of the focus group interviews (Appendix A). In This context, the items used to measure actions undertaken are presented as below:

1. Hours per week devoted to distributorship work
2. Hours per week devoted to presenting products and business opportunities to others
3. Hours per week devoted to motivating and training new network marketers
4. Hours per week devoted to learning business skills and knowledge
5. Hours per week devoted to customer services
6. Number of presentations conducted per week
7. Number of sales workshops held per month.

To measure these items, a five point Likert scale was used: For the first five items (1-5): 1, less than 5 hours; 2, 6–10 hours; 3, 11–20 hours; 4, 21–40 hours; and 5, more than 40 hours. For the last two items (6 and 7): 1, less than one time; 2, one to two times; 3, three to four times; 4, five times; and 5, more than five times.

Performance (financial outcome): This variable is measured with weekly income earned by Chinese immigrant network marketers from conducting their business. The data is obtained from the commission payment system database from the network marketing firm with the permission of the manager who has authorized access to the objective performance data. The weekly income was the average weekly income earned by a network marketer in the past ten weeks before he/she completed the questionnaire. The reason for a ten week average income is because, at different stages of the network marketing business development, the income earned by a network marketer varies in

accord with fluctuations in the business. The past ten weeks average income was believed would reflect the reality of the current performance of a network marketer, objectively.

3.5 Reflective versus Formative Constructs

The distinction between reflective and formative constructs is important (Jarvis, Mackenzie & Podsakoff, 2003). Misspecification of constructs can bias structural estimation and affect the statistical significance of the parameter estimate (MacKenzie, Podsakoff & Jarvis, 2005; Petter, Straub & Rai, 2007). According to the guidelines, reflective constructs are affected by an underlying latent unobservable construct (MacCallum & Browne, 1993; Diamantopoulos & Winklhofer, 2001; Petter et al., 2007). Changes in the underlying construct leads to changes in the indicators (Jarvis, et al., 2003; Petter, et al. 2007). Formative constructs are a composite of multiple measures (MacCallum and Browne, 1993; Diamantopoulos & Winklhofer, 2001; Petter et al., 2007), and changes in the formative indicators cause changes in the underlying construct (Jarvis et al., 2003; Petter et al., 2007). Jarvis et al (2003) suggested four decision rules, as presented below, to identify the construct as formative or reflective:

- *the direction of causality*: The direction of causality is from indicators to construct – the construct is formative; the direction of causality is from construct to indicators – the construct is reflective.
- *the interchangeability of the indicators*: The indicators of a formative construct need not be interchangeable; the indicators of a reflective construct should be interchangeable.
- *The covariation among the indicators*: The indicators are not necessary to covary with each other for a formative construct, but are expected to covary with each other for a reflective construct.
- *The nomological net of the construct indicators*: Indicators of a formative construct are not required to have the same antecedents and consequences; but the indicators of a reflective construct are required to have the same antecedents and consequences.

The current study applies these rules to analyse each of the constructs and obtains the results as follows (refer to Appendix E for details of the analysis):

- the construct of motivation in conducting network marketing business is a hypothesised construct with three first order latent constructs as formative indicators, and two of these first order latent constructs (*intrinsic motivation*, *extrinsic motivation*) have multiple formative indicators; one (*business attractiveness*) has multiple reflective indicators;
- the construct of the influence of social environment in NMOs is a hypothesised construct with three first order latent constructs as formative indicators, and each of these first order latent constructs has multiple reflective indicators;
- the construct of desire for opportunity is a hypothesised construct with three sub-constructs as reflective indicators, and each of these sub-constructs has multiple reflective indicators;
- the construct of network marketing business specific self-efficacy is a hypothesised construct with two first order latent constructs as reflective indicators, and each of these first order latent constructs has multiple reflective indicators;
- the construct of social competence is a hypothesised construct with four first order latent constructs as formative indicators, and each of these first order latent constructs has multiple reflective indicators;
- the construct of action undertaken is a hypothesised construct with seven formative indicators.

3.6 Data Collection

Data collection was composed of two parts: i) subjective perceptual data collection; and ii) objective performance data collection. Subjective data were collected from various Chinese network marketer training venues in New South Wales, Victoria and Queensland. The reason for selecting these three States was that most of the Chinese immigrant network marketers in the targeted network marketing firm were located in these three States. With the permission of a network marketing firm and institutional ethics clearance, the subjective data was matched with objective performance data provided by the direct selling firm using an Associateship identification number.

Finalised questionnaires were distributed to Chinese immigrant network marketers and personally collected from them at the front door of their major training

venues in each of the three States. In New South Wales, 303 questionnaires were randomly distributed to Chinese immigrant network marketers at the front door of their training venues, 65 were randomly distributed in Victoria, and 70 were randomly distributed in Queensland. The total number of questionnaires distributed was 438 and those returned numbered 273. There were 227 useable questionnaires collected, representing a response rate of 51.83%.

Demographic Statistics

The setting for this research was network marketing organizations in Australia. All subjects (N=227) were Chinese immigrant network marketers (males 26.4%, females 73.6%). The ages of subjects ranged from 18 to 60 years and above (18–30, 16.3%; 31–40, 21.6%; 41–50, 40.15%; 51–60, 16.7%; 60 and above, 4.8%). Respondents (N=227) spoke English at the level of the native speaker (0.9%), frequent usage (8.4%), competent (38.3%), a little (39.2%), and no English (9.7%) respectively, whilst 3.5% respondents did not report their English capabilities. The education level of the respondents ranged from PhD degree (2.6%) to high school certificate (8.8%). Among the respondents, 68.7% had university degrees. The length of network marketing business engagement ranged from 1 month to 119 months, the average length being 28.56 months (SD = 22.51 months). Average working hours in the conduct of network marketing business/per week was 23.01 hours, with a range from nil to 70 hours (SD = 15.63 hours).

3.7 Developing Measurement Models for Reflective Constructs

To develop measurement models for reflective constructs, two major steps were taken: i) exploratory factor analysis (EFA); and ii) confirmatory factor analysis (CFA). Dropping an indicator from the construct does not alter the conceptual domain of the reflective construct, but may alter the conceptual domain of the formative construct (Jarvis et al, 2003; MacKenzie et al, 2005; Petter et al, 2007). EFA was performed on the reflective measurement models (the influence of social environment in NMOs, desire for opportunity, and network marketing business specific self-efficacy and the actions undertaken) to reduce the number of indicators to a smaller, more manageable number while retaining as much of the original variances as possible and understanding the latent constructs (Conway & Huffcutt, 2003, p. 149).

Although the sub-constructs of social competence (*social perception, impression management, social adaptability and expressiveness*) are formed with multiple reflective indicator items, the EFAs were not performed with this measurement model. The measurement model for social competence was fully adopted from Baron and Markman (2003). To perform EFA and redevelop the measurement for social competence is not necessary.

After performing the EFAs for the reflective measurement models, the confirmatory factor analyses (CFA) were also conducted. The purpose in conducting CFAs was to examine the construct validities of reflective measurement models.

3.7.1 Exploratory Factor Analysis (EFA)

The EFAs were performed within the model-building framework introduced by Turker (2009) and Hair et al. (2006). All EFAs were done on SPSS version 17. The results of EFAs assist in understanding latent constructs (Conway & Huffcutt, 2003).

The influence of social environment in NMOs: Data were analysed through the principal component factor. The number of factors extracted was three. Table 3.7.1a shows the three factor structure with eigenvalues greater than 1.0. The three factors captured 66.97% of the variance of the 18 items.

Factor 1, 'social influence' ($\alpha = 0.931$), comprised items used by Sparks Schenk (2001; 2006) to measure the social influence on Chinese immigrant network marketers in conducting their network marketing business. This factor can be explained with Social Cognitive Theory (Bandura, 1986) and the literature of NMO studies (Biggart, 1989; Bhattacharya & Mehta, 2000).

Factor 2, 'training' ($\alpha = 0.852$), includes items generated from focus groups to measure the influence of training conducted in the environment of NMOs. This factor can be explained by the literature of organizational training (Leuven, 2005; Schwoerer et al., 2005; Zhao et al., 2005; Tai, 2006; Mainga et al., 2009) and Social Cognitive Theory (Bandura, 1986).

Factor 3, 'cohesion' ($\alpha = 0.863$), comprised items developed by Schenk and Spark (2006) used to measure the NMO's cohesion. This factor can be explained with Social Cognitive Theory (Bandura, 1986) and NMO literature (Biggart, 1989; Bhattacharya & Mehta, 2000; Schenk & Sparks, 2001, 2006).

Desire for entrepreneurial opportunity from network marketing business:

Data were analysed through the principal component factor. The number of factors extracted was two. Table 3.7.1b shows the two factor structure with eigenvalues greater than 1.0. The two factors captured 69.567% of the variance of the 12 items.

Factor 1, 'love and enthusiastic in conducting network marketing business' ($\alpha = 0.924$), and factor 2, 'tense in conducting network marketing business' ($\alpha = 0.893$), comprised items generated by the present study on the basis of Krueger (1993). This factor can be explained with the entrepreneurial intention model developed by Krueger (1993).

Network marketing specific self-efficacy: Data were analysed through the principal component factor. The number of factors extracted was two. Table 3.7.1c shows the two factor structure with eigenvalues greater than 1.0. The two factors captured 65.086% of the variance of the 12 items.

Factor 1, 'perceived degree of difficulty in conducting network marketing business' ($\alpha = 0.912$), and factor 2, 'confidence in conducting network marketing business' ($\alpha = 0.859$), comprised items generated by the present study on the basis of Krueger's (1993) study. This factor can be explained with the entrepreneurial intention model developed by Krueger (1993).

Table 3.7.1a Social Environment Influence of NMO Total Variance explained and Rotated Factor Loading Matrix

Item Codes	Items	Social Environment Influence of NMO (EFA)			Total
		Social Influence	Training	Cohesion	
EnSp11	My sponsor and other uplines lead “doing” rather than “telling”	.826			
EnSp12	My sponsor other uplines lead by example	.823			
EnSp10	When it comes to making a success of my distributorship, I am satisfied with information I receive from my sponsor and other uplines	.781			
EnSp6	My sponsor and other uplines paint a positive pictures of my possible future with this network marketing organization	.781			
EnSp7	My sponsor and other uplines help me see a positive future for myself as member of this network marketing organization	.763			
EnSp13	I look to my sponsor and other uplines as examples of how to be an effective network marketing organization member	.758			
EnSp9	My sponsor and other uplines is an excellent source of information about being a successful member of this network marketing organization	.746			
EnSp8	I receive valuable information from my sponsor and other uplines about how to make the most of being a member of this network marketing organization	.746			
EnSp5	My sponsor and other uplines are able to get me committed to a positive vision of the future with this network marketing organization	.641			
Environ T16	Training provide by this network marketing organization is essential for me to operate my network marketing business		.832		
Environ T17	Through the training provided by this network marketing organization, I have obtained large amount of knowledge about network marketing business		.821		

Table 3.7.1a Social Environment Influence of NMO Total Variance explained and Rotated Factor Loading Matrix – Cont.

Item Codes	Items	Social Environment Influence of NMO (EFA)			Total
		Social Influence	Training	Cohesion	
Environ T15	The trainings I received in this network marketing organization are effective		.755		
Environ T18	Without training provided by network marketing organization, I won't be able to establish my network marketing business successfully.		.712		
Environ T14	Much of the training I received as a network marketer came from other network marketers in this network marketing organization		.675		
EnCoh2	The member of my organization are very cooperative with each other			.861	
EnCoh3	The member of my organization believe we can depend on each other for advice and support concerning our distributorships			.831	
EnCoh1	There is a great deal of trust among fellow member in my organization			.751	
EnCoh4	The members of my organization support each other's work			.741	
Eigenvalues		5.646	3.417	2.995	12.058
Percentage of trace		31.369	18.96	16.641	66.97
α		0.931	0.852	.863	

Table 3.7.1b Desire for opportunity of Total Variance explained and Rotated Factor Loading Matrix

Item Codes	Items	Desire for Opportunity (EFA)		Total
		Love & enthusiastic	Tense	
D2	I would love sharing the opportunity of the network marketing business with others	.816		
D10	How enthusiastic would you be in sharing the opportunity of the network marketing business with others?	.788		
D3	I would love sharing the products sold by this network marketing organization with others.	.776		
D1	I would love conducting my current network marketing business	.766		
D9	How enthusiastic would you be in your current network marketing business?	.760		
D11	How enthusiastic would you be in sharing the products sold by this network marketing organization with others?	.741		
D12	How enthusiastic would you be in learning skills and knowledge about how to conducting network marketing business	.725		
D4	I would love learning skills and knowledge about how to conducting network marketing business	.713		
D6	How tense would you be in sharing the opportunity of the network marketing business with others?		.894	
D5	How tense would you be in conducting your current network marketing business?		.868	
D7	How tense would you be in sharing the products sold by this network marketing organization with others?		.849	
D8	How tense would you be in learning skills and knowledge about how to conducting network marketing business?	.466	.632	
Eigenvalues		5.049	3.299	8.348
Percentage of trace		42.072	27.495	69.567
α		0.924	0.893	

Table 3.7.1c Network Marketing Specific Self-efficacy of Total Variance explained and Rotated Factor Loading Matrix

Item Codes	Items	Self-efficacy (EFA)		Total
		Difficulty	confidence	
SE2	How hard do you think it would be to introduce your current network marketing business to others?	.871		
SE4	How hard do you think it would be to recruit others to participate in your organization?	.858		
SE1	How hard do you think it would be to conduct your current network marketing business?	.815		
SE3	How hard do you think it would be to sell the products to others?	.801		
SE6	How hard do you think it would be to lead a network marketing organization?	.738		
SE5	How hard do you think it would be to train others to conduct their business?	.724		
SE7	How hard do you think it would be to do public speech?	.472	.444	
SE12	How sure of yourself in developing new leaders in your organization?		.811	
SE10	Do you know enough to conduct network marketing business?		.807	
SE8	How certain of success are you in conduct your current network marketing business?		.797	
SE11	How sure of yourself in communicating with others effectively?		.757	
SE9	How overworked would you be in conducting your current network marketing business?		.658	
Eigenvalues		4.321	3.487	7.808
Percentage of trace		36.009	29.058	65.068
α		0.912	0.859	

3.7.2 Confirmatory Factor Analysis (CFA)

To confirm the construct validity and assess the performance of reflective measures for the constructs of desire for opportunities and network marketing specific self-efficacy, CFAs were performed using AMOS 17 (Byrne, 2010).

Desire for entrepreneurial opportunity from network marketing business:

Following the procedure suggested by Byrne (2010), five tests were conducted using AMOS 17. The results of psychometric properties of the measurement for the construct desire for opportunity from network marketing business are presented in Table 3.7.2a-1 and the standardised regression weights are presented in Table 3.7.2a-3. According to Dawes and Massey (2006), the results of test five are indicative of acceptable fit.

Table 3.7.2a-1 Results of Psychometric Properties of the Measurement

	X ²	Df	χ^2/df	P	CFI	RMSEA
Test One	236.72	43		.000	.88	.15
Test Two (deleted 1 item)	160.94	34		.000	.91	.14
Test Three (deleted 2 items)	88.03	26		.000	.95	.11
Test Four (deleted 3 items)	56.67	19		.000	.96	.10
Test Five (deleted 4 items)	29.79	13		.005	.98	.08

To examine the convergent validity of these measures, the average variance extracted (AVE) for the latent constructs (love/enthusiastic in conducting network marketing business and tense in conducting network marketing business) were calculated using the formula cited by Hair et al (2006). The results of the calculations are presented in Table 3.7.2a-2, which shows that the value of AVE exceeds 0.5 for all sub-scales, the convergent validity is established (Hair et al, 2006).

The discriminant validity was established by comparing the AVE for each latent construct with the squared correlation between each pair of latent constructs. To satisfy this test, the squared correlation for each pair of latent constructs should be less than the

average variance extracted for each individual construct (Dawes & Massey, 2006; Fornell & Larcker, 1981).

Table 3.7.2a-2: AVE for Love/Enthusiastic and Tense

Latent Construct	AVE (λ)	Convergent Validity
Love/Enthusiastic	0.638	Established
Tense	0.774	Established

The correlations for each pair of latent constructs (Love/Enthusiastic and Tense) were calculated using AMOS 17, and the results were presented in Table 3.7.2a-4. The Table 3.7.2a-4 also presents the squared correlation of the pair of latent constructs (Love/Enthusiastic and Tense). The value for this squared correlation is 0.352 which is less than all AVEs. Thus, the discriminant validity has been established.

Table 3.7.2a-3 Standardised Regression Weights and Validity Test Results

Item Codes		Love Enthusiastic	Tense	Reliability α
D10	←	.889		0.868
D11	←	.902		
D1	←	.613		
D12	←	.757		
D7	←		.799	0.905
D6	←		.963	
D5	←		.869	
Discriminant Validity		OK	OK	
Convergent Validity		OK	OK	

Table 3.7.2a-4 Correlation between Each Pair of Latent Constructs in the Measurement for Desire for Opportunity

			Correlation	Squared Correlation
Love/Enthusiastic	<-->	Tense	.593	0.352

To perform reliability analysis for each of the latent constructs (Love/Enthusiastic and Tense), SPSS 17 was used. The results were 0.868 and 0.905 (Table 3.7.2a-3), which suggests that for each latent construct, there is a reasonable degree of internal consistency between the corresponding indicators.

Thus, the measurement for the construct of desire for opportunity developed in the current study is appropriate.

Network marketing specific self-efficacy: Following the procedure suggested by Byrne (2010), five tests were conducted. The results of psychometric properties of the measurement for network marketing specific self-efficacy are presented in Table 3.7.2b-1 and the standardised regression weights are presented in Table 3.7.2b-3. According to Dawes and Massey (2006), the results of test five are indicative of acceptable fit.

Table 3.7.2b-1 Results of Psychometric Properties of the Scale

	X ²	Df	X ² /df	P	CFI	RMSEA
Test One	232.06	53		.000	.88	.13
Test Two (deleted 1 item)	159.74	43		.000	.91	.12
Test Three (deleted 2 items)	14.01	34		.000	.93	.11
Test Four (deleted 3 items)	65.94	26		.000	.96	.09
Test Five (deleted 4 items)	34.57	19		.016	.98	.07

To examine the convergent validity of these measures, the average variance extracted (AVE) for the latent constructs (degree of difficulty in conducting network marketing business and confidence in conducting network marketing business) were calculated using the formula cited by Hair et al (2009). The results of the calculations are presented in Table 3.7.2b-2, which shows that the value of AVE exceeds 0.5 for all subscales, and the convergent validity is established (Hair et al, 2006).

Table 3.7.2b-2: AVE for Love/Enthusiastic and Tense

Latent Construct	AVE (λ)	Convergent Validity
Degree of Difficulty	0.712	Established
Confidence	0.601	Established

The discriminant validity was established by comparing the AVE for each latent construct with the squared correlation between each pair of latent constructs. To satisfy this test, the squared correlation for each pair of latent constructs should be less than the average variance extracted for each individual construct (Fornell & Larcker, 1981; Dawes & Massey, 2006).

The correlations for each pair of latent constructs (Degree of difficulty and Confidence) were calculated using AMOS 17; the results were presented in Table 3.7.2b-4. The Table 3.7.2b-4 also presents the squared correlation of the pair of latent constructs (Degree of difficulty and Confidence). The value for this squared correlation is 0.247 which is less than all the AVEs. Thus, the discriminant validity has been established.

To perform reliability analysis for each of latent constructs (Degree of difficulty and Confidence), SPSS 17 was used. The results were 0.889 and 0.856 (Table 3.7.2b-3), which suggests that for each latent construct, there is a reasonable degree of internal consistency between the corresponding indicators.

Thus, the measurement for the construct of self-efficacy developed in the current study is appropriate.

Table 3.7.2b-3 Standardised Regression Weights and Validity Test Results

Item Codes		Degree of Difficulty	Confidence	Reliability α
SE2	←	.900		.889
SE4	←	.832		
SE1	←	.837		
SE3	←	.803		
SE12	←		.850	.856
SE10	←		.690	
SE8	←		.739	
SE11	←		.813	
Discriminant Validity		OK	OK	
Convergent Validity		OK	OK	

Table 3.7.2b-4 Correlation between Each Pair of Latent Constructs in the Measurement for Self-efficacy

			Correlation	Squared Correlation
Degree of Difficulty	<-->	Confidence	.497	0.247

3.8 Estimation of Measurement Models Using PLS

The statistical evaluation criteria for the reflective measurement model cannot be applied directly to the measurement models for formative constructs (Diamantopoulos, 1999), because the “formative measurement model reverses the direction of causality in as far as the indicators form or constitute the latent variable. This causality reversal demands

a different interpretation and evaluation of the measurement model” (Götz et al., 2010, p. 697).

To estimate the measurement models, the method of Partial Least Squares (PLS) was used in the current study since this method explicitly estimates the outer weights to form construct scores, and modelling formative indicators is much less problematic (Chin, 2010, p. 664). In addition, the PLS approach can deal with formative as well as reflective indicators, even within one structural equation model simultaneously (Götz et al., 2010).

The first step in the estimation of the measurement model was to construct the research model (Figure 3.9, Appendix I) following the procedures outlined by Wetzels et al. (2009). The research model includes the variables of the influence of social environment in NMO (environmental influence), motivation, self-efficacy, desire for opportunity, social competence, human capital, actions undertaken in conducting network marketing business and the performance. Among these variables, motivation is formed with three formative sub-latent variables (extrinsic motivation, intrinsic motivation and business attractiveness). Extrinsic motivation and intrinsic motivation are formed with multiple formative indicators; the business attractiveness is formed with five reflective indicators (refer to section 3.5).

Environmental influence is formed with three formative latent variables (cohesion, social influence, and training) and each of these latent variables is formed with multiple reflective indicators (refer to section 3.5). Given the performance of EFA within Environmental influence (refer to section 3.7), some initial indicators of the first-order latent variables in the environmental influence were deleted.

Social competence is formed with four formative latent variables (social perception, adaptability, expressiveness and impression management). Each of these latent variables in social competence is formed with multiple reflective indicators (refer to section 3.5). The action undertaken is formed with seven formative indicators (refer to section 3.5).

The variables of desire for opportunity and self-efficacy are formed with two reflective latent variables respectively. Each of reflective latent variables in desire for opportunity and self-efficacy is formed with multiple reflective indicators. To develop the reflective measurement models for desire for opportunity and self-efficacy, EFAs and CFAs were performed (refer to section 3.7.1 and section 3.7.2) and some of the initial

indicators in the measurement models for desire for opportunity and self-efficacy were dropped off.

Figure 3.9 (Appendix I) shows the research model comprises four formative construct models (motivation to conduct network marketing business, the influence of social environment in NMOs, social competence and actions undertaken in conducting network marketing business) and two reflective construct models (desire for opportunity and self-efficacy) .

To evaluate the measurement models the procedures outlined by Götz et al. (2010) were followed. According to Götz et al. (2010), reflective measurement models and formative measurement models were evaluated separately.

In the current study, PLS analyses were performed with Smart-PLS 2.0 (Ringle et al., 2005) computer package. SmartPLS software allows for the simultaneous testing of measurement models, research model and hypotheses.

3.8.1 Evaluation of Reflective Measurement Models

According to Götz et al. (2010), the reflective measurement models were evaluated from five perspectives: i) content validity; ii) indicator reliability; iii) construct reliability; iv) convergent validity; and v) discriminant validity. Details are presented below.

Content Validity

Content validity is the degree to which elements of an assessment instrument are relevant to and representative of the targeted construct for a particular assessment purpose (Haynes, Richard and Kubany, 1995), it refers to “the subjective agreement among professionals that a scale logically appears to accurately reflect what it purposed to measure” (Zikmund, 1997, p. 343).

Besides the reflective measurements for self-efficacy and desire for opportunity, the current study has ten measures for reflective sub-constructs, which are business attractiveness (sub-construct of motivation); cohesion, social influence, and training (sub-constructs of the influence of social environment in NMO); social perception, social adaptability, expressiveness, and impression management (sub-constructs of social competence). The examination of content validities for each of these measurements is demonstrated in the following.

Reflective measurement for self-efficacy: In the current study, network marketing business specific self-efficacy is defined as network marketers' beliefs in their capabilities to attain the expected results in conducting network marketing business activities (Section 2.6.1). The target conceptual domain to measure is the Chinese immigrant network marketer's beliefs in their capabilities to operate network marketing businesses successfully. According to Krueger (1993) and the focus groups, the concept of self-efficacy includes two sub-concepts: self-perceived degree of difficulty and self-confidence in conducting network marketing business measured with multiple items (section 3.4 and section 3.7). The measurement model for self-efficacy can represent the target conceptual domain to measure.

Reflective measurement of desire for opportunity: Desire for opportunity is defined as the extent to which a network marketer wants to make profits from conducting network marketing business (section 2.6.3). The target conceptual domain to measure is the Chinese immigrant network marketer's desire for pursuing opportunities derived from operating network marketing business. According to Krueger (1993) and the focus groups, the sub-concepts of desire for opportunity include love, tense and enthusiastic in conducting network marketing business measured with multiple items (section 3.4 and section 3.7). The measurement model for desire for opportunity can represent the target conceptual domain to measure.

Reflective measure for business attractiveness: Business attractiveness is one of the concepts of motivation. It was derived from the literature of NMOs (Biggart, 1989; Kuntze, 2001) and the literature of ethnic entrepreneurship (Chaganti & Greene, 2002; Henrekson, 2005; Sequeira & Rasheed, 2006; Ley, 2006; Bergmann & Sternberg, 2007). The target conceptual domain to measure is the attractiveness of network marketing business to Chinese immigrant in terms of the risks and cost of start-up, which is represented by the items in the measure.

Reflective measures for cohesion, social influence and training: Cohesion, social influence and training are sub-constructs of the influence of the social environment in NMOs. The target conceptual domain to measure for cohesion is the influence of cohesive social environment in NMOs on Chinese immigrant network marketers. Items used to measure cohesion were cited from Sparks and Schenk (2006) with a slight alteration. The

target conceptual domain to measure for social influence is the influence of other network marketers on Chinese immigrant network marketers. Items used to measure social influence were cited from Sparks and Schenk (2001, 2006). The target conceptual domain to measure for training is the influence of training provided by NMOs and other network marketers on Chinese immigrant network marketers. Items used to measure training were generated from focus groups and supported with the literature of NMOs (Biggart, 1989; Sparks & Schenk, 2001). The content of measurement for *cohesion, social influence and training* is valid.

Reflective measures for social perception, social adaptability, expressiveness, and impression management: The measures for social perception, social adaptability, expressiveness, and impression management are cited from Baron and Markman (2003). The target conceptual domain to measure for these sub-constructs is the social competence. The content of these measurements should be valid.

Summary: The reflective measurements in the current study were developed on the basis of the literature and confirmed by focus groups. The target conceptual domains to measure for the measurements are clear.

Indicator Reliability

According to Götz et al. (2010, p. 694), the “indicator reliability specifies which part of an indicator’s variance can be explained by the underlying latent variable”. The loadings of the latent constructs on an indicator, values larger than 0.7, are acceptable (Götz et al., 2010). In the current study, all indicator reliabilities, including reflective indicators contained in formative measurement, were examined with the Smart-PLS 2.0 (Ringle et al., 2005) computer package simultaneously.

Table 3.8.1 shows construct-to-item loadings and cross loadings of the reflective measures for the constructs. All loadings exceed 0.71 for these items (except that one item loading for social adaptability is 0.69 and two items loading for expression are 0.58 and 0.35 respectively) and load more highly on their own construct than others. These results provide strong support for the reliability of the reflective measures. According to Götz et al. (2010), the indicator reliabilities for reflective measurement models are established.

Construct Reliability

Götz et al. (2010) suggests that it is important to know how well a construct is measured by its assigned indicators. To do so, composite reliability (Fornell & Larcker, 1981) or/and Cronbach's alpha can be used (Götz et al., 2010). Composite reliability values larger than 0.6 (Bagozzi & Yi, 1988; Götz et al., 2010) or Cronbach's alpha values larger than 0.6 (Hair et al, 2009; Götz et al., 2010) are acceptable.

According to Table 3.8.1a presented below, the values of composite reliability of measures for all latent constructs, ranges from 0.86 to 0.94, which are far above 0.6. Table 3.8.1a also shows that the Cronbach alpha values of the measures for business attractiveness (0.79), cohesion (0.81), social influence (0.91), training (0.87), tense (0.90), love/enthusiastic (0.86), degree of difficulty (0.89), confidence (0.88), expressiveness (0.73), and impression management (0.60), are all above 0.6. Thus, construct liabilities for reflective measurement models are established.

Convergent Validity

The statistics presented in Table 3.8.1a, indicate the values of the average variance extracted (AVE) for reflective latent variables. It shows the value of AVE for all reflective constructs exceeding 0.5 (with the exception of expressiveness which is slightly less than 0.5). Therefore, the convergent validities of the measures for the reflective latent variables have been established (Fornell & Larcker, 1981).

Discriminant Validity

According to Table 3.8.1b, the square root of AVE for all of the reflective constructs is greater than 0.67 and each is greater than the correlation between the constructs. The diagonal elements in Table 3.4.4.1b are greater than off-diagonal elements. These statistics suggest that each construct relates more strongly to its own measures than to measures of other constructs. That is, all constructs share more variance with their own measures than with other constructs. The discriminant validities of the measures for the reflective latent variables have been confirmed (Fornell & Larcker, 1981). Thus, the reflective measures for latent constructs in the research model are reliable and valid.

Table 3.8.1 Reflective Constructs: Factor Loadings and Cross-Loading

Code	LV/EN	TNS	Coh	SoIn	TRA	IntriM	BuAt	ExtriM	DgDf	CFD	EXP	IPMT	ADP	SPCP
D1	0.76	0.48	0.43	0.34	0.57	0.44	0.17	0.36	0.36	0.45	0.09	0.36	0.37	0.28
D10	0.90	0.50	0.19	0.22	0.45	0.39	0.10	0.31	0.32	0.45	0.08	0.24	0.30	0.25
D11	0.91	0.53	0.27	0.26	0.45	0.40	0.18	0.28	0.35	0.41	0.10	0.23	0.35	0.25
D12	0.85	0.46	0.19	0.17	0.46	0.36	0.16	0.25	0.34	0.45	0.11	0.22	0.33	0.24
D5	0.53	0.92	0.21	0.14	0.32	0.26	0.10	0.20	0.30	0.29	0.12	0.13	0.19	0.08
D6	0.56	0.95	0.20	0.11	0.30	0.35	0.17	0.24	0.36	0.34	0.11	0.14	0.15	0.08
D7	0.51	0.89	0.31	0.13	0.26	0.24	0.08	0.22	0.29	0.26	0.16	0.12	0.21	0.09
EnCoh1	0.23	0.19	0.71	0.37	0.29	0.15	0.28	0.23	0.14	0.13	0.11	0.03	0.25	0.18
EnCoh2	0.20	0.17	0.86	0.39	0.37	0.16	0.20	0.22	0.14	0.06	0.05	0.22	0.26	0.20
EnCoh3	0.31	0.26	0.83	0.38	0.40	0.23	0.19	0.27	0.15	0.10	0.06	0.13	0.16	0.09
EnCoh4	0.28	0.23	0.87	0.54	0.47	0.21	0.20	0.24	0.12	0.16	0.02	0.23	0.27	0.13
EnSp10	0.23	0.13	0.39	0.83	0.39	0.28	0.28	0.42	0.16	0.11	0.04	0.15	0.15	0.16
EnSp11	0.19	0.09	0.37	0.81	0.38	0.18	0.22	0.41	0.17	0.13	-0.01	0.22	0.13	0.06
EnSp13	0.20	0.10	0.34	0.75	0.37	0.27	0.23	0.44	0.21	0.18	0.04	0.19	0.19	0.19
EnSp5	0.21	0.13	0.53	0.73	0.36	0.25	0.32	0.34	0.05	0.15	-0.03	0.24	0.10	0.16
EnSp7	0.23	0.14	0.48	0.83	0.40	0.20	0.28	0.26	0.08	0.09	-0.05	0.25	0.15	0.10
EnSp8	0.30	0.13	0.44	0.85	0.49	0.23	0.19	0.30	0.15	0.21	0.04	0.29	0.25	0.22
EnSp9	0.25	0.08	0.33	0.81	0.42	0.26	0.24	0.32	0.07	0.12	-0.03	0.24	0.22	0.18
EnvironT14	0.39	0.17	0.33	0.46	0.76	0.44	0.24	0.50	0.28	0.27	0.05	0.34	0.20	0.14
EnvironT15	0.51	0.31	0.41	0.41	0.8	0.36	0.29	0.39	0.21	0.30	0.09	0.27	0.19	0.12
EnvironT16	0.53	0.34	0.45	0.43	0.87	0.41	0.21	0.43	0.19	0.31	0.15	0.16	0.20	0.10
EnvironT17	0.51	0.29	0.43	0.44	0.88	0.37	0.19	0.38	0.18	0.33	0.03	0.22	0.20	0.13
EnvironT18	0.35	0.20	0.32	0.32	0.75	0.25	0.21	0.27	0.12	0.24	-0.00	0.22	0.12	0.00
NeedB21	0.22	0.19	0.23	0.23	0.28	0.35	0.76	0.36	0.07	0.13	0.05	0.19	0.12	0.06
NeedB22	0.06	0.03	0.15	0.15	0.18	0.23	0.79	0.16	-0.07	-0.00	0.13	-0.00	-0.04	-0.04
NeedB23	0.14	0.05	0.24	0.33	0.23	0.33	0.85	0.32	0.06	0.01	0.00	0.04	-0.09	-0.07
NeedB24	0.09	0.09	0.18	0.25	0.17	0.14	0.77	0.22	0.05	0.08	0.07	0.03	0.04	0.10

Table 3.8.1 Reflective Constructs: Factor Loadings and Cross-Loading – Cont.

Code	LV/EN	TNS	Coh	SoIn	TRA	IntriM	BuAt	ExtriM	DgDf	CFD	EXP	IPMT	ADP	SPCP
SE1	0.32	0.31	0.18	0.21	0.24	0.32	0.09	0.24	0.88	0.34	0.16	0.32	0.25	0.27
SE2	0.39	0.25	0.12	0.17	0.18	0.29	-0.03	0.21	0.91	0.38	0.20	0.32	0.35	0.37
SE3	0.35	0.28	0.16	0.11	0.23	0.30	0.05	0.211	0.87	0.35	0.13	0.26	0.35	0.32
SE4	0.33	0.38	0.11	0.07	0.19	0.28	0.06	0.23	0.87	0.41	0.18	0.27	0.24	0.25
SE8	0.49	0.39	0.20	0.21	0.38	0.42	0.08	0.39	0.39	0.84	0.14	0.28	0.42	0.47
SE10	0.38	0.15	0.05	0.15	0.30	0.31	0.07	0.27	0.26	0.82	0.13	0.19	0.36	0.45
SE11	0.45	0.27	0.14	0.18	0.28	0.36	0.10	0.33	0.38	0.87	0.11	0.32	0.51	0.59
SE12	0.41	0.28	0.07	0.06	0.25	0.31	-0.01	0.26	0.39	0.88	0.12	0.24	0.47	0.60
SEep23	0.15	0.12	-0.06	-0.06	0.05	0.17	0.02	0.16	0.21	0.22	0.81	0.10	0.18	0.18
SEep24	0.07	0.15	0.03	0.02	0.03	0.07	0.11	0.12	0.14	0.02	0.83	0.09	0.11	0.05
SEep25	0.12	0.15	0.12	0.01	0.06	0.10	-0.07	0.10	0.14	0.11	0.76	0.12	0.20	0.09
SEep26	-0.10	-0.08	0.10	0.07	0.07	0.14	0.18	0.15	0.01	-0.00	0.58	0.09	-0.02	0.00
SEep27	-0.06	-0.02	0.19	0.07	0.16	0.16	0.29	0.22	0.03	0.06	0.35	0.09	-0.00	-0.02
SEep28	0.26	0.11	0.15	0.22	0.24	0.25	0.05	0.24	0.26	0.36	0.15	0.86	0.40	0.32
SEep29	0.26	0.14	0.19	0.26	0.26	0.17	0.11	0.14	0.31	0.16	0.08	0.84	0.32	0.33
SEsa18	0.36	0.15	0.27	0.20	0.16	0.26	-0.00	0.21	0.36	0.54	0.06	0.32	0.74	0.58
SEsa19	0.36	0.12	0.23	0.18	0.15	0.16	-0.03	0.08	0.28	0.40	0.11	0.27	0.80	0.54
SEsa20	0.18	0.13	0.19	0.13	0.09	0.10	-0.09	0.12	0.21	0.35	0.15	0.34	0.84	0.65
SEsa21	0.31	0.19	0.19	0.22	0.28	0.27	0.14	0.30	0.21	0.40	0.11	0.40	0.76	0.50
SEsa22	0.32	0.16	0.20	0.10	0.18	0.18	0.03	0.15	0.24	0.30	0.30	0.32	0.69	0.39
SEsp13	0.23	0.13	0.06	0.08	0.03	0.20	-0.10	0.25	0.32	0.60	0.15	0.21	0.50	0.81
SEsp14	0.24	0.16	0.19	0.13	0.10	0.22	0.04	0.20	0.28	0.53	0.07	0.35	0.62	0.86
SEsp15	0.27	0.01	0.08	0.16	0.12	0.18	0.00	0.15	0.29	0.50	0.13	0.32	0.59	0.86
SEsp16	0.27	0.06	0.20	0.18	0.15	0.09	0.04	0.11	0.30	0.53	0.11	0.35	0.62	0.89
SEsp17	0.22	0.02	0.22	0.24	0.10	0.09	0.07	0.10	0.25	0.47	0.06	0.36	0.60	0.79

Note: IntriM; intrinsic motivation, ExtriM: extrinsic motivation, BuAt: business attractiveness, Coh: cohesion, SoIn: social influence, TRA: training, TNS: tense, LV/EN: love/enthusiastic, DgDf: degree of difficulty, CFD: confidence, ADP: social adaptability, SPCP: social perception, EXP: expressiveness, IPMT: impression management. The largest factor loadings for each item or scales are in **bold**.

Table 3.8.1a Factor Loadings, Average Variance Extracted (AVE), Composite Reliability and Cronbach's alpha for Multi-Indicator Latent Variables (reflective) Using Smart-PLS 2.0

Variables	Measures	Loading	AVE	Composite Reliability	Cronbach's alpha
Motivation for Conducting Network Marketing Business					
Business Attractiveness			0.61	0.86	0.79
21. To start up my own small business with lowest investment and risks	NeedB21	0.75			
22. It doesn't really matter if I fail in my network marketing business, because I have only invested little money in it.	NeedB22	0.75			
23. It is a good opportunity for me to learn how to start up my own business, because it only cost little money.	NeedB23	0.85			
24. To start up my own business without financial pressure	NeedB24	0.75			
Influence of Social Environment in NMO			0.43	0.92	0.91
Cohesion			0.64	0.88	0.81
1. There is a great deal of trust among fellow member in my organization	EnCoh1	0.69			
2. The members of my organization are very cooperative with each other	EnCoh2	0.85			
3. The members of my organization believe we can depend on each other for advice and support concerning our distributorships	EnCoh3	0.80			
4. The members of my organization support each other's work	EnCoh4	0.86			
Social Influence			0.65	0.93	0.91
5. My sponsor and other uplines are able to get me committed to a positive vision of the future with this network marketing organization	EnSp5	0.72			
7. My sponsor and other uplines help me see a positive future for myself as member of this network marketing organization	EnSp7	0.82			
8. I receive valuable information from my sponsor and other uplines about how to make the most of being a member of this network marketing organization	EnSp8	0.87			
9. My sponsor and other uplines is an excellent source of information about being a successful member of this network marketing organization	EnSp9	0.69			
10. When it comes to making a success of my distributorship, I am satisfied with information I receive from my sponsor and other uplines	EnSp10	0.83			
11. My sponsor and other uplines lead "doing" rather than "telling"	EnSp11	0.83			
13. I look to my sponsor and other uplines as examples of how to be an effective network marketing organization member	EnSp13	0.73			

Table 3.8.1a Factor Loadings, Average Variance Extracted (AVE), Composite Reliability and Cronbach's alpha for Multi-Indicator Latent Variables (reflective) Using Smart-PLS 2.0 – Cont. 1

Variables	Measures	Loading	AVE	Composite Reliability	Cronbach's alpha
<i>Training</i>			0.67	0.91	0.88
14. Much of the training I received as a network marketer came from other network marketers in this network marketing organization	EnvironT14	0.73			
15. The training I received in this network marketing organization is effective	EnvironT15	0.82			
16. Training provided by this network marketing organization is essential for me to operate my network marketing business	EnvironT16	0.88			
17. Through the training provided by this network marketing organization, I have obtained a large amount of knowledge about network marketing business	EnvironT17	0.88			
18. Without training provided by the network marketing organization, I won't be able to establish my network marketing business successfully.	EnvironT18	0.74			
<i>Desire for Opportunity</i>			0.62	0.92	0.90
<i>Tenses</i>			0.85	0.94	0.91
5. How tense would you be in conducting your current network marketing business?	D5	0.92			
6. How tense would you be in sharing the opportunity of the network marketing business with others?	D6	0.94			
7. How tense would you be in sharing the products sold by this network marketing organization with others?	D7	0.89			
<i>Love/Enthusiastic</i>			0.73	0.92	0.88
1. I would love conducting my current network marketing business	D1	0.77			
10. How enthusiastic would you be in sharing the opportunity of the network marketing business with others?	D10	0.87			
11. How enthusiastic would you be in sharing the products sold by this network marketing organization with others?	D11	0.91			
12. How enthusiastic would you be in learning skills and knowledge about how to conduct network marketing business	D12	0.80			

Table 3.8.1a Factor Loadings, Average Variance Extracted (AVE), Composite Reliability and Cronbach's alpha for Multi-Indicator Latent Variables (reflective) Using Smart-PLS 2.0 – Cont. 2

Variables	Measures	Loading	AVE	Composite Reliability	Cronbach's alpha
Network Marketing Specific Self-efficacy			0.53	0.90	0.87
Degree of Difficulty			0.78	0.93	0.91
1. How easy do you think it would be to conduct your current network marketing business?	SE1	0.86			
2. How easy do you think it would be to introduce your current network marketing business to others?	SE2	0.90			
3. How easy do you think it would be to sell the products to others?	SE3	0.84			
4. How easy do you think it would be to recruit others to participate in your organization?	SE4	0.85			
Confidence			0.72	0.91	0.87
8. How certain of success are you in the conduct of your current network marketing business?	SE8	0.84			
10. Do you know enough to conduct a network marketing business?	SE10	0.85			
11. How sure are you of yourself in communicating with others effectively?	SE11	0.87			
12. How sure are you of yourself in developing new leaders in your organization?	SE12	0.88			
Social Competence					
Social Perception			0.71	0.92	0.90
13. I am a good judge of other people	SEsp13	0.84			
14. I can usually recognize other's traits accurately by observing their behaviour	SEsp14	0.89			
15. I can usually read others well – tell how they are feeling in a given situation	SEsp15	0.87			
16. I can tell why people have acted the way they have in most situations	SEsp16	0.90			
17. I generally know when it is the right time to ask someone for a favour	SEsp17	0.79			

Table 3.8.1a Factor Loadings, Composite Reliability, Average Variance Extracted (AVE) for Multi-Indicator Latent Variables (reflective) Using Smart-PLS 2.0 – Cont. 3

Variables	Measures	Loading	AVE	Composite Reliability	Cronbach's alpha
<i>Social Adaptability</i>			0.59	0.88	0.82
18. I can easily adjust to being in just about any social situation	SEsa18	0.81			
19. I can be comfortable with all types of people – young or old, people from the same or different backgrounds as myself	SEsa19	0.81			
20. I can talk to anybody about almost anything	SEsa20	0.83			
21. People tell me that I am sensitive and understanding	SEsa21	0.75			
22. I have no problems introducing myself to strangers	SEsa22	0.65			
<i>Expressiveness</i>			0.48	0.81	0.74
23. People can always read my emotions even if I try to cover them up	Seep23	0.81			
24. Whatever emotion I feel on the inside tends to show on the outside	Seep24	0.84			
25. Other people can usually tell pretty much how I feel at a given time	Seep25	0.75			
26. I am very sensitive to criticism from others	Seep26	0.55			
27. I often concerned about what others think of me	Seep27	0.27			
<i>Impression Management</i>			0.72	0.84	0.62
28. I'm good at flattery and can use it to my advantage when I wish	Seep28	0.86			
29. I can appear to like someone even when I don't.	Seep29	0.83			

Table 3.8.1b Latent Variable Correlations

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
1. Adaptability	1	.77																				
2. Degree of difficulty	.34	1	.88																			
3. Desire for opportunity	.35	.42	1	.79																		
4. Environmental Influence	.28	.23	.44	1	.67																	
5. Expressiveness	.19	.19	.14	.05	1	.69																
6. Extrinsic motivation	.22	.25	.34	.51	.18	1	NA															
7. Human capital	.19	.15	.36	.12	.18	.09	1	NA														
8. Impression management	.43	.33	.26	.32	.14	.23	.08	1	.85													
9. Intrinsic motivation	.25	.33	.45	.41	.17	.75	.14	.25	1	NA												
10. Love/Enthusiastic	.39	.40	.92	.47	.11	.35	.35	.30	.46	1	.85											
11. Self-efficacy	.51	.84	.54	.30	.20	.37	.22	.38	.44	.54	1	.73										
12. Social influence	.22	.16	.25	.87	.00	.44	.07	.28	.30	.29	.20	1	.80									
13. Social perception	.70	.34	.23	.20	.12	.19	.20	.38	.19	.29	.57	.19	1	.84								
14. Social competence.	.89	.42	.36	.33	.32	.28	.22	.70	.30	.42	.60	.26	.83	1	NA							
15. Tense	.20	.34	.86	.28	.14	.24	.29	.14	.31	.58	.40	.14	.09	.20	1	.92						
16. Action taken	.42	.36	.61	.26	.13	.19	.64	.26	.28	.56	.49	.18	.35	.44	.52	1	NA					
17. Business attractiveness	.01	.05	.17	.35	.07	.35	.13	.10	.35	.18	.07	.31	.01	.06	.13	.12	1	.79				
18. Cohesion	.28	.16	.33	.75	.07	.29	.06	.20	.23	.31	.18	.52	.18	.28	.26	.14	.26	1	.82			
19. Confidence	.52	.42	.48	.28	.15	.37	.22	.31	.41	.51	.84	.18	.62	.59	.32	.46	.07	.14	1	.85		
20. Motivation	.25	.30	.43	.53	.16	.90	.15	.26	.91	.45	.42	.44	.20	.30	.30	.27	.57	.32	.40	1	NA	
21. Performance	.23	.23	.42	.10	.20	.10	.70	.10	.19	.41	.31	-.02	.23	.26	.32	.70	.13	.03	.29	.18	1	NA
22. Training	.22	.24	.52	.81	.08	.48	.17	.29	.45	.56	.35	.50	.12	.27	.32	.31	.28	.47	.36	.52	.25	1

Note: Bold elements along the main diagonal represent the square root of average variance extracted from variable by its items during PLS

analysis

3.8.2 Evaluation of Formative Measurement Models

The current study follows Götz et al.'s (2010) suggestions to evaluate the formative measurement model. In the case of formative measures, instead of examining the factor loadings, factor weights are examined. Factor weights represent a canonical correlation analysis and provide information about how each indicator contributes to the respective construct (Mathwick et al., 2001).

As indicated in Table 3.8.2a (Appendix F), four out of nine formative items for intrinsic motivation significantly contributed to the measure ($\rho < 0.01$), four out of eleven items for extrinsic motivation significantly contributed to the measure ($\rho < 0.01$), and four out of seven items for action undertaken significantly contributed to the measure ($\rho < 0.01$). Two concerns here are; i) formative items without making significant contributions to the measures; ii) potential multicollinearity among the items (Mathwick et al., 2001), producing unstable estimates. Therefore, the theoretical and conceptual considerations should be carefully looked at and the potential multicollinearity among the items should be checked (Götz et al., 2010).

Formative items without making significant contributions to the measures

Researchers suggest that the formative measurement model assumes that all items as a group jointly form the measure. The consequences of dropping one of the items are potentially quite serious, because it may affect whether the measures can fully represent the construct (Diamantopoulos & Winklhofer, 2001; Jarvis et al., 2003; Petter, 2007). According to Kuntz (2001) and the focus group study in the current research, the latent construct of intrinsic motivation is measured from nine different perspectives (to contribute to the success, to have fun, to better use one's skill, for the cause, to keep learning, to have satisfaction, to be challenged, to be innovative, and for personal accomplishment). None of these items were dropped even though some of them did not make significant contributions to the measure for the latent construct intrinsic motivation. If any one of these items were dropped, the measure would not completely represent the intrinsic motivation conceptualized in the current study.

Extrinsic motivation is measured from eleven different perspectives - (to make a lot of money, to get rich quickly, to be free to name one's own hours, to be free to work

whenever one wants, to have influence over and create a positive impact upon one's community, to be able to have a lavish lifestyle, to buy whatever one wants, to have financial security, to be able to vacation more often, to have power to call one's own shots, and to be known as a successful business person). If any one of these items was dropped, the measure would not completely represent the latent construct of extrinsic motivation conceptualized in the current study.

The action undertaken is measured from the perspectives of spending time on conducting network marketing business (such as, presenting products and business opportunities to others, motivating and training others, learning business skills and knowledge, and providing services) and a number of business activities conducted weekly. This measurement was based on Sparks and Schenk (2001) and the results obtained from the focus group. None of items used to measure the action undertaken were dropped even though some of them did not make significant contributions to the measure. If any one of these items were dropped, the measure would not completely represent the action undertaken in conducting network marketing business conceptualized in the current study.

Potential multicollinearity among the items

To examine the quality of measures for the latent constructs of intrinsic motivation and extrinsic motivation and action undertaken, collinearity tests were performed. To test the collinearity, SPSS 17 was used to calculate Variance Inflation Factors (VIF). The results of calculations of VIF were presented in Table 3.8.2b (intrinsic motivation) (see Appendix G), Table 3.8.3c (extrinsic motivation) (see Appendix G), and Table 3.8.3d (action undertaken) (see Appendix G). These results showed minimal collinearity with the VIF of all items ranging between 1.18 and 1.55 (intrinsic motivation), 1.23 and 2.77 (extrinsic motivation), 1.34 and 3.26 (action undertaken). As all were below the cut-off threshold 3.33, multicollinearity is of no major concern (Cenfetelli & Bassellier 2009).

3.9 Structures of Measurement Models and Research Model

This section presents the structures of the measurement models and research model (refer to Figure 3.9 and Figure 3.9.1-1 to Figure 3.9.1-8 in Appendix I). With these figures,

the relationships between the constructs and sub-constructs and their measurements are clearly demonstrated.

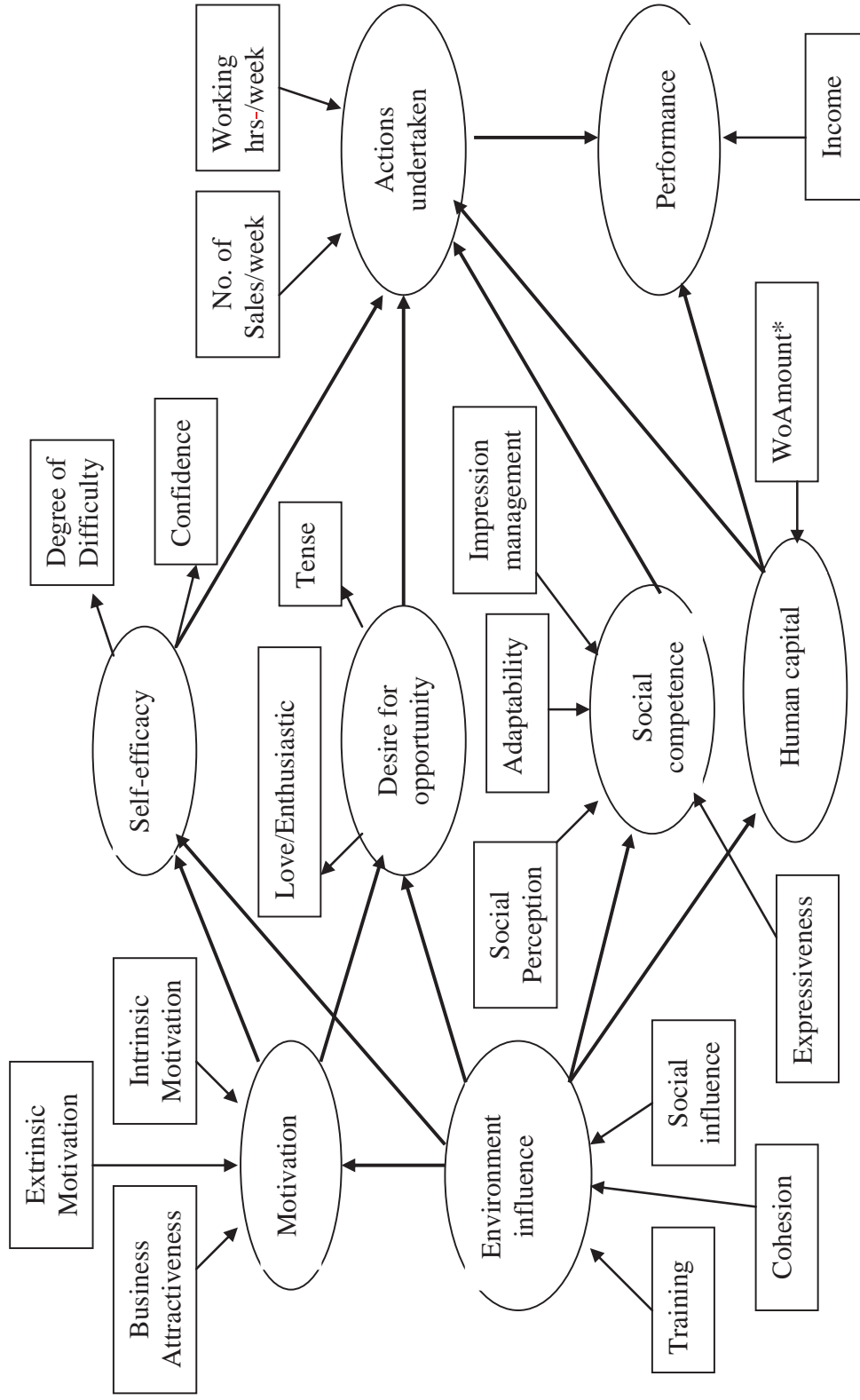
3.9.1 The Structure of Measurement Models

The measurement for *motivation to conduct network marketing business* is formative (Section 3.5). It is formed with three formative sub-measurements (intrinsic motivation, extrinsic motivation and business attractiveness), which are composed of nine and eleven formative items, and four reflective items, respectively. The measurement for *the influence of social environment in NMO* is formative. It is formed with three sub-measurements (social influence, training and cohesion) (Section 3.5), which consists of seven, five and four reflective items respectively. The measurement for the construct of *desire for entrepreneurial opportunity from network marketing business* is formed with two reflective sub-measurements (love/enthusiastic and tense) (Section 3.7.2), which are composed of four and three reflective items respectively. The measurement for the construct of *network marketing specific self-efficacy* is formed with two reflective sub-measurements (degree of difficulty and confidence) (Section 3.7.2). They consist of four reflective items respectively. The measurement for *social competence* is formative (Section 3.5). It is formed with four formative sub-measurements (social perception, expressiveness, social adaptability and impression management), which are measured with five, five, five and two reflective items respectively. The measurement for *actions undertaken in conducting network marketing business* is formative (Section 3.5). It is formed with seven formative items. *Human capital* and *performance* are measured with one item respectively (See Figure 3.9.1-1 to Figure 3.9.1-8 in Appendix I).

3.9.2 Structure of the Research Model

Figure 3.9.2 presents the structure of the research model - the Model of Network Marketing Business Entrepreneurial Performance. This model is composed of two reflective variables (self-efficacy and desire for opportunity) and four formative variables (motivation, the influence of social environment, social competence and action undertaken). The dependent variable is the performance.

Figure 3.9.2 The Structure of the Model of Network Marketing Business Entrepreneurial Performance



* WoAmount: weekly working hours x number of months in the business

3.10 Chapter Summary

Research design, questionnaire development, and the development of measurement models were presented in this chapter. In order to answer the research question, the current research was carefully designed as a cross-sectional design. A series of steps were initiated in developing the questionnaire and establishing measurement bases. The statistical techniques applied in developing the measurements were the packages of SmartPLS 2.0, SPSS 17, and AMOS 17. According to the rules of identifying formative and reflective constructs recommended by Jarvis et al. (2003) and Petter, et al. (2007), decisions were made relative to whether the constructs were formative or reflective. The constructs in the model of network marketing business entrepreneurial performance were combined with formative and reflective constructs.

The initial measurements for reflective constructs (desire for opportunity and self-efficacy) were developed using structural equation modelling (SEM) techniques. The software package used in developing the measurement models was AMOS 17. Two steps were processed in developing the initial measurements for the reflective constructs of desire for opportunity and self-efficacy: 1) exploratory factor analysis; and 2) confirmatory factor analysis. The examination results showed that the initial measurements for the reflective constructs, desire for opportunity and self-efficacy, were appropriate.

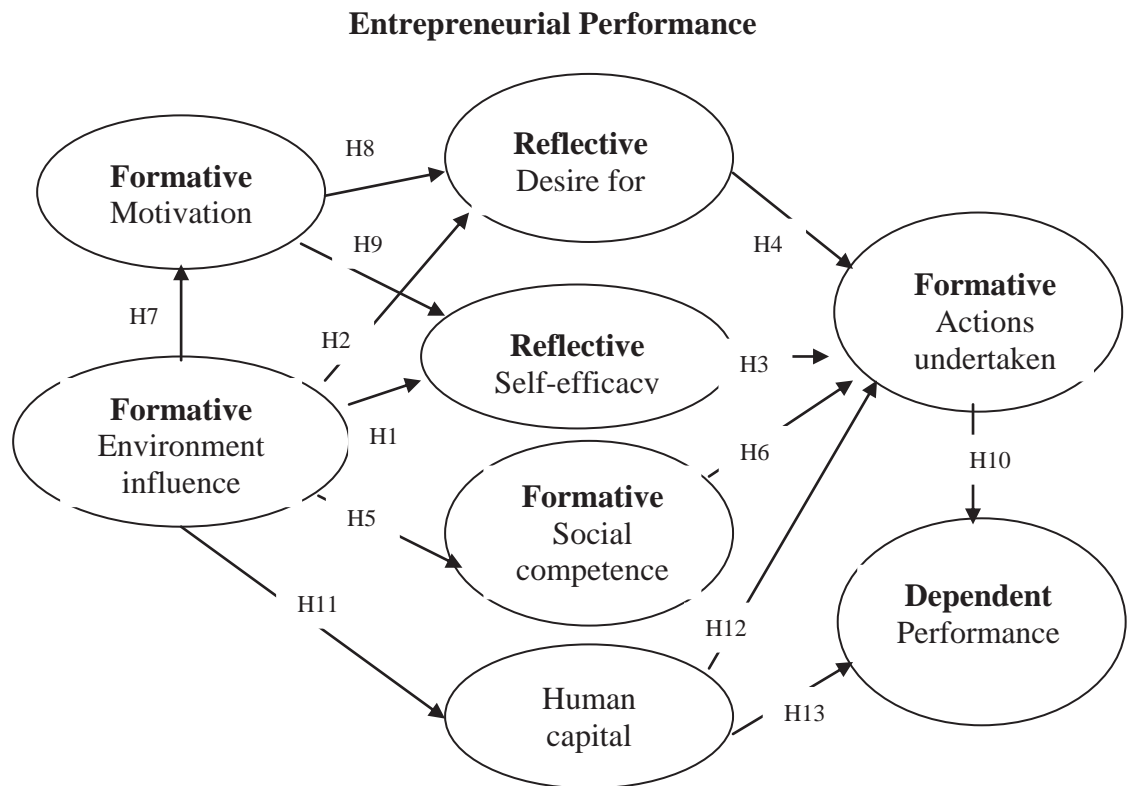
Then, the statistical technique of Partial Least Squares (PLS) was used to assess the measurement models. The assessment results suggested that the measurement models developed in the current research were acceptable. Finally, structures of measurements for the constructs were presented.

Chapter Four
DATA ANALYSIS AND RESULTS

4.1 Introduction to the Chapter

This chapter presents the results of the data analysis and the findings of the study. In this thesis, the research question posed is: *What factors determine Chinese immigrant network marketer's performance in conducting their network marketing business?* To answer this question, thirteen hypotheses were proposed and the path model (Figure 4.1) was developed. This path model comprises four formative and two reflective constructs, with the dependent variable being the performance measured with financial outcomes. This chapter is organized with an introduction, the response analysis, preliminary data analysis, an estimation of the structural models using Partial Least Squares, and the testing of the robustness of the results, concluding with a summary.

Figure 4.1: The Path Diagram in the Model of Network Marketing Business



4.2 Response Analysis

The response analysis involved assessing the survey response rate, examining the characteristics of the data such as the participant's demographics characteristics and the length of service in the business. A preliminary analysis was also conducted to test if there were potential biases in the sample.

4.2.1 Response Rate

Table 4.2.1 summarises the response rates from the survey. As shown in the Table, 227 valid questionnaires were collected from the 438 persons approached. The adjusted response rate is 51.83%. The reasons for excluding some of the questionnaires returned were due to: i) respondents did not provide their network marketer identification number; and ii) new participants with less than one month of network marketing experience. As argued by Sparks and Schenk (2006), to be competent in becoming a network marketer, the respondents need a range of business skills which cannot be obtained in less than one month in the business as these individuals were generally considered to be product users rather than business builders.

Table 4.2.1 Survey Response Rate

Number of questionnaire distributed	438
Number of responses	273
Gross Response rate	62.33%
Number of questionnaires not applicable	46
Net Response rate	51.83%
Number of valid responses	227

4.2.2 Response Characteristics

The sample contained responses from Chinese immigrant network marketers in the Australian States of New South Wales, Victoria, and Queensland. As shown in Table 4.2.2a, over seventy per cent of respondents were married females. The largest age group among the respondents was 41–50 year old (40.5%), with over eighty per

cent of respondent's ages were over 30 years old. Even though about seventy per cent of the respondents had university degree qualifications, a substantial proportion of them were not competent in the English language.

Table 4.2.2b shows that over seventy per cent of respondents stayed in their network marketing business for over one year. It suggests that most respondents in the sample were experienced network marketers; they had the capability to respond to the questions asked in the questionnaire.

The information provided in Table 4.2.2a and Table 4.2.2b suggests that most respondents in the sample are well educated adults with experiences of operating network marketing business. Information provided by them should be considered rational.

Table 4.2.2a: Demographic Characteristics of Sampled Chinese Network Marketers

Characteristics	Percentage
<i>Gender</i>	
Male	26.4%
Female	73.6%
<i>Marital status</i>	
Single (including divorced)	16.7%
Married (include de-facto)	77.5%
Divorced	5.8%
<i>Age</i>	
18-30	16.3%
31-40	21.6%
41-50	40.5%
51-60	16.7%
> 60	4.9%
<i>Education</i>	
School Certificate & post school diploma	26%
Bachelor degree	48.5%
Post graduate certificate/diploma	4.9%
Master degree	12.8%

Characteristics	Percentage
PhD degree	2.6%
Missing	5.2%
<i>English competency</i>	
Don't speak English at all	9.7%
Some English	39.2%
Competent	38.3%
Proficient	8.4%
Native	0.9%
Missing	3.5%
Sample size	227

Table 4.2.2b Number of Months with the Business

Number of Months with the Business	Percentage
1 – 12	26.9%
13 – 24	23.8%
25 – 36	19.8%
37 – 48	11.9%
> 49	15.4%
Missing	2.2%
Sample size	227

4.2.3 Response Bias

To test if there is a response bias, the survey and response samples were compared on three criteria: the number of respondent locations, the range of age and experience (by number of months staying in the business) and response samples. Completed questionnaires were collected in the Australian States of New South Wales, Victoria, and Queensland. According to the ABS (2006), most Chinese immigrants in Australia settle in these three States. The ABS (2006) reports that 35.6% of immigrants settled in New South Wales, 25.0% in Victoria, and 17.1% in Queensland during 2005-

2006. Thus, the selected three states in the survey sample are representative, there is likely to be no bias in the results,

The range of ages of Chinese immigrants in the response sample was from 18 to over 60 years old, and the length of their experience in conducting the business ranged from 1 to over 49 months. Thus, the response sample includes different age group network marketers who have been operating their network marketing business in different states of Australia for a number of months. Although most responding Chinese immigrant network marketers are females with university degree, they are not salient for testing the proposed model, because the World Federation Direct Selling Association (2006) reported that over eighty per cent of network marketers are females. The gender distribution in the sample matches this report.

In sum, comparing the survey and response samples on the three criteria found no major differences between the two responding groups and the non-responding group of Chinese immigrant network marketers. It can therefore be concluded that the responses are representative of the survey sample, which in turn is representative of the population of Chinese immigrant network marketers in Australia. By including a large number of Chinese immigrant network marketers from three different States of Australia, the rich and diverse sample not only encompasses adequate variance for testing the proposed model, but also increases the generalizability of the study findings. No other study in the network marketing organization studies literature was found that used such a diverse sample for testing the model of network marketing business entrepreneurial performance. A more detailed discussion of the response sample characteristics is included in Section 3.2.5 in Chapter Three.

4.3 Preliminary Analysis

The preliminary data analysis involved two procedures: missing value analysis and descriptive analysis. The missing values analysis was carried out to produce a clean data set for model estimation, whereas the descriptive analysis provided an estimate of the characteristics of the data, such as the mean, standard deviation and correlations.

4.3.1 Missing Values Analysis

The data matrix comprising 227 cases and 81 indicators has approximately 8.21% missing values. Table 4.3.1 shows the profile of cases with and without missing data. To study the differences between the cases with and without missing data, a Chi-square test was carried out.

Table 4.3.1 Profiles of Cases with and without Missing Data

Constructs	No. of Items	Fe	Fe x Items	Fo x Items
Motivation	24	227	5448	5434
Influence of Environ	16	227	3632	3611
Self-efficacy	8	227	1816	1811
Desire for Opp.	7	227	1589	1579
Social competence	17	227	3859	3828
Human capital	1	227	227	205
Action undertaken	7	227	1589	1553
Performance	1	227	227	215

Note: Influence of Environ – the influence of social environment in NMO

Desire for Opp. – Desire for opportunity

No. of Items – number of items of the measure for the construct

Fe – number of cases with missing data

Fe x Items – number of cases with missing data multiplied by the number of items

Fo x Items – number of cases without missing data multiplied by the number of items

To carry out the Chi-square test, the following formula applied by Mason and Lind (1993, p. 577) was used to calculate the differences between the profiles of cases with and without missing data.

$$\begin{aligned}
\chi^2 &= \sum \left[\frac{(\text{Fo x Items} - \text{Fe x Items})^2}{\text{Fe x Items}} \right] \\
&= \frac{(5434 - 5448)^2}{5448} + \frac{(3611 - 3632)^2}{3632} + \frac{(1811 - 1816)^2}{1816} + \frac{(1579 - 1589)^2}{1589} + \frac{(3828 - 3859)^2}{3859} \\
&\quad + \frac{(205 - 227)^2}{227} + \frac{(1553 - 1589)^2}{1589} + \frac{(215 - 227)^2}{227} \\
&= 0.04 + 0.12 + 0.01 + 0.06 + 0.25 + 2.13 + 0.82 + 0.63 \\
&= 4.06
\end{aligned}$$

The result of the calculation was 4.06. In this calculation, the number of degrees of freedom was seven, because the proposed model was formed with eight constructs. According to the Table which appeared in Mason and Lind (1993, p. 806), the *critical value* for this calculation was 12.59 at the 0.05 level. The calculation result was much less than the critical value, which means that there were no differences between the profiles of cases with and without missing data, and the data may be regarded as missing completely at random (Mason & Lind, 1993).

4.3.2 Sample Size Analysis

Following Green's (1991, pp. 506–507) guideline, the current study conducted a Power Analysis (Cohen 1988) to determine the minimum sample size required. As stipulated by Cohen (1988), to achieve a medium effect size of 0.8 ($\alpha=0.05$) in an *a priori* model, the minimum sample size required for the current study (with seven predictors) is 103 cases. Therefore, the sample size (N=227) in the current study is greater than the minimum required.

4.3.3 Descriptive Statistics

There are two usages for the descriptive statistics in the current study. First, it was used to identify the characteristics of the sample of Chinese immigrant network marketers and their practice in conducting network marketing business. Second, it was

used to identify the correlations between the demographic characteristics and sub-variables in every variable.

Appendix B demonstrates the results of the computation of mean, standard deviation, minimum and maximum values for each of the 81 items used in the model. All measures have a reasonable variance, which suggests that the measures are useful for a correlation study. In addition, frequency analyses of the 81 items shows that all items have scores spanning the entire range on their respective scales.

4.4 Data Analysis

The hypothesised model of network marketing business entrepreneurial performance is composed of formative and reflective constructs. *SmartPLS* (Ringle et al., 2005) was used to examine the measurement models for the constructs and test the hypotheses simultaneously. The significance of each variable to one another is determined according to the bootstrap procedure (500 sub-samples). Götz et al.'s (2010) guideline for evaluation of the model quality was followed to examine the measurement models for constructs and the research model.

4.4.1 Inter-construct Correlations

Table 4.4.1 presents inter-construct correlations and reliability measures. A review of Table 4.4.1 indicates several key results. The influence of social environment in NMO is significantly and positively correlated to desire for opportunity, motivation, self-efficacy. Motivation is significant and positively correlated to desire for opportunity and self-efficacy. Self-efficacy, desire for opportunity and human capital are significantly and positively correlated to actions undertaken. Actions undertaken and human capital are significant and positively correlated to performance. The values of these correlations are noteworthy for comparison with the path coefficients estimated by PLS (discussed below).

Table 4.4.1 Inter-construct Correlations and Reliability Measures

Correlations of among Constructs

Com	R Square	Composite Reliability	AVE	1	2	3	4	5	6	7	8
0.48	0.61	n/a	n/a	1.00							
0.78	0.32	0.88	0.78	0.59	1	(0.88)					
0.58	0.00	n/a	n/a	0.31	0.55	1					
1	0.58	n/a	n/a	0.68	0.39	0.20	1				
1	0.02	n/a	n/a	0.64	0.33	0.15	0.70	1			
0.60	0.24	n/a	n/a	0.23	0.39	0.439	0.11	0.09	1		
0.71	0.20	0.83	0.71	0.49	0.55	0.35	0.29	0.22	0.42	(0.84)	
0.48	0.10	n/a	n/a	0.40	0.37	0.32	0.22	0.18	0.29	0.54	1

Note: N = 227. The absolute values of correlations ≥ 0.3 are significant at $p < 0.05$ and those ≥ 0.37 are significant at $p < 0.01$; AVE = average variance extracted; Com = Communality. Bold elements in the parentheses along the main diagonal represent the square root of the average variance extracted from the variable by its items during PLS analysis.

4.4.2 Structural Model

The analysis of the structural model is composed of two major steps: i) evaluating the structural equation model; and ii) testing the hypotheses and presenting the findings. To evaluate the structural equation model, the strength of relationships between constructs and the variance explained (R^2) were investigated, changes of R-squares was assessed, and Q-Square and GoF were tested. The purpose of the evaluation the structural equation model is to examine the quality of the research model.

4.4.2.1 Evaluation of the Structural Equation Model

The evaluation of the structural model proposed in the current study consists of estimating the path coefficients between constructs in the research model, which indicates the strength of the relationships and the R-square value of the dependent variable, show the amount of variance explained by the model. In addition, Q-square is examined to evaluate the predictive relevance for the model constructs. At the end of this section, the GoF value is calculated to demonstrate the level of goodness of fit for the model construct.

4.4.2.1.1 The strength of relationships between constructs

Following Ringle, Wende and Will (2005), the significance of PLS parameter estimates was assessed by using the Bootstrap option incorporated within *SmartPLS* software. The bootstrapping procedure is carried out to provide extra confidence that the results are not sample specific, by using repeated random samples drawn from the data. In this instance, the bootstrap procedure was repeated until it reached 500 bootstrap resamples.

The significance and the strength of the relationships among the constructs are shown in Table 4.4.2.1.1. According to Table 4.4.2.1.1, the influence of the social environment in NMOs had positive effects on motivation to conduct network marketing business ($\beta=0.49$, $t=8.68$, $p < 0.001$), self-efficacy in conducting network marketing business ($\beta=0.19$, $t=2.71$, $p < 0.05$), desire for opportunity from network marketing business ($\beta=0.47$, $t=7.80$, $p < 0.001$), social competence ($\beta=0.32$, $t=4.44$, $p < 0.01$) and human capital ($\beta=0.15$, $t=2.59$, $p < 0.05$). Among these relationships, the relationship between the influence of social environment in NMOs and motivation is the strongest. Although the relationship between the influence of the social environment in NMOs

and human capital is the weakest, it is still significant. Therefore, H1, H3, H5, H7 and H11 are supported (Figure 4.4.2.1).

Table 4.4.2.1.1 also shows that self-efficacy ($\beta=0.16$, $t=2.75$, $p < 0.05$), desire for opportunity ($\beta=0.30$, $t=5.30$, $p < 0.01$), social competence ($\beta=0.12$, $t=2.00$, $p < 0.05$) and human capital ($\beta=0.48$, $t=11.13$, $p < 0.001$) had positive effects on actions undertaken in conducting network marketing business. Human capital had the biggest impact on the actions undertaken in conducting network marketing business; and the relationships between self-efficacy and actions undertaken; desire for opportunity and actions undertaken; social competence and actions undertaken; and human capital and actions undertaken are all significant. Thus, H2, H4, H6, H12 are supported (refer to Figure 4.4.2.1).

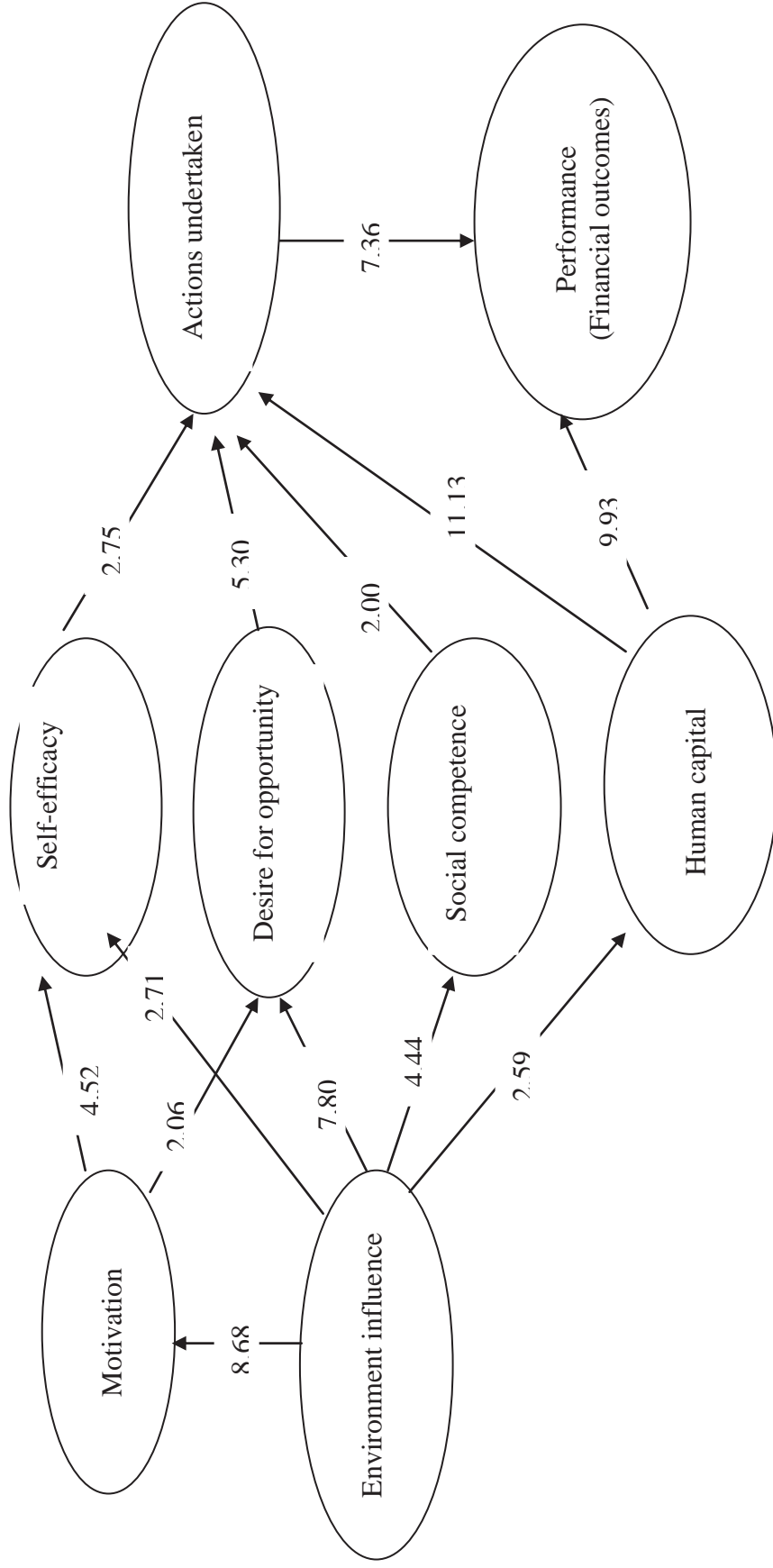
The research model also proposes four more relationships, which are: (i) the relationship between motivation and self-efficacy; (ii) the relationship between motivation and desire for opportunity; (iii) the relationship between human capital and performance (financial outcomes); and (iv) the relationship between actions undertaken and performance (financial outcomes). According to Table 4.4.2.1.1, motivation had a positive effect on self-efficacy ($\beta=0.32$, $t=4.52$, $p < 0.01$) and the desire for opportunity ($\beta=0.15$, $t=2.06$, $p < 0.05$), human capital had a positive effect on performance ($\beta=0.44$, $t=9.93$, $p < 0.001$), and actions undertaken had a positive effect on performance ($\beta=0.39$, $t=7.36$, $p < 0.001$). Hypotheses H9, H10 and H13, and H8 are significantly supported (Figure 4.4.2.1).

Table 4.4.2.1.1 Path coefficients

Paths	Original Sample	Sample Mean	Standard Deviation	Standard Error	t-statistics	ρ-value
H1: Environmental Influence → Self-efficacy	0.19	0.20	0.07	0.07	2.71	**
H2: Self-efficacy → Actions	0.16	0.16	0.06	0.06	2.75	**
H3: Environmental influence → Desire for opportunity	0.47	0.47	0.06	0.06	7.80	****
H4: Desire for opportunity → Actions	0.30	0.30	0.06	0.06	5.30	***
H5: Environmental Influence → Social competence	0.32	0.33	0.07	0.07	4.44	***
H6: Social competence → Actions	0.12	0.13	0.06	0.06	2.00	**
H7: Environmental influence → Motivations	0.49	0.49	0.06	0.06	8.68	****
H8: Motivations → Desire for opportunity	0.15	0.16	0.07	0.07	2.06	**
H9: Motivations → Self-efficacy	0.32	0.32	0.07	0.07	4.52	***
H10: Actions → Performance	0.39	0.39	0.05	0.05	7.36	****
H11: Environmental influence → Human capital	0.15	0.16	0.06	0.06	2.59	**
H12: Human capital → Actions	0.48	0.49	0.04	0.04	11.13	****
H13: Human capital → Performance	0.44	0.44	0.04	0.04	9.93	****

** p < 0.05, *** p < 0.01, ****p<.001

Figure 4.4.2.1: Results of Assessment for the Significance of PLS Parameter Estimates



4.4.2.1.2 Variance explained (R^2)

Figure 4.4.2.1 presents the results of the analysis of the structural model. All constructs are significantly explained by at least one of the predicted antecedent variables. Path coefficients (Appendix H) show that the influence of social environment in NMOs has a positive impact on motivation, explaining 24.2% ($R^2 = 0.242$), social competence explaining 10.1% ($R^2 = 0.101$), and human capital 2.4% ($R^2 = 0.024$). The influence of social environment in NMOs and motivation have collectively positive impacts on self-efficacy explaining 20.1% ($R^2 = 0.201$) and the desire for opportunity explaining 31.6% ($R^2 = 0.316$). Self-efficacy, desire for opportunity, social competence and human capital have collectively positive impacts on actions undertaken explaining 61.2% ($R^2 = 0.612$). Actions undertaken and human capital have collectively positive impacts on performance (financial outcomes) explaining 57.8% ($R^2 = 0.578$).

4.4.2.1.3 Q-Square

In addition to looking at the R-squares as the criterion for predictive relevance, the predictive re-use technique as developed by Stone (1974) and Geisser (1975) can also be applied to examine the relevance of the path model (Chin, 2010). With the predictive re-use technique, the predictive relevance for the model constructs is evaluated by looking at the Q-square. The Q-square is a measure of how well the observed values are reproduced by the model and its parameter estimates (Chin, 2010). A Q-square greater than 0 implies that the model has predictive relevance, whereas a Q-square less than 0 suggests that the model lacks predictive relevance.

Two Q-squares can be obtained depending on the form of prediction. A cross-validated communality Q-square is obtained if prediction of the data point is made by the underlying latent variable score, whereas a cross-validated redundancy Q-square is obtained if prediction is made by latent variable constructs that are predictors of the blindfolded construct in the PLS model (Chin, 2010, pp. 679–680).

The blindfolding estimates obtained from running the function of blindfolding in *SmartPLS* (Ringle et al., 2005) are presented in Table 4.4.1.3. As seen in the tabulation, using omission distances of 10 and 25 produced similar results, indicating that the estimates are stable. The communality Q-square is greater than 0 for all constructs except the human capital and performance constructs that have values equal to 0. This indicates that constructs are adequately measured (Chin, 2010, p. 680).

The values of redundancy Q-square for the outcome construct of 'Performance' are 0.556 (omission distance of 10) and 0.573 (omission distance of 25), which are larger than 0.5. This suggests that the proposed model has good predictive ability (Chin, 2010, p. 680).

Overall, since the estimated model has satisfactory communality and redundancy Q-squares, the results of the Q-square analysis further confirms that the model measures are adequate, and that the structural model has satisfactory predictive relevance for the outcome construct of performance.

Table 4.4.2.1.3 Results of Blindfolding Estimations

Construct	R-Square	Omission distance = 10		Omission distance = 25	
		Communality Q-square	Redundancy Q-square	Communality Q-square	Redundancy Q-square
Motivation	0.18	0.298	0.147	0.294	0.145
Influence of Env.	n/a	0.245	0.245	0.251	0.251
Self-efficacy	0.20	0.168	0.114	0.173	0.120
Desire for Opp.	0.29	0.325	0.218	0.322	0.218
Social comp.	0.07	0.228	0.041	0.229	0.038
Human capital	0.03	0.000	0.017	0.000	0.014
Action	0.51	0.376	0.268	0.355	0.393
Performance	0.54	-0.000	0.556	0.000	0.573

Note: Influence of Env. = the influence of social environment in NMOs; Desire for Opp. = desire for opportunity; Social Comp. = Social competence; Action = Action undertaken; n/a = not applicable.

4.4.2.1.4 GoF Test

To account for the path model performance in both the measurement and the structural model with a focus on overall prediction performance of the model, Tenenhaus, Vinzi, Chatelin and Lauro (2005, p. 173) proposed a global criterion of goodness of fit (GoF). GoF ($0 \leq \text{GoF} \leq 1$) index is obtained as a geometric mean of the average communality index and average R^2 value. Based on the communality indexes and R^2 values calculated with (Ringle et al., 2005), the average communality index and average R^2 value were calculated as 0.702 and 0.259 respectively. Thus,

$$\begin{aligned} \text{GoF} &= \sqrt{\text{Communality} * R^2} \\ &= \sqrt{0.702 * 0.259} = 0.423 \end{aligned}$$

GoF value (0.423) obtained in the current study exceeds the value of 0.36 for large effect sizes of R-square (Wetzels, Odekerken-Schröder and van Oppen, 2009, p. 187). It demonstrates a high level of goodness of fit (Wetzels et al. 2009).

4.4.2.2 Hypotheses Testing and Findings

Testing the hypotheses using the sample of 227 respondents was conducted in section 4.3. The results are presented in Table 4.4.2.2, which shows that all hypotheses were supported.

Table 4.4.2.2 the Results of Hypotheses Tests

Path	Path coefficient	t-statistic	Sig. level	Hypotheses
H1: Social environment influence of NMO → Self-efficacy	0.19	2.71	**	Supported
H2: Self-efficacy → Network marketing entrepreneurial actions	0.16	2.75	**	Supported
H3: Social environment influence of NMO → Desire for opportunity	0.47	7.80	****	Supported
H4: Desire for opportunity → Network marketing entrepreneurial action	0.30	5.30	***	Supported
H5: Social environment influence of NMO → Social competence	0.32	4.44	***	Supported
H6: Social competence → Network marketing entrepreneurial action	0.12	2.00	**	Supported
H7: Social environment influence of NMO → Motivation	0.49	8.68	****	Supported
H8: Motivation → Desire for opportunity	0.15	2.06	**	Supported
H9: Motivation → Self-efficacy	0.32	4.52	***	Supported
H10: Network marketing entrepreneurial Action → Financial performance	0.39	7.36	****	Supported
H11: Social environment influence of NMO → Human capital	0.15	2.59	**	Supported
H12: Human capital → Network marketing entrepreneurial action	0.48	11.13	****	Supported
H13: Human capital → Financial performance	0.44	9.93	****	Supported

** p < 0.05, *** p < 0.01, ****p<.001

4.5 Chapter Summary

This chapter analyses the responses to the research survey and concludes that the responses are representative of the survey sample, which in turn is representative of the population of Chinese immigrant network marketers in Australia. The data matrix used in the current study comprises 227 cases and 81 indicators, which has approximately 8.21% missing values. The result derived from the analysis of missing values suggests that the data missed in the data matrix is randomly distributed.

The results obtained from the analysis of the structural model demonstrate that all 13 hypotheses proposed in the current study were supported by the findings. The model developed in the current study has a high level of goodness of fit (global GoF index=0.423). Actions undertaken and human capital have collectively positive impacts on performance explaining 57.8% ($R^2 = 0.578$). The results obtained from Q-square tests suggest that the performance of Chinese immigrant network marketers in conducting their business is well predicted by the research model.

Chapter Five

DISCUSSION AND IMPLICATIONS

5.1 Introduction to the Chapter

This chapter discusses the theoretical contributions and implications in relation to the research questions derived in Chapter 2. It briefly justifies research questions raised in the current study. After this, the findings obtained from testing the hypotheses are discussed from the perspectives of: i) testing hypotheses relative to the influence of social environment in NMOs; ii) testing hypotheses relative to the impacts of motivations on self-efficacy and the desire for opportunity; iii) testing hypotheses relative to the impacts of self-efficacy, desire for opportunity, social competence and human capital on entrepreneurial actions undertaken by network marketers; and iv) testing hypotheses relative to the factors that predict Chinese network marketers' performances in conducting their network marketing business.

The most important points discussed in this chapter are the theoretical contributions and implications. In this chapter, the contributions and implications are discussed from two perspectives: i) theoretical contributions; ii) methodological contributions.

This chapter is organized in the order of introduction to the chapter, overview of the current study, constructs in the research model, research findings, theoretical contributions and implications. The chapter concludes with the summary.

5.2 Overview of the Current Study

This research starts by identifying the gap in the literature of NMO studies. To do so, the literature on NMOs has been critically reviewed. In spite of the fact that NMOs have been in existence for several decades (Biggart, 1989) and made substantial contributions to the business world (Kuntze, 2001; Sparks & Schenk, 2001), only a limited number of empirical studies have been published until now. Among these studies, the empirical study conducted by Lin (2007) was the only one on Chinese immigrants conducting network marketing business, which provided evidence that many Chinese immigrants have been attracted to NMOs to pursue entrepreneurial opportunities (Lin, 2007). However, none of the previous studies explained what factors caused Chinese

immigrants to undertake actions and achieve their success in the network marketing business, which left a gap in the literature. It had been established that the main strategy utilized by NMOs was to create a favourable environment to attract people and motivate them (Biggart, 1989; Kuntze, 2001; Sparks & Schenk, 2006), but the relationship between the influence of the social environment in NMOs and individual network marketer's behaviours in pursuing the entrepreneurial opportunities from network marketing business is still unknown.

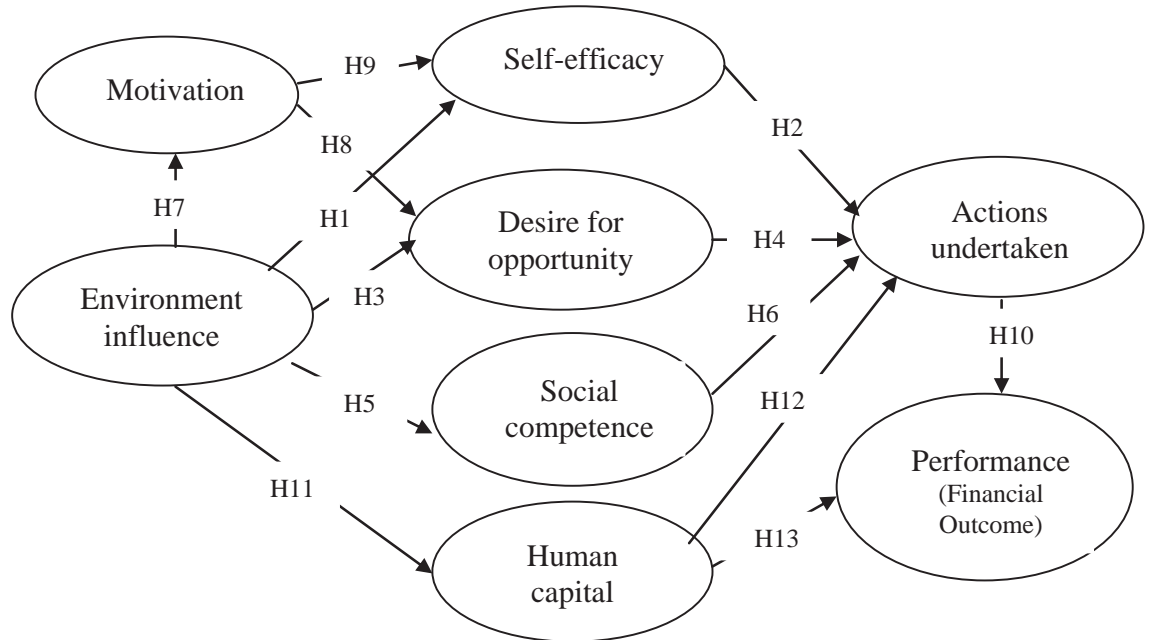
To address the gaps in the literature, the current research took Chinese immigrant network marketers in Australia as the unit of analysis, and posed the research question: *What factors determine Chinese immigrant network marketers' performance in conducting their network marketing business?* Eight focal constructs presented below were established in the study to investigate this question.

- *Influence of the social environment in NMOs*: This construct was developed from the social environment within the organization. It was operationalised on the basis of the research conducted by Sparks and Schenk (2001; 2006), Bhattacharya and Mehta (2000), Pratt (2000), and Biggart (1989). The main theoretical foundation for this construct was Social Cognitive Theory (Bandura, 1986).
- *Motivation in conducting network marketing business*: This construct was operationalised on the basis of Kuntze's (2001) study, the literature of entrepreneurial motivations (Lee & Tsang, 2001; Kisfalvi 2002; Collins et al., 2004; Hanges & Locke, 2004; Zhao & Seibert, 2006) and the literature of immigrant entrepreneurship (Chaganti & Greene, 2002; Henrekson, 2005; Sequeira & Rasheed, 2006; Ley, 2006; Bergmann & Sternberg, 2007).
- *Network marketing specific self-efficacy*: This construct was developed based on the basis of Krueger's (1993) study and supported by the Social Cognitive Theory (Bandura, 1986; 1997) and the literature of entrepreneurial behaviours (McMullen & Shepherd, 2006; Zhao & Seibert, 2006).
- *Desire for opportunity from network marketing business*: This construct was built on the basis of the Model of Entrepreneurial Intention (Krueger, 1993), Social Cognitive Theory (Bandura, 1986) and necessity theory (Henrekson, 2005; Bergmann & Sternberg, 2007).

- *Social competence*. This construct was constructed on the basis of the literature of NMO studies (Sparks & Schenk, 2006) and entrepreneurial communications (Baron & Markman 2003; Kauffeld, 2006; Zhang et al., 2008).
- *Human capital*: This construct was constructed on the basis of the literature of human capital and its positive impacts on an individual's performance (Gimeno et al., 1997; Paloniemi, 2006; Eikebrokk & Olsen, 2009).
- *Actions undertaken in conducting network marketing business*: This construct was constructed on the basis of Sparks and Schenk's (2001) study and the results obtained from the focus groups.
- *Performance (financial outcome)*: This construct was constructed on the basis of the literature of entrepreneurial performance (Sadler-Smith et al., 2003; Carland et al., 1984).

The relationships between these constructs are supported by Social Cognitive Theory (Bandura, 1986), the Theory of Planned Behaviour (Ajzen, 1991), the Model of Entrepreneurial Intention (Krueger, 1993), and the literature of immigrant entrepreneurship and NMO studies. With these constructs and the relationships between them, thirteen hypotheses were proposed and the research model was formed (Figure 5.2).

Figure 5.2: Model of Network Marketing Business Entrepreneurial Performance



5.3 Constructs in the Research Model

As mentioned in the previous section, the research model in the current study was formed with eight constructs. They are explained as follows.

Influence of the social environment in NMO: This construct is a prime variable in the research model, though it does not directly affect the actions undertaken in conducting network marketing business and the network marketer’s performance. The construct of the influence of the social environment in NMOs determines the performance by directly affecting the variables of motivation in the conduct of network marketing business, network marketing specific self-efficacy, desire for opportunity from network marketing business, social competence and human capital (Bandura, 1986). These affects are supported by Social Cognitive Theory (Bandura, 1986) and proven by the current research.

Section 5.2 indicated that the construct of the influence of the social environment in NMOs is operationalized on the basis of the research conducted by Sparks and Schenk (2001; 2006), Bhattacharya and Mehta (2000), Pratt (2000), and Biggart (1989). The reasons for applying these studies to current research are presented below.

One of the common themes reflected by the publications of empirical studies on NMOs is that independent network marketers conduct their businesses through their NMOs. These publications demonstrate the main characteristics of the NMO (Biggart, 1989), reveal the relationship between network marketers within the NMO (Sparks & Schenk, 2001; 2006), and explain the reasons for network marketers pursuing network marketing business (Bhattacharya & Mehta, 2000; Pratt, 2000). They clarified the characteristics of the influence of social environment in NMOs (cohesion, social influence, and training).

Motivation in conducting network marketing business: This construct was developed on the basis of Kuntze's (2001) study and the literature of entrepreneurial motivations (Lee & Tsang, 2001; Kisfalvi 2002; Collins et al., 2004; Hanges & Locke, 2004; Zhao & Seibert, 2006) and immigrant entrepreneurship (Chaganti & Greene, 2002; Henrekson, 2005; Sequeira & Rasheed, 2006; Ley, 2006; Bergmann & Sternberg, 2007). The explanations for applying these publications to build this construct are presented below.

Kuntze (2001) is the only researcher to date to conduct an empirical study and investigate the motivation for network marketers in conducting their network marketing business. He focused on differentiating network marketers from entrepreneurs and investigating the differences in the motivations of network marketers and entrepreneurs. The current study specifically focuses on investigating the behaviours of Chinese immigrants pursuing entrepreneurial opportunities from network marketing business. These behaviours include the motivations in conducting network marketing business. Therefore, Kuntze's (2001) study and the literature of immigrant entrepreneurship (Chaganti & Greene, 2002; Henrekson, 2005; Sequeira & Rasheed, 2006; Ley, 2006; Bergmann & Sternberg, 2007) are included in developing the construct of motivation in the conduct of network marketing business.

Kuntze (2001) suggests that network marketers are motivated extrinsically, while entrepreneurs are motivated intrinsically. However, the current study argues that Chinese immigrants involve themselves in network marketing business to pursue entrepreneurial opportunities (Lin, 2007). Thus, the literature of entrepreneurial motivations (Lee & Tsang,

2001; Kisfalvi 2002; Collins et al., 2004; Hanges & Locke, 2004; Zhao & Seibert, 2006) is included.

Network marketing specific self-efficacy: This construct is essential in the current research, as the objective of this research is to investigate the factors that determine Chinese immigrants achieving their success through pursuing entrepreneurial opportunities from network marketing business. Entrepreneurial results rely on action (McMullen & Shepherd, 2006; Zhao & Seibert, 2006). According to Social Cognitive Theory (Bandura, 1986), network marketing specific self-efficacy is one of the critical factors that determines Chinese immigrants' willingness to take actions in conducting network marketing business. In order to understand what factors determine Chinese immigrants achieving their successes through pursuing entrepreneurial opportunities from network marketing business, the investigation of network marketing specific self-efficacy is necessary.

This construct was mainly built on the basis of Krueger's (1993) Model of Entrepreneurial Intention. According to Krueger (1993), the construct of self-efficacy is formed with two concepts: i) confidence in conducting network marketing business; and ii) perception of difficulty in conducting network marketing business, which clearly express the theme of self-efficacy. This construct is supported by the Social Cognitive Theory (Bandura, 1986; 1997).

Desire for opportunity from network marketing business: This construct is essential in the current study. Like self-efficacy, desire for opportunity is also a critical factor in determining Chinese immigrant's willingness to take actions in conducting network marketing business. Therefore, it is necessary to investigate Chinese immigrant network marketers' desires for opportunities from network marketing business.

In the current study, the construct of desire for opportunity was built on the basis of the Model of Entrepreneurial Intention (Krueger, 1993) and Social Cognitive Theory (Bandura, 1986). Drawing upon the Model of Entrepreneurial Intention (Krueger, 1993), this construct is formed with three concepts: i) level of tense in carrying out network marketing business activities; ii) level of loving to conduct network marketing business; and iii) level of enthusiasm in conducting network marketing business. These concepts

reflect the theme of desire for opportunity (Bhattacharya and Mehta, 2000; Pratt, 2000) (Refer to Appendix A).

Social competence: The construct of social competence is important in determining the action undertaken in conducting network marketing business, which in turn determines the performance. This construct was developed on the basis of the literature of NMO studies (Sparks & Schenk, 2006) and entrepreneurial communication (Baron & Markman 2003; Kauffeld, 2006; Zhang, et al., 2008). The reason for applying these publications to construct the social competence was because: i) Sparks and Schenk (2006) first suggested that social communication positively affects the planning of network marketing business, which in turn, positively affects performance in the context of network marketing business. Social competence is a person's capability of communicating with others effectively (Kauffeld, 2006); ii) Baron and Markman (2003) developed the measurement for social competence in the context of business; and iii) Zhang et al. (2008) defined social competence as the overall effectiveness of a person's performance in interacting with others on a face-to-face basis.

Human capital: This construct is essential as well in the research model, as it affects the actions undertaken and the performance outcomes. Because no study conducted on human capital in the context of NMO, has been found, the concept of human capital derived from the studies of Gimeno et al. (1997), whilst Paloniemi (2006) and Eikebrokk and Olsen (2009) were borrowed to develop the construct of human capital in the current study. In the current research, human capital is defined as experiences in conducting network marketing business, measured in terms of the number of months stayed in the business multiplied by the number of weekly working hours.

Actions undertaken in conducting network marketing business: This construct directly affects the performance of Chinese immigrant network marketers in conducting their business. It was mainly constructed on the basis of Sparks and Schenk's (2001) study. Until now, Sparks and Schenk (2001) is the only study that suggests the concept of the action undertaken in conducting network marketing. In Sparks and Schenk (2001), the

concept of action undertaken is expressed as efforts to present the opportunities and sale of the products.

Performance: Performance is the only dependent variable. According to Sadler-Smith et al. (2003) and Carland et al. (1984), this variable is measured by the financial outcome.

The objective of constructs in the research model is to answer the research question from different perspectives. These constructs were developed based on previous empirical studies and relevant theories, such as, Social Cognitive Theory (Bandura, 1986), entrepreneurial intention model (Krueger, 1993), Kuntze (2001) and Sparks and Schenk (2001; 2006), etc. Theoretically, the foundations of these constructs are rational.

5.4 Research Findings

The findings from testing each of the research hypotheses are summarised and presented in Table 5.4. These tabulated hypotheses can be divided into four categories. The first category of hypotheses relates to the influence of the social environment in NMOs. It includes hypotheses 1, 3, 5, 7 and 11, which relate to the influence of the social environment in NMOs on self-efficacy in conducting network marketing business, the desire for opportunity from network marketing business, social competence, and human capital and motivation in conducting network marketing business.

The second category relates to the impacts of motivation on self-efficacy and the desire for opportunity, which includes hypotheses 8 and 9. The third category relates to the impacts of self-efficacy, the desire for opportunity, social competence and human capital on entrepreneurial actions undertaken by network marketers (hypotheses 3, 4, 6, and 12). The last category relates to the factors that directly affect network marketers' performances in conducting their network marketing business (hypotheses 10 and 13).

5.4.1 The Influence of Social Environment in NMO

The primary theory applied to the current study to develop the research model is the Social Cognitive Theory (Bandura, 1986). This theory explains human behaviour in

Table 5.4 Findings Obtained from Hypotheses Testing

Path	Hypotheses
Hypothesis 1: The influence of social environment is positively associated with Chinese immigrant network marketers' self-efficacy in conducting their business.	Supported
Hypothesis 2: There is a positive relationship between Chinese immigrant network marketers' self-efficacy and network marketing activities undertaken.	Supported
Hypothesis 3: The influence of social environment is positively associated with Chinese immigrant network marketers' desire for pursuing opportunities from network marketing business.	Supported
Hypothesis 4: There is a positive relationship between Chinese immigrants' desire for entrepreneurial opportunity and network marketing activities undertaken.	Supported
Hypothesis 5: There is a positive relationship between the social environment and the social competence of Chinese immigrant network marketers.	Supported
Hypothesis 6: There is a positive relationship between network marketers' social competence and the number of network marketing related activities they will undertake.	Supported
Hypothesis 7: There is a positive relationship between social environment and Chinese immigrant network marketers' motivations in conducting their network marketing business.	Supported
Hypothesis 8: There is a positive relationship between Chinese immigrant network marketers' motivation and their desire for opportunity.	Supported
Hypothesis 9: There is a positive relationship between motivation in conducting network marketing business and network marketing business-specific self-efficacy.	Supported
Hypothesis 10: There is a positive relationship between network marketing activities undertaken and the financial performance outcome.	Supported
Hypothesis 11: There is a positive relationship between social environment and human capital of Chinese immigrant network marketers.	Supported
Hypothesis 12: There is a positive relationship between the human capital of Chinese immigrant network marketers and network marketing activities undertaken.	Supported
Hypothesis 13: There is a positive relationship between the human capital of Chinese immigrant network marketers and the financial performance outcome.	Supported

terms of triadic, dynamic and reciprocal interactions of the environment factor, the personal and cognitive factors and the behaviour factor (Bandura, 1986).

In the current study, the environmental factor is the construct of the influence of the social environment in NMOs; the behaviour factor is composed of the constructs: i) desire for opportunity; ii) motivation; and iii) the actions undertaken to conduct network marketing business; personal and cognitive factors are composed of the constructs: i) social competence; ii) human capital; and iii) network marketing specific self-efficacy. The influence of the social environment is the most crucial construct in the current study. It results in a number of direct, causal paths to five other constructs: i) motivation ii) network marketing specific self-efficacy; iii) desire for opportunity; iv) social competence; and v) human capital. The meaning of the findings obtained from testing these hypotheses are discussed as follows.

This hypothesis is derived from the extensive literature on each source of self-efficacy in conducting network marketing business (enactive mastery experiences, vicarious experiences, verbal persuasion, and training) (Bandura, 1997). The scale for influences of social environment in NMOs is formed with three sub-scales: i) social influence in NMO; ii) the influence of training provided by NMO; and iii) influence of cohesion in the social environment of NMOs. Each of these sub-scales is formed using first order reflective scales. The scale for self-efficacy is formed with two sub-scales: i) confidence; and ii) perceived degree of difficulty. Each of these sub-scales is formed using first order reflective scales.

The characteristics of influence of the social environment in NMOs are collectively defined with cohesion in the social environment of NMOs, social influence, and training. The concepts of cohesion, social influence and training are substantially different; they do not share the same theme, and are not interchangeable. Dropping any one of these three concepts will alter the conceptual domain of the construct of influence of the social environment in NMOs. In addition, the direction of causality is from cohesion, social influence and training to the influence of the social environment in NMOs. Thus, the scale for the influence of the social environment in NMOs is identified as formative (Jarvis et al. 2003).

Hypothesis 1: Influence of Social Environment in NMOs predicts Self-efficacy in Conducting Network Marketing Business.

The network marketing specific self-efficacy is manifested with confidence and the perceived degree of difficulty. The confidence and perceived degree of difficulty share a similar theme: self-perceived capability of conducting network marketing business. The confidence and perceived degree of difficulty are interchangeable; dropping one of them will not alter the conceptual domain of the construct of self-efficacy. In addition, the direction of causality is from self-efficacy to the confidence and degree of difficulty. Thus the scale for self-efficacy is identified as reflective (Jarvis et al. 2003).

The current research has found (Table 4.4.1) that the influence of the social environment in NMOs is positively correlated to self-efficacy. This result suggests that there exists a positive relationship between the influence of the social environment in NMOs and self-efficacy. It is rational to examine this relationship and test the hypothesis 1.

The result of the path analysis (Table 4.4.2.1.1) indicates Hypothesis 1 is supported. It reveals that the influence of the social environment in NMOs positively determines the self-efficacy in conducting network marketing business. This result indicates Chinese immigrant network marketer's confidence of building successful network marketing business is positively affected by organisational cohesion, social influence and training provided by NMO.

The dynamics of the association between the influences of the social environment and self-efficacy are consistent with the literature on Social Cognitive Theory (Bandura, 1986; 1997) and the literature on training (Malone, 2001; Choi, Price & Vinokur, 2003). It can be explained from perspectives on the impacts of sub-constructs (social influence, training and cohesion) and of the influence of social environment on self-efficacy.

Social Cognitive Theory (Bandura, 1986; 1997) suggests social influence in the NMO plays an important role in raising Chinese immigrant network marketer's self-efficacy, because individual's self-efficacy is related to the attainment of others. Seeing others perform successfully in operating network marketing business in Australia typically raises self-efficacy beliefs in Chinese immigrants that they believe they possess the same capabilities to also perform successfully (Bandura, 1997). The current study argues that the

positive impacts of the influence of the social environment in NMOs on self-efficacy should be explained by Social Cognitive Theory (Bandura, 1986).

As mentioned before, the second sub-construct of the influence of social environment in NMOs is the influence of training provided by NMOs. A few empirical studies in the literature support the notion that training raises network marketer's self-efficacy (Malone, 2001; Choi, Price & Vinokur, 2003). Through training, network marketers will master network marketing business skills and increase their confidence (Bandura, 1986). Social Cognitive Theory suggests that enactive mastery, defined as repeated performance accomplishments, is an important pre-condition for the development of self-efficacy (Bandura, 1986; Axtell & Parker, 2003). From the second perspective of the sub-construct (training) on the influence of the social environment in NMOs, the current study argues that the positive impacts of the influence of social environment on self-efficacy can be explained with the literature on training (Malone, 2001; Choi, et al., 2003) and Social Cognitive Theory (Bandura, 1986).

In NMOs, most training programs are provided by experienced network marketers (Sparks & Schenk, 2001). Each of the network marketers are independent small business owners or contractors (Biggart, 1989), who have no obligation to comply with instructions from others (Sparks & Schenk, 2001). The pre-condition for running a successful training program is the cohesive environment in the NMO. The competition among NMOs is not encouraged (Sparks and Schenk, 2006). No evidence is found that cohesion impacts on self-efficacy directly, but cohesion positively affects self-efficacy through training (Bandura, 1986; Axtell and Parker, 2003).

Thus, the positive impact of the influence of the social environment in NMOs on Chinese immigrant network marketer's self-efficacy found in the current study can be well explained with Social Cognitive Theory and the relevant literature.

Hypothesis 3: the Influence of the Social Environment is Positively Associated with Immigrant Network Marketers' Desire for Pursuing Opportunities from Network Marketing Business.

This hypothesis was established on Social Cognitive Theory (Bandura, 1986), the literature of immigrant entrepreneurship (Iyer & Shapiro, 1999; Chaganti & Greene, 2002;

Sequeira & Rasheed, 2006), and necessity theory (Henrekson, 2005; Bergmann & Sternberg, 2007). The scale for desire for opportunity was formed with two sub-scales: i) tense; and ii) love/enthusiasm. Each of these sub-scales is formed using first order reflective scales.

The tense and love/enthusiasm are manifestations of the desire for opportunity. They share a similar theme: the want to conduct network marketing business. The concept of tense and love/enthusiasm are interchangeable; dropping one of them will not alter the conceptual domain of the desire for opportunity. In addition, the direction of causality is from the desire for opportunity to the tense and love/enthusiasm. Thus the scale for desire for opportunity is identified as reflective (Jarvis et al. 2003).

The result obtained in the current study (Table 4.4.1) shows that the influence of the social environment in NMOs is positively correlated to the desire for opportunity. This finding suggests that the positive relationship between the influence of the social environment in NMOs and the desire for opportunity exists. It is rational to examine this relationship and test the hypothesis 3.

The results of the path analysis (Table 4.4.2.1.1) indicate that Hypothesis 3 is supported. It reveals that the influence of the social environment in NMOs positively determines the desire for opportunity from network marketing business.

This result can be explained from the perspectives of Social Cognitive Theory (Bandura, 1986), literature of immigrant entrepreneurship (Iyer & Shapiro, 1999; Chaganti & Greene, 2002; Sequeira & Rasheed, 2006), and necessity theory (Henrekson, 2005; Bergmann & Sternberg, 2007).

Desire for opportunity is behaviour of immigrant network marketers in pursuing opportunities from network marketing business. The positive impact of the influence of the social environment on the desire for opportunity proved by the current study can be explained with Social Cognitive Theory (Bandura, 1986). Social Cognitive theory asserts that the influence of a person's social environment positively affects his/her behaviour (Bandura, 1986).

The literature of entrepreneurship suggests that the desire for profitable opportunities is an important trait of the entrepreneur (Shane & Venkataraman, 2000;

McMullen & Shepherd, 2006). This trait is influenced by the group norm through adding social pressure to act so as to achieve an outcome (Sekerka & Bagozzi, 2007).

Necessity theory suggests immigrant entrepreneurs are pushed into entrepreneurship because they have no better choices for work or for making a living (Henrekson, 2005; Bergmann & Sternberg, 2007). Immigrant entrepreneurs acquire the resources to launch new ventures from two major sources: families and the social network in their ethnic enclave (Sequeira & Rasheed, 2006). Families provide a convenient and low cost source of support (Iyer & Shapiro, 1999).

Those immigrants, such as Chinese immigrants coming from the People's Republic of China, who do not have access to suitable resources, are easily attracted to the entrepreneurship promoted by NMOs (Lin, 2007). Their desire for entrepreneurial opportunity could be strengthened by the influence of other network marketers and training provide by NMOs (Bandura, 1986). Therefore, the influence of social environment in NMOs positively affects the immigrant network marketer's desire for opportunity from the network marketing business.

Hypothesis 5: There is a Positive Relationship between the Social Environment and the Social Competence of Immigrant Network Marketers

This hypothesis is constructed on the basis of characteristics of the social environment in NMOs, Social Cognitive Theory and the literature of entrepreneurial communications (Baron & Markman 2003; Kauffeld, 2006; Zhang et al., 2008). The scale for the construct of social competence is adapted from Baron and Markman (2003), which is formed with four sub-scales: i) social perception; ii) social adaptability iii) expressiveness; and iv) impression management. Each of these sub-scales is formed using first order reflective scales.

The characteristics of social competence are collectively defined with social perception, social adaptability, expressiveness, and impression management (Baron & Markman 2003). The concepts of social perception, social adaptability, expressiveness, and impression management are substantially different; they do not share the same theme, and are not interchangeable. Dropping any one of these concepts will alter the conceptual domain of the construct of social competence (Baron & Markman 2003). In addition, the

direction of causality is from social perception, social adaptability, expressiveness, and impression management to social competence. Thus, the scale for the social competence is identified as formative (Jarvis et al. 2003).

One of findings obtained from the current research (Table 4.4.2.1.1) indicates that Hypothesis 5 is supported. This result can be explained by the characteristics of the social environment in NMOs (Sparks & Schenk, 2006) and by Social Cognitive Theory (Bandura, 1986). One of the salient characteristics of the social environment of NMOs is the cohesion (Sparks & Schenk, 2006). Social competence is an important capability for network marketers to work together and operate their businesses cohesively. This capability can be learned from others (Hoehn-Weiss et al., 2004) and obtained from the social environment of NMOs (Bandura, 1986).

Social Cognitive Theory suggests most human behaviour is learned by observation (Bandura, 1986), the same as social competence. In the social environment of NMOs, network marketers have the opportunity to observe how the experienced network marketers communicate with people who have different backgrounds, learn the communication skills from the experienced network marketers and improve their social competence. Therefore, network marketer's social competence is positively affected by the influence of social environment in NMOs. This argument is supported by the evidence in the literature (Schoenrock, et al, 1999; Soenens & Vansteenkiste, 2005).

Hypothesis 7: There is a Positive Relationship between Social Environment and Immigrant Network Marketers' Motivations in Conducting their Network Marketing Business

This hypothesis is constructed on the basis of Kuntze's (2001) study, the literature of entrepreneurial motivations (Lee & Tsang, 2001; Kisfalvi 2002; Collins et al., 2004; Hanges & Locke, 2004; Zhao & Seibert, 2006) and immigrant entrepreneurship (Chaganti & Greene, 2002; Henrekson, 2005; Sequeira & Rasheed, 2006; Ley, 2006; Bergmann & Sternberg, 2007). The scale for motivation in conducting network marketing business is formed with three sub-scales: i) intrinsic motivation; ii) extrinsic motivation; and iii) business attractiveness. The sub-scales of intrinsic motivation and extrinsic motivation are formed using first order formative scales, while the sub-scale of business attractiveness is formed using first order reflective scales.

The characteristics of motivation in conducting network marketing business are collectively defined with intrinsic motivation, extrinsic motivation and business attractiveness. The concepts of intrinsic motivation, extrinsic motivation and business attractiveness are substantially different; they do not share the same theme, and are not interchangeable. Dropping any one of these concepts will alter the conceptual domain of the construct of motivation in conducting network marketing business. In addition, the direction of causality is from intrinsic motivation, extrinsic motivation and business attractiveness to motivation. Thus, the scale for the motivation in conducting network marketing business is identified as formative (Jarvis et al. 2003).

The finding presented in Table 4.4.1 shows the influence of the social environment in NMOs positively correlates to motivation. This result suggests that there exists a positive relationship between the influence of the social environment in NMOs and motivation. It is rational to examine this relationship and test Hypothesis 7. The result of the path analysis (Table 4.4.2.1.1) indicates that Hypothesis 7 is supported. The explanation for this result is described as follows.

In the current study, the motivation for network marketers conducting their own business is conceptualized on the basis of symbolic self-completion theory (Wicklund & Gollwitzer, 1981; Kuntze, 2001), the literature of entrepreneur's traits (Collins et al., 2004; Baum & Locke, 2004; Zhao & Seibert, 2006; Stewart & Roth, 2007), and immigrant entrepreneurship (Chaganti and Greene, 2002; Zhou, 2004; Ley, 2006; Sequeira and Rasheed, 2006). The main theme reflected by the construct of motivation is the sense of rewards in terms of obtaining the title of entrepreneur, satisfying the needs of achievement, and establishing one's own business.

Social Cognitive Theory suggests that actions that bring rewards are generally repeated, whereas those that bring unrewarding or punishing outcomes tend to be discarded (Bandura, 1986). According to this theory, Chinese immigrant network marketers guide their actions undertaken by both observed consequences and the consequences they create for themselves (Bandura, 1986). Social reactions are the predictors of primary consequences; Chinese immigrant network marketers will do things for approval from others and refrain from actions that arouse the wrath of others (Bandura, 1986). Therefore,

the influence of the social environment in NMOs has a positive impact on the motivation for network marketers in conducting their network marketing business.

Hypothesis 11: there is a positive relationship between social environment and human capital of immigrant network marketers

Hypothesis 11 was developed on the basis of the literature of human capital (Paloniemi, 2006; Eikebrokk & Olsen, 2009). The current study defined human capital as the experience of conducting network marketing business, which was measured by the number of months spent in the business multiplied by the number of working hours weekly. The result of the path analysis (Table 4.4.2.1.1) indicates Hypothesis 11 is supported. The explanation for this result is presented as follows.

According to the definition of human capital in the current study, Chinese immigrant network marketers can gain such human capital from the training provided by NMOs, observing other's performance, and the personal experience of performing the network marketing business activities.

In the NMO, various training programs are available for network marketers to obtain or improve their business skills (Biggart, 1989; Sparks & Schenk, 2001). The longer a network marketer stays in the NMO, the more training he/she will receive, because training provided by the NMO is on a continuous basis (Sparks & Schenk, 2001; 2006).

Observing others' performance is another way for Chinese immigrant network marketers to obtain business skills. Sharing skills and supporting each other is one of the important characteristics in the social environment of NMOs (Biggart, 1989; Sparks & Schenk, 2001; 2006). Thus, the impact of influence of the social environment in NMOs on human capital proposed in the current study is rational and proved by the current study.

Summary: from the explanations for the results of testing hypotheses 1, 3, 5, 7 and 11, the current study argues that the factor of the influence of the social environment in NMOs is crucial for Chinese immigrant network marketers in conducting their business. It affects Chinese network marketer's behaviours and personal factors in performing their network marketing business activities.

5.4.2 The Impact of Motivations

The current study suggests that motivation directly affects two other constructs: i) desire for opportunity; and ii) self-efficacy. Based on this suggestion, Hypotheses 8 and 9 were proposed.

Hypothesis 8: There is a Positive Relationship between Immigrant Network Marketers' Motivation and their Desire for Opportunity.

This hypothesis is supported by Social Cognitive Theory (Bandura, 1986) and the literature of entrepreneurial motivation (Collins et al., 2004; Zhao & Seibert, 2006). The finding presented in Table 4.4.1 shows that a positive correlation exists between motivation and the desire for opportunity. This finding suggests that it is rational to examine and test Hypothesis 8. The result of the path analysis (Table 4.4.2.1.1) indicates that Hypothesis 8 is supported. This result is explained as follows.

According to Social Cognitive Theory, people evoke different reactions from their social environment (Bandura, 1986). Evidence in the literature shows that a large number of Chinese immigrants are attracted to network marketing organizations (Lin 2007), but only those Chinese immigrants, who have a strong need for achievement, will have a desire for the entrepreneurial opportunity arising from network marketing business. The need for achievement is the most important construct of motivation for entrepreneurs to pursue entrepreneurial opportunity (Collins et al., 2004; Zhao & Seibert, 2006). Therefore, the high level of motivation that Chinese immigrant network marketers have, the stronger desire they will have for pursuing the entrepreneurial opportunity from network marketing business.

Hypothesis 9: There is a Positive Relationship between Motivation in Conducting Network Marketing Business and Network Marketing Business-specific Self-efficacy.

This hypothesis is also supported by Social Cognitive Theory (Bandura, 1986) and the literature of entrepreneurial motivation (Collins et al., 2004; Zhao & Seibert, 2006). The finding presented in Table 4.4.1 shows that a positive correlation exists between motivation and self-efficacy. This finding suggests that it is rational to examine and test

Hypothesis 9. The result of the path analysis (Table 4.4.2.1.1) indicates that Hypothesis 9 is supported. This result is explained as follows.

According to Social Cognitive Theory, a person's level of motivation is based more on what they believe than on what is objectively true (Bandura, 1997). According to this theory, the current study argues that a person's self-efficacy positively affects his/her motivation. This argument is supported by a few empirical studies in the area of training (Carlson et al. McMahan, 2000; Tracey, et al. 2001; Tai, 2006), which show that the higher level of self-efficacy possessed by a trainee, the more motivated s/he will be for undertaking training.

Self-efficacy describes a personal factor of Chinese immigrant network marketers in pursuing entrepreneurial opportunities from network marketing business. Motivation also describes a behaviour of entrepreneurially oriented Chinese immigrants in pursuing entrepreneurial opportunities from network marketing business. Social Cognitive Theory asserts both the behaviour factor (motivation) and the personal factor (self-efficacy) affect reciprocally (Bandura, 1986). It means that the higher level of self-efficacy causes a higher level of motivation, which in turn also causes a higher level of self-efficacy.

According to the literature of necessity entrepreneurship (Bergmann & Sternberg, 2007; Block and Keollinger, 2009), immigrant entrepreneurship (Chaganti & Greene, 2002; Sequeira & Rasheed, 2006) and the NMO study (Biggart, 1989; Lin 2007), pursuing entrepreneurship is the initial motivation for Chinese immigrants to be involved in network marketing business. The Chinese immigrants motivated by entrepreneurship have a need for achievement (Zhao & Seibert, 2006) and are willing to face challenges and take actions to establish their own ventures (McMullen & Shepherd, 2006).

Compared to other types of business ventures, establishing a network marketing business is claimed to be the easiest way to start one's own business, because it does not require much expenditure or special skills in start-up (Biggart, 1989; Kuntze, 2001; Sparks & Schenk, 2001; 2006). Therefore, the higher level of motivation for pursuing entrepreneurship that a Chinese immigrant has, the higher level of self-efficacy s/he will have in operating a network marketing business. The motivation for pursuing entrepreneurship in network marketing business positively affects network marketing-specific self-efficacy.

Summary: In accord with the testing hypotheses 8 and 9, the current study argues that the motivation factor for Chinese immigrants conducting their network marketing business is another important construct. It positively affects Chinese immigrants' behavioural factor (desire for opportunity) and personal factor (self-efficacy) in performing their network marketing business activities.

5.4.3 Impacts on Action Undertaken in Conducting Network Marketing Business

The construct of action undertaken is established on the basis of the literature of entrepreneurship (Shane & Venkataraman, 2000; Echhardt & Shane, 2003; McMullen & Shepherd, 2006) and NMOs (Spark & Schenk, 2001) and the results obtained from focus groups. According to Spark and Schenk's (2001) notion in measuring for the effort of conducting network marketing business, the current study built the construct of action undertaken from the perspectives of weekly working hours in operating a network marketing business and weekly sales.

The characteristics of action undertaken in conducting network marketing business are collectively defined with weekly working hours in selling products, presenting business opportunities, recruiting new members and training new members and number of sale orders made. The concepts used to measure the action undertaken are substantially different; they do not share the same theme, and are not interchangeable. Dropping any one of these two concepts will alter the conceptual domain of the action undertaken in conducting network marketing business. In addition, the direction of causality is from the concepts of weekly working hours in selling products, presenting business opportunities, recruiting new members and training new members and the number of sale orders achieved relative to the action undertaken. Thus, the scale for the action undertaken in conducting network marketing business is identified as formative (Jarvis et al. 2003).

The research model indicates that the action undertaken in conducting network marketing business is collectively affected by the constructs of self-efficacy, desire for opportunity, social competence and human capital. To investigate these relationships, four hypotheses (Hypotheses 2, 4, 6 and 12) were proposed and tested.

Hypothesis 2: There is a Positive Relationship between Immigrant Network Marketers' Self-efficacy and Network Marketing Activities Undertaken.

This hypothesis is supported by Social Cognitive Theory (Bandura, 1986), the Theory of Planned Behaviour (Ajzen, 1991), and the Model of Entrepreneurial Intention (Krueger, 1993). The finding presented in Table 4.4.1 shows that a positive correlation exists between self-efficacy and action undertaken. This result suggests it is rational to propose and test Hypothesis 2.

The result of the path analysis (Table 4.4.2.1.1) indicates that Hypothesis 2 is supported. This finding suggests that actions undertaken by network marketers in conducting network marketing business are affected by their self-efficacy belief. This finding may be explained as follows.

Social Cognitive Theory asserts a person's level of action undertaken is based more on what they believe about whether they will be able to achieve the desired result or not, rather than on what is objectively true (Bandura, 1986; 1997). A person's beliefs in their efficacy, influences the course of action they choose to pursue, how much effort they apply in given endeavours, and how long they will persevere in the face of obstacles and failures (Bandura, 2001). Therefore, self-efficacy is an important determinant of human behaviour (Forbes, 2005).

The positive impact of self-efficacy on the action undertaken suggested by Social Cognitive Theory is partially supported by the Model of Entrepreneurial Intention (Krueger, 1993). The Model of Entrepreneurial Intention and the Theory of Planned Behaviours assert that self-efficacy is one of the determinants of entrepreneurial intention, and positively affects entrepreneurial intention (Choo & Wong, 2006; Ajzen, 1991; Krueger, 1993). Thus, the result of testing Hypothesis 2 in the current study can be fully explained by Social Cognitive Theory, supplemented by the Theory of Planned Behaviour and the Model of Entrepreneurial Intention.

Hypothesis 4: There is a Positive Relationship between Immigrants' Desire for Entrepreneurial Opportunity and Network Marketing Activities Undertaken.

The result of the path analysis (Table 4.4.2.1.1) indicates that Hypothesis 4 is supported. This finding suggests that actions undertaken by network marketers in

conducting network marketing business can be predicted by their desire for opportunity. This finding is explained as follows.

The Theory of Planned Behaviour suggests that attitudes towards the behaviour and subjective norms are important predictors of behavioural intention (Ajzen, 1991), which in turn, predicts the actions (Choo & Wong, 2006). Attitude is one of the best predictors of desires (Armitage & Conner, 2001). In the entrepreneurial intention model, attitude and subjective norms are translated into the perceived desirability (Krueger, 1993; Krueger & Brazeal, 1994; Krueger et al., 2000). Perceived desirability partly drives entrepreneurial activity (Shapero, 1975; Krueger, 1993) and affects entrepreneurial intentions (Krueger, 1993).

According to the Theory of Planned Behaviour (Ajzen, 1991), entrepreneurial actions undertaken in the network marketing business could be predicted by the network marketer's entrepreneurial intention to conduct network marketing business. This claim is supported by a few empirical studies (e.g. Hooft et al., 2005; Westaby, 2005). For example, Hooft et al. (2005) found that the intention to search for a job was significantly predictive of job search behaviours. Westaby (2005) demonstrated that the intention to keep working predicts the behaviour.

In entrepreneurship literature, the positive relationship between entrepreneurial intention and entrepreneurial action undertaken are also supported (e.g. Bird & Jelinek, 1988; Krueger, 1993; Jung, Ehrlich & Noble, 2001; Choo & Wong, 2006).

Based on the Theory of Planned Behaviour and other previous studies, the current study argues that desire for entrepreneurial opportunity affects the intention to pursue entrepreneurial opportunity, which in turn determines the entrepreneurial actions undertaken. Therefore, it is predictable that the desire for entrepreneurship positively affects entrepreneurial actions undertaken. This prediction is supported by Social Cognitive Theory (Bandura, 1986) and proved by the result of this study.

According to Social Cognitive Theory (Bandura, 1986), the desire for opportunity and actions undertaken in pursuing the opportunity are behavioural factors, and the intention to pursue an opportunity is the cognitive factor. The behaviour factor of desire for opportunity positively affects the cognitive factor of the intention to pursue the opportunity,

which in turn, positively affects another behaviour factor, the action undertaken. Thus, the desire for opportunity positively affects actions undertaken.

Hypothesis 6: There is a Positive Relationship between Network Marketers' Social Competence and the Number of Network Marketing Business Related Activities they will Undertake.

This hypothesis is derived from the literature of entrepreneurial communication (Baron & Markman 2003) and NMO studies (Sparks & Schenk, 2001; 2006). The finding presented in Table 4.4.1 shows that a positive correlation exists between social competence and the action undertaken. This result suggests that Hypothesis 6 should be proposed and tested.

The result of the path analysis (Table 4.4.2.1.1) indicates Hypothesis 6 is supported. This finding suggests that actions undertaken by Chinese immigrant network marketers in conducting network marketing business can be affected by social competence. This finding may be explained as follows.

Evidence in the literature indicates that social competence is positively related to entrepreneurial success (Baron & Markman 2003), business performance and academic achievement (Porath & Bateman, 2006). Researchers argue that business performance relies on actions (McMullen & Shepherd, 2006).

The main actions of network marketing organizations are selling products, recruiting new network marketers and supporting and training them to do the same things (Granfield & Nicols, 1975; Biggart, 1989; Bloch, 1996; Pratt, 2000; Koehn, 2001; Sparks & Schenk, 2001; 2006), which involve many interactions between network marketers and their prospects. The effectiveness in interacting with others is the mark of social competence (Baron & Markman, 2003) and social competence is one of the important abilities for network marketers to conduct their business.

Social competence is a personal factor while action undertaken is a behavioural factor (Bandura, 1986). According to Social Cognitive Theory (Bandura, 1986), the personal and behavioural factors impact reciprocally. From this theory, it is predictable that social competence positively affects actions undertaken. Therefore, Hypothesis 6 is proposed and proven by the result obtained in the current study.

Hypothesis 12: There is a Positive Relationship between the Human Capital of Immigrant Network Marketers and Network Marketing Activities Undertaken.

This hypothesis is supported by Social Cognitive Theory (1986). The finding presented in Table 4.4.1 shows the existence of a positive correlation between human capital and action undertaken. This result suggests it is rational to propose and test Hypothesis 12.

The result of the path analysis (Table 4.4.2.1.1) indicates that Hypothesis 12 is supported. This finding suggests that actions undertaken by Chinese immigrant network marketers in conducting network marketing business can be positively affected by human capital. This finding may be explained as follows.

As previous mentioned, human capital is defined as Chinese immigrant network marketer's experiences of conducting network marketing business. It is a personal factor. According to Social Cognitive Theory (Bandura, 1986), this personal factor (human capital) positively affects the behaviour factor (actions undertaken). Thus, Hypothesis 12 is proposed and proved by the current research.

Summary: According to the explanations for the results arising from testing Hypotheses 2, 4, 6, and 12, the current study argues that the action undertaken in conducting network marketing business is another crucial construct. The factor, action undertaken, is caused by self-efficacy, desire for opportunity, social competence and human capital.

5.4.4 Impacts on Performance

The construct, performance, is the dependent variable. It is defined as the income earned by Chinese immigrant network marketers from operating their business. The research model shows that the construct, performance, is collectively determined by the construct human capital and the action undertaken. Two hypotheses (Hypotheses 10 and 13) are proposed to explain these determinations.

Hypothesis 10: There is a Positive Relationship between Actions Undertaken by Network Marketers and the Financial Performance Outcome.

This hypothesis is developed on the basis of the literature of entrepreneurship (Sadler-Smith et al., 2003; Carland et al., 1984). The finding presented in Table 4.4.1 shows the existence of a positive correlation between the action undertaken and performance. This result suggests that it is rational to propose and test Hypothesis 10.

The result of the path analysis (Table 4.4.2.1.1) indicates Hypothesis 10 is supported. This finding suggests that performance can be predicted by the action undertaken by Chinese immigrant network marketers in conducting network marketing business. This finding may be explained as follows.

One of the important objectives for entrepreneurial activities is to pursue profitability (Sadler-Smith et al., 2003; Carland et al., 1984). To achieve entrepreneurial results, entrepreneurial actions must be taken (McMullen & Shepherd, 2006). Entrepreneurial actions remain at the core of how an entrepreneur stretches to reach his/her objective and improve performance (Kuratko et al., 2001). The main actions undertaken by network marketers include selling products and recruiting new network marketers (Granfield & Nicols, 1975; Biggart, 1989; Sparks & Schenck, 2001; 2006; Lin, 2007). It is predictable that the more actions undertaken by the Chinese immigrant network marketers, the better financial results will be achieved. Thus, Hypothesis 10 was proposed and proven by the current research.

Hypothesis 13: There is a Positive Relationship between the Human Capital of Chinese Immigrant Network Marketers and the Financial Performance Outcome.

This hypothesis is developed on the basis of the literature of human capital (Gimeno, et al., 1997; Shrader & Siegel, 2007). The finding presented in Table 4.4.1 shows that the existence of a positive correlation between human capital and performances. This result suggests that Hypothesis 13 should be proposed and tested.

The result of the path analysis (Table 4.4.2.1.1) indicates Hypothesis 13 is supported. This finding suggests that performance can be predicted by human capital. This finding may be explained as follows.

In the current study, human capital is defined as the experiences of conducting a network marketing business. Experience is a valuable asset to improve business performance (Shrader & Siegel, 2007). Empirical studies suggest the positive relationship

between experiences (human capital) and entrepreneurial performance (Gimeno, et al., 1997; Shrader & Siegel, 2007). Experiences have been shown to increase productivity (Shrader & Siegel, 2007) and reduce the chance of making mistakes.

5.4.5 Summary of the Discussion about Hypotheses

Section 5.4 presents the results of testing the hypotheses, demonstrating that all thirteen proposed hypotheses are supported and thirteen key findings are obtained:

- The influence of the social environment in NMOs positively affects immigrant network marketers' self-efficacy in conducting their network marketing business.
- Immigrant network marketers' self-efficacy positively affects the entrepreneurial actions they undertake in conducting the network marketing business.
- The influence of the environmental influence in NMOs positively affects immigrant network marketers' desire for opportunities from network marketing business.
- Immigrants' desire for opportunities from network marketing business positively affects the entrepreneurial actions they take in conducting network marketing business.
- The influence of the social environment in NMOs positively affects immigrant network marketer's social competence.
- An immigrant network marketers' social competence positively affects the actions he/she takes in conducting network marketing business.
- The influence of the social environment in NMOs positively affects immigrant network marketers' motivations in conducting their network marketing business.
- Immigrant network marketers' level of motivation in conducting network marketing business positively affects their desire for opportunity from network marketing businesses.
- The level of motivation in conducting network marketing business positively affects the network marketing business specific self-efficacy.

- The entrepreneurial actions undertaken by immigrant network marketers in conducting the network marketing business positively determines the financial outcomes.
- The influence of the social environment in NMOs positively affects immigrant network marketers' human capital.
- The human capital an immigrant network marketer possesses positively predicts the conduct of a network marketing business.
- Immigrant network marketers' network marketing specific human capital positively affects their financial performance outcomes.

These thirteen tested hypotheses involving eight constructs are divided into four different categories and explained from theoretical perspectives. Among these four categories of hypotheses, only two hypotheses (Hypotheses 10 and 13) directly affect the dependent variable (performance), whereas the other hypotheses affect the dependent variable indirectly by affecting the personal and behavioural factors related to the impacts on actions undertaken in conducting the network marketing business. Two of the eight constructs (self-efficacy and the desire for opportunity) are reflective, and four (the influence of social environment in NMOs, motivation, social competence and action undertaken) are formative.

The formative constructs are collectively defined with their sub-constructs. The concepts of sub-constructs in each formative construct are substantially different (Jarvis et al., 2003); they do not share the same theme, and are not interchangeable (Jarvis, et al., 2003). Dropping any one of them will alter the conceptual domain of the formative construct. In addition, the direction of causality is from sub-constructs to the formative construct (Jarvis, et al., 2003).

Reflective constructs are manifested with their sub-constructs. The concepts of sub-constructs in each reflective construct share a similar theme with each other; they are interchangeable (Jarvis, et al., 2003). Dropping one of them will not alter the conceptual domain of the reflective construct. In addition, the direction of causality is from the reflective construct to its sub-constructs (Jarvis, et al, 2003).

Based on these articulations in explaining the results of the hypotheses testing, the theoretical contributions and implications are identified and presented in Section 5.5.

5.5 Theoretical Contributions and Implications

This research applies the literature of Social Cognitive Theory (Bandura, 1986), the Theory of Planned Behaviour (Ajzen, 1991), immigrant entrepreneurship (Chaganti & Greene, 2002; Sequeira & Rasheed, 2006) and network marketing organization studies (Biggart, 1989; Kuntze, 2001; Sparks and Schenk, 2001; 2006) to establish the theoretical framework of the influence of the social environment, personal and behavioural factors, and performance. Thus, a rich and comprehensive path model of network marketing business entrepreneurial performance is developed by integrating the key conceptual frameworks across multiple disciplines. Based on PLS methodology, the model is analysed using *SmartPLS* (Ringle et al., 2005), which suggests that a model has good predictive ability and a high level of goodness of fit. The analysis of the model reveals several contributions to the literature.

First, several paths are discovered. The first path, the influence of the social environment – self-efficacy – action undertaken path, is represented by the relationships between a stronger influence of the social environment, higher self-efficacy, and more actions undertaken. The second path, the influence of social environment – desire for opportunity – action undertaken path, is represented by the relationships between the stronger influence of the social environment, greater desire for opportunity, and more actions. The third path, the influence of social environment – social competence – action undertaken path, is represented by the relationships between the stronger influence of the social environment, higher level of social competence, and more actions undertaken. The fourth path, the influence of social environment – human capital – action undertaken path, is represented by the relationships between the stronger influence of the social environment, better human capital, and more actions undertaken. The analyses also reveal that the influence of the social environment in network marketing organizations positively impact motivation, which in turn positively impacts self-efficacy and the desire for opportunity. These paths explain the process whereby Chinese network marketing organizations develop the Chinese network marketers as part of the training and development process

outcomes in these individuals, actively participating in network marketing organization activities. It demonstrates that the social environment in network marketing organizations leads to the development of network marketers' desire for opportunities from network marketing business and self-efficacy, social competence and human capital.

The paths discovered in this research start from a common point: the influence of social environment, and end at the point of performance. These paths go through the constructs of self-efficacy, desire for opportunity, social competence, human capital and the action undertaken respectively and demonstrate the relationships between these constructs. With these paths, the relationship between the influence of the social environment in NMOs and performance, has been established and tested. Thus, the second contribution made by this study is the empirical support for the thirteen relationships between the constructs (the influence of social environment in the network marketing organization, motivation, and self-efficacy, the desire for opportunity, social competence, human capital, action undertaken and performance).

One of the most important constructs in the model developed in the current study is the influence of the social environment in NMOs. This construct affects performance via personal factors (self-efficacy, social competence and human capital) and behavioural factors (motivation, desire for opportunity and actions undertaken). Five key findings (refer to Section 5.4.5) are obtained from testing the impacts of the construct of the influence of social environment in NMOs on the personal and behavioural factors (motivation, self-efficacy, desire for opportunity, social competence and human capital), which generate a rich knowledge for the literature of NMOs. These findings expand the application of Social Cognitive Theory (Bandura, 1986) to the area of NMO study and enrich the literature of NMO study.

The action undertaken in conducting network marketing business is also an important factor. Not only does it cause the performance (financial outcome), but it is also caused by personal and other behavioural factors (self-efficacy, desire for opportunity, social competence and human capital) in the model developed in this study. From the testing of the causal relationship between personal and behavioural factors and the actions undertaken in conducting network marketing business, four findings are obtained (refer to Section 5.4.5). These findings expand the application of Theory of Planned Behaviour

(Ajzen, 1991) and the Entrepreneurial Intention Model (Krueger, 1993) to the area of NMO study, enhancing the understanding of the behaviours of network marketers in conducting network marketing business, and assisting theorists in studying NMOs in future.

Social Cognitive Theory (Bandura, 1986) describes human functioning in terms of a model of triadic reciprocity in which behaviour, cognitive and other personal factors, and environmental events all operate as interacting determinants of each other (Bandura, 1986). Besides operating as interacting determinants of behaviour, cognitive and other personal factors, the findings obtained from the current study conform to Bandura's (1986) suggestion that environmental events may determine behaviour, cognitive and other personal factors when the environmental influence is powerful enough. Thus, the third contribution made by this study is the identification of the factors that determine immigrants' pursuit of entrepreneurship in the field setting of network marketing organization.

Advances in NMO studies are characterised by the combination of reflective and formative constructs being conceptualised from complex multidimensional phenomena measurement with multiple reflective or formative items (Sparks & Schenk, 2001; 2006). The model developed in this study is represented with multiple formative and reflective constructs, with each construct further represented by multiple sub-constructs, and the fine level items to encompass the rich and broad domain of the model's constructs. The model proposed and tested here is both theoretically meaningful and managerially useful. Thus, the fourth contribution made by this study is the operationalization of the constructs, from reflective to formative – the results strongly support using the Partial Least Squares approach in future research on network marketing organization.

The Theory of Planned Behaviour (Ajzen, 1991) suggests that the individual's intention to perform a given behaviour can be predicted by three conceptually independent determinants, which are: i) the attitude towards the behaviour; ii) the subjective norm; and iii) the degree of perceived behavioural control. Krueger (1993) applied the Theory of Planned Behaviour (Ajzen, 1991) to develop the models of entrepreneurial intentions. In Krueger's (1993) model, the attitude towards the behaviour and social norm (Ajzen, 1991) were replaced by perceived desirability, and the perceived behavioural control was replaced by perceived self-efficacy (feasibility) (Krueger, 1993). According to Krueger

(1993), perceived desirability and self-efficacy predict entrepreneurial intention, and this in turn, determines entrepreneurial action. In the current study, the perceived desirability is replaced by the desire for opportunity and the finding suggests that entrepreneurial actions are directly caused by self-efficacy and the desire for opportunity.

Kuntze (2001) suggests that network marketers are entrepreneurial dreamers rather than real entrepreneurs. He argues that network marketers have a far lesser sense of creativeness, such as innovation, than successful entrepreneurs, because there is no need for them to conceptualise a new type of business and just get the products from a network marketing firm and sell them to whomever they know (Kuntze, 2001). The current study disagrees with Kuntze's (2001) view on the identity of network marketers as entrepreneurial dreamers. Kuntze (2001) suggests network marketers are motivated extrinsically. The finding obtained in the current study indicates that experienced network marketers are motivated intrinsically. This study argues that entrepreneurship in the network marketing industry is more than a type of economic action; it is bound up in an idea about patriotism (in the context of the USA), equality, freedom, and free enterprise (Biggart, 1989). The sense of creativeness for network marketers is reflected in pursuing a better life with creative ways. Network marketing entrepreneurs experience the sense of alignment between their personal values and their NMO's mission and purpose (Milliman, Czaplewski and Ferguson, 2003).

With the engagement with Kuntze (2001) and supports from the literature of NMOs (Biggart, 1989, Sparks Schenk, 2001) and immigrant entrepreneurship (Chaganti and Greene, 2002; Henrekson, 2005; Sequeira and Rasheed, 2006; Ley, 2006; Bergmann and Sternberg, 2007), the current research first identifies network marketers as network marketing entrepreneurs, develops the measurement for the motivation of network marketing entrepreneurs and links NMO study with immigrant entrepreneurship. This linkage has shed light in the understanding of immigrant entrepreneurship from the perspective of NMO.

From a review of the major empirical studies conducted in the area of NMOs (Biggart, 1989; Bhattacharya & Mehta, 2000; Sparks & Schenk, 2006), the current study reveals the insight of NMO and identified that creating a favourable social environment within the NMOs is an important strategy utilised by NMOs to attract and motivate

network marketers. This understanding contributes knowledge to the literature of NMO studies.

From a sociological perspective which covered family relations, ideology, gender, business culture and economic history, Biggart (1989) conducted the first comprehensive study of NMOs. Based on Biggart (1989) and Sparks and Schenk (2001; 2006), the current study analysed the social environment in NMOs from macro-level and micro-level, summarised the main characteristics of the influence of the social environment in NMOs as: i) cohesion; ii) social influence; and iii) training. The current study tested the relationships between the influence of the social environment in NMOs with other variables (self-efficacy, desire for opportunity, social competence, human capital and motivation); and enhanced the understanding of the relationship between the influence of social environment in NMOs and network marketers' personal factors and behavioural factors. With such an understanding, the strategy applied by NMO, network marketer's personal and behavioural factors and performance are theoretically linked together. This linkage reveals the insight of the impact of social environment in NMOs on performance, provides a new perspective in the understanding of immigrant network marketers' performance in pursuing entrepreneurship in the network marketing business, and makes contributions to the literature of NMOs and entrepreneurship.

Potentially this research may assist future researchers in understanding network marketers when they study the relationship between performance and leadership, or motivation in the context of network marketing organization. With such an understanding, more theoretical models or theories may be developed.

Sparks and Schenk (2001) studied leadership on an individual basis in the context of NMOs. They suggested that transformational leadership style is a viable leadership style in NMOs, as network marketers are independent small business owners who had no obligations to comply with instructions from the management of network marketing firms (Sparks and Schenk, 2001). However, Sparks and Schenk (2001) did not address the relationship between the transformational leadership and the network marketer's performance. If future researchers wished to explore the relationship between the transformational leadership and performance, they may apply the methodology used and/or results obtained in the current study.

Research of entrepreneurship has a long history and a large number of publications (Schaper & Volery, 2004; McMullen & Shepherd, 2006), but the current research is the first empirical study to explore network marketing entrepreneurial behaviours, which expands the study of entrepreneurship to the context of network marketing business. Unlike entrepreneurs who pursue their entrepreneurship through competition with other entrepreneurs (Schaper & Volery, 2004), network marketers pursue their entrepreneurship based on cooperation with other network marketers (Sparks & Schenk, 2001). The current study provides evidence to show that cooperation rather than competition with others can achieve entrepreneurial success in the context of network marketing business. This evidence may encourage researchers to study small business owners who pursue entrepreneurship from a cooperative environment perspective.

Immigrant entrepreneurship started attracting researchers' attention in the most recent decade (Iyer & Shapiro, 1999; Chaganti & Greene, 2002; Zhou, 2004; Ley, 2006; Sequeira & Rasheed, 2006). The main reason offered for immigrants to pursue self-employment was that immigrants were disadvantaged in the labour market (Iyer & Shapiro, 1999; Chaganti & Greene, 2002; Zhou, 2004; Ley, 2006; Sequeira & Rasheed, 2006). They start a business as a means of economic survival (Chaganti & Greene, 2002). Studies suggested that immigrant entrepreneurs raised the resources from their social networks to start-up their ventures (Iyer & Shapiro, 1999; Sequeira & Rasheed, 2006). One of the important traits for entrepreneurs is their high need for achievement (Stewart & Roth, 2007). The current study reveals how immigrants, who have a strong need for achievement without access to resources, pursue entrepreneurship through network marketing business and extends the immigrant entrepreneurship studies into the context of NMOs.

In addition to the theoretical contributions, the current study may also serve as exemplars for empirical studies. The purpose of the current research is to answer the question: *What factors determine immigrant network marketer's performance in conducting their network marketing business?* The nature of the research is to engage with the world of theory, such as Social Cognitive Theory (Bandura, 1986) and the world of practice (the performance of immigrant network marketers in conducting network marketing business) to develop a model and examine a range of factors impacting on the performance of immigrants in network marketing business. The rationale of the casual

relationship between the constructs in the research model are explained with Social Cognitive Theory (Bandura, 1986), the Theory of Planned Behaviour (Ajzen, 1991) and the literature of entrepreneurship. A large number of publications applying Social Cognitive Theory to business and management research were available for the current research to develop the hypotheses, whereas only a small number of publications on research into NMOs were available to develop the measurements. Based on the deductive research strategy, the current research adopted a cross-sectional design, selected the quantitative research method and used focus groups to validate the measurements. This research demonstrates that adopting the proper research strategy and design and selecting appropriate research method may be the assurance of the sound research results (Bryman & Bell, 2007, p. 44).

In the current research, four decision rules were applied to identify the constructs as formative or reflective (Jarvis et al., 2003). They re-emphasised the importance of differentiating reflective constructs from formative constructs, since misspecification of constructs can bias structural estimation and affect the statistical significance of the parameter estimate (MacKenzie et al., 2005; Petter et al., 2007). This study can serve as an exemplar for applying decision rules (Jarvis et al., 2003) to differentiate formative constructs from reflective constructs in the empirical study.

Another exemplar, for which the current research may serve, is in the application of multiple statistical packages (SPSS, AMOS and SmartPLS) in the one empirical study. To examine the reflective measurement and reduce the number of indicators of reflective measurement to a manageable level, without altering the conceptual domain of the construct (Jarvis et al., 2003), the SPSS and AMOS statistical packages were applied. The proposed reflective and formative measurements and the structural model were estimated simultaneously using the SEM-based PLS methodology.

The issue of simultaneity is important since the measures often draw their meaning from the structure within which they are embedded. This is particularly so for constructs measured with formative indicators, such as the motivation construct used here, whose measurement properties can neither be assessed using reliability measures such as Cronbach's alpha, nor be assessed using validity measures such as convergent validity and discriminant validity.

Another important advantage of the methodology applied in the current research is that it forces researchers to think about the measurement issues while developing their conceptual models. The rigorous methodology used in this study will hopefully push NMO research to a more scientific level.

5.6 Chapter Summary

This chapter discussed the research project holistically. It explained the constructs in the research model one by one and divided the findings obtained from the testing of the hypotheses into four categories: i) findings obtained from the testing of hypotheses related to the influence of social environment in NMOs; ii) findings obtained from the testing of hypotheses related to the impacts of motivation; iii) findings obtained from the testing of hypotheses related to the impacts of self-efficacy, desire for opportunity, social competence and human capital on network marketing business entrepreneurial actions undertaken by network marketers; and iv) findings obtained from the testing of hypotheses related to the factors that determine Chinese network marketers' performances in conducting their network marketing business. The discussion about the findings was carried out on the basis of these four categories.

The main contributions and implications made by the current research to the literature of NMO studies include: i) discovery of four cognitive paths with a common start point of the influence of the social environment and the end point of performance; ii) empirical support for the thirteen relationships between the constructs (the influence of the social environment in the network marketing organization, motivation, self-efficacy, desire for opportunity, social competence, human capital, action undertaken and performance); iii) the identification and examination of the factors that determine immigrants' pursuit of entrepreneurship in the field setting of network marketing organizations; and iv) the operationalization of the constructs, from reflective to formative – the results strongly support using a Partial Least Squares approach in future research on network marketing organizations. Potentially this research may assist future researchers in understanding network marketers when they study the relationship between performance and leadership or motivation in the context of network marketing organizations. With such an

understanding, more theoretical models may be developed. In addition, the current study may also serve as an exemplar for future studies.

Chapter Six

CONCLUSION

6.1 Chapter Introduction

This chapter is the final chapter of the thesis. It highlights the contributions made by the current research, indicates the practical implications and points out the limitations of the current study. In this chapter, the direction of future studies and implications for the area covered by the current research are suggested, and the conclusions of the current research are presented. The chapter is organized as follows: the background of the current research, practical implications, limitations, and future studies. The last section of this chapter contains the conclusions of the current research.

6.2 Background of the Current Research

This research project is the first study to explore the factors determining immigrant network marketers' performance in their network marketing business activities. The purpose of this research is to answer the research question and fill the gap in the literature of NMO studies to enhance the understanding of immigrants establishing their network marketing business in the Western host country.

This project started by reviewing the literature and identifying the gaps. The literature gap identified in the current study is that many immigrants have been attracted to network marketing business to pursue entrepreneurial opportunities (Lin, 2007), but none of previous studies explained what factors determined why and how these immigrants undertook actions to perform in their network marketing businesses and achieve success. To fill this gap, the research question was raised: *What factors determine immigrant network marketer's performance in conducting their network marketing business?*

To answer the research question, a deductive research strategy was adopted. The reason for adopting this strategy was because many publications were available on entrepreneurship and the application of Social Cognitive Theory (Bandura, 1986) and the Theory of Planned Behaviour (Ajzen, 1991) to the studies of entrepreneurship (Bryman & Bell, 2007). In the beginning of the current research, a comprehensive literature review on

network marketing organization studies was conducted and a literature gap was located. To fill this gap, a research framework was developed based on Social Cognitive Theory (Bandura, 1986), the Theory of Planned Behaviour (Ajzen, 1991), the literature of entrepreneurship (Krueger, 1993; Krueger & Brazeal, 1994; Baron & Markman 2003; Collins et al., 2004; Zhao & Seibert, 2006; McMullen & Shepherd, 2006;), and NMO studies (Biggart, 1989; Bhattacharya & Mehta, 2000; Pratt, 2000; Kuntze, 2001; Sparks & Schenk, 2001; 2006; Lin, 2007). The research framework included eight constructs: i) the influence of the social environment in NMOs; ii) motivation; iii) self-efficacy; iv) desire for opportunity; v) social competence; vi) human capital; vii) actions undertaken; and viii) performance. Among these constructs, performance was the dependent variable. To investigate the relationship between these constructs, thirteen hypotheses were proposed and the research model, the Model of Network Marketing Business Entrepreneurial Performance, was developed.

The current research was a cross-sectional design. The main reason for choosing a cross-sectional design was because it was impossible to manipulate the variables (Bryman & Bell, 2007), as: i) network marketers were independent contractors who have no obligations to comply with instructions from others (Sparks & Schenk, 2001); and ii) for a large number of participants involved in the study, it was extremely difficult to manipulate the variables in such a large group of participants with limited financial resources and time.

The research setting was Chinese immigrant network marketers in Australia. Considering the small number of published empirical studies on network marketing organization, a focus group approach was adopted as the method to validate the measurement. A quantitative approach supplemented the research method.

To ensure the validity of the data collected from the field, the development of the survey questionnaire went through several steps following the process outlined in Hinkin (1995). The first step in designing the questionnaire was the literature review. Based on the outcomes of the literature review, the existing measurements for the variables were located and questions for the focus group study were framed.

The second step in the design of the questionnaire was to conduct focus groups. To avoid the weaknesses of the focus group, multi focus group interviews were conducted. The third step was to develop the preliminary questionnaire based on the results obtained

from literature review and focus group interviews, followed by the fourth step, pilot testing the questionnaire. With the results derived from the pilot study, the questionnaire was finalized.

To minimise a common method bias, the research was designed to collect data from two different sources: i) subjective data (questionnaire data): and ii) objective data - financial performance (commission) obtained from the database of a network marketing firm. Management permission was obtained from the company providing the financial data and the study received ethical clearance from University Of Technology, Sydney Human Research Ethics Committee. The participants in the current research were Chinese immigrant network marketers who were from the Australian States of New South Wales, Victoria and Queensland. The number of useable questionnaires collected totalled 227, representing a response rate of 51.83%.

To ensure no structural estimation was biased and no statistical significance of the parameter estimations were affected, the properties of the constructs of the research model were carefully examined and determined as reflective or formative following the decision rules outlined by Jarvis et al (2003). Among the eight constructs of the research model, the constructs of desire for opportunity and self-efficacy were reflective, the constructs of the influence of social environment in NMOs, namely motivation, social competence and actions undertaken, were formative. The reflective and formative constructs and the conceptual model were examined and tested together using *SmartPLS* 2.0 (Ringle et al., 2005).

The results obtained from examining the reflective constructs (desire for opportunity and self-efficacy) showed that the measures for the desire for opportunity and self-efficacy were reliable and valid. To examine the formative constructs (the influence of the social environment in NMOs, namely motivation, social competence and actions undertaken), the theoretical considerations for the items of the measurements were carefully examined, and collinearity tests performed. The result showed that these measures were acceptable and multicollinearity was of no major concern.

To examine the research model, the global criterion of goodness of fit (GoF) proposed by Tenenhaus et al (2005) was calculated. The result of the calculation was that

GoF = 0.423. It exceeds the cut-off value of 0.36 for large effect sizes of R^2 , which demonstrates the high level of goodness of fit (Wetzels et al. 2009).

The theoretical contributions made in the current study are summarised as:

- demonstration of the impact of influence of the social environment in NMOs on self-efficacy, the desire for opportunity, social competence, human capital and the motivation to conduct a network marketing business (Bandura, 1986);
- examination of the impact of self-efficacy, the desire for opportunity, social competence and human capital on the network marketing business entrepreneurial actions undertaken, based on the Theory of Planned Behaviours (Ajzen, 1991), Social Cognitive Theory (Bandura, 1986) and entrepreneurial literature in the context of NMOs (Krueger, 1993; 2000; Shane & Venkataraman, 2000; Baron & Markman, 2003; Echhardt & Shane, 2003)
- provision of statistical evidence in this study, based on the large sample; and
- testing of the conceptualised model using PLS Modelling (Petter et al., 2007; Chin, 2010) in order to examine the formative properties of the influence of social environment in NMOs (Bandura, 1986), motivations (Sparks & Schenk, 2001; 2006; Kuntze, 2001) and social competence scales (Baron & Markman 2003).

The results obtained in the current study will allow the development of a theoretical template for future studies on NMOs.

6.3 Practical Implications

With respect to the practical significance of this study, network marketing firms can gain potential benefits in knowing the results of this study. These results will assist managers of network marketing firms to understand the behaviours of their network marketers operating their business. Such understandings are essential for the managers of network marketing firms, as the main sales forces in network marketing firms are network marketers (Harris, 2004) and the critical factor in a network marketing firm's success is its ability to engage the energies of thousands of network marketers and shape them into a highly productive organization (Biggart, 1989). The practical implications of the current study include: i) creating favourable business environment to attract new network marketers and motivate existing network marketers; ii) providing effective training to raise

network marketer's self-efficacy, which in turn increases actions undertaken in conducting network marketing business activities and improving the performance; iii) raising the management's ability to engage a large number of network marketers; vi) building reliable sales forces and maintaining customer loyalty.

6.3.1 Creating Favourable Business Environment

The findings in the current research reveal the relationships between the influence of the social environment in NMOs, motivations, self-efficacy, the desire for opportunity, social competence and human capital, actions undertaken and performance. They suggest that creating a favourable social environment in the NMOs is crucial for the success of the network marketing business, as the influence of the social environment in NMOs positively affects motivation, self-efficacy, the desire for opportunity, social competence, and human capital, which in turn positively affects actions undertaken in conducting business activities directly and indirectly. These findings will increase managers' awareness of the importance of a favourable social environment in NMOs.

The current study also found three characteristics of influence relative to the social environment in NMOs: i) cohesion; ii) social influence; and iii) training (Biggart, 1989; Sparks and Schenk, 2001; 2006). Being aware of these, the managers of network marketing firms are able to create a favourable business environment in NMOs by laying down proper policies & procedures for network marketers to comply with and minimising the competition among network marketers (cohesion), recognising and promoting the top network marketers (social influence), and developing appropriate training programs and delivering them (Biggart, 1989).

6.3.2 Providing Effective Training

Training is essential for the success of network marketing business, as a large number of network marketers had no experience of selling anything before being involved in network marketing business (Sparks & Schenck, 2001). One of the key factors for designing effective training programs is to identify the need for training (De Cieri & Kramar, 2003). The purpose of training is to improve performance (De Cieri & Kramar, 2003).

In spite of the fact that the network marketers are independent contractors, who are responsible for their own profits and costs (Biggart 1989), network marketers' performances are directly related to the performance of network marketing firms. Network marketers' incomes are paid through a commission system (Harris, 2004). The more products that are sold, the more income that network marketers earn, and the better performance the network marketing firm achieves. Therefore, the main purpose of the training program provided by network marketing firms is to improve network marketers' performances.

The relationship between performance, actions undertaken, human capital, self-efficacy, desire for opportunity social competence, motivation and the influence of social environment in NMOs found in the current study, will help managers of network marketing firms understand the need for training of network marketers. This understanding will assist the managers in developing effective training programs. These programs include products training, communication skill training, business operational training etc.

6.3.3 Building Reliable Sales Forces and Maintaining Customer Loyalty

Network marketing is a system in which a network marketing firm pays network marketers outside the company to sell its products and services directly to consumers (Harris, 2004). Network marketers have two identities: i) sales forces of network marketing firms; ii) consumers of the products of network marketing firms (Vander Nat & Keep, 2002). The major advantages of network marketing include securing distribution and sales quickly through network marketers and gaining consumer acceptance for the products and services through network marketers. The major area of competition between the network marketing firms occurs in the labour market and they vigorously compete against each other to attract full- and part-time network marketers (Granfield & Nicols, 1975). By knowing the results obtained in the current study, the managers of network marketing firms are able to reduce the staff turnover rate among network marketers by helping network marketers to achieve better performance, and as the turnover rate of network marketers reduces, customer loyalty will be maintained if not enhanced. Managers may create a cohesive culture in the organisation, set good examples for others and promote

these examples. In addition, managers may develop and provide network marketers with training programs to influence network marketers's performance.

6.4 Limitations

In the process of deciding the research setting, the issues considered were the research location, research design, the main research method, whether the research sample was representative of the overall population and issues derived from the common method variance. In this study, the research setting was the population of Chinese immigrants in Australia. A simple random sample was used. A simple random sample is the most basic form of probability sample. The aim of selecting this sampling method was to keep sampling error to a minimum.

The identified challenge to simple random sampling is the bias derived from common method variance. To prevent issues derived from common method variance, the research was carefully designed. With this design, the data was collected from two different channels: i) the subjective perception data, for the independent variables, was collected directly from research subjects; and ii) the objective data, for the dependent variable, was collected from the database of a network marketing firm with permission and ethical clearance. The current research could only collect objective data from one network marketing firm's database. In order to make sure that the sample was representative, a network marketing firm was carefully selected.

Despite specifically contributing to the NMO literature, the current study has its limitations. First, the sample for this study was only limited to Chinese immigrants in selected Australian States (New South Wales, Queensland and Victoria). To generalise the findings of this study, more studies with heterogeneous samples, such as, the samples from other countries are needed, as Chinese immigrant behaviours are likely affected by their social environment (Bandua, 1986).

Second, like all cross-sectional research, the primary data in the current study was collected at a single point in time with a survey questionnaire. Therefore, the current research cannot explain the effect of time on the relationship posited in the model (Bryman & Bell, 2007).

Thirdly, human capital is defined as “experiences in conducting network marketing business, measured in term of the number of months stayed in the business multiplied by the number of of weekly working hours”. This definition is different from that Becker (1975) defined. Fourthly, network marketers are clearly explained as entrepreneurs, but a wider coverage of the entrepreneurship literature are needed to uncover this.

Finally, the concerns for bias derived from the common method variance were not clarified completely. To avoid bias caused by the common method variance, the data for the dependent variable and independent variables were collected from different channels (Podsakoff et al., 2003). To make sure that the bias derived from the common method variance is free, statistical remedies should be performed (Podsakoff et al., 2003).

One of the most widely used techniques to address the issue of common method variance is Harman’s one-factor test (Podsakoff et al, 2003). However, the questionnaire used in the current research does not include the items specifically used to perform Harman’s one-factor test. Therefore, Harman’s one-factor test was not performed.

6.5 Future Research Implications

It is important that future research continues in this direction with further improvement and extension of the model. Future research may consider adding and examining, moderating or mediating factors, such as interpersonal skills to extend the current model, because interpersonal conflict is an essential, ubiquitous part of organizational life (Whetten & Cameron, 1991). As the results show in the current study, network marketers need to form an organization (NMO) and work together to achieve success, although they are independent small business owners or contractors (Sparks & Schenk, 2001).

The model developed in the current study should be tested in different cultural settings to examine whether the variables contributing to the entrepreneurship behaviour vary in the various cultural contexts in future studies. The different research design may be considered in explaining the effects of time on the relationship between the variables. In designing the questionnaire, consideration should be given to the use of Harman’s one-factor test to test the bias caused by common method variance.

In addition, social satisfaction (Bhattacharya & Mehta, 2000) should be considered in future studies, because operating network marketing businesses are run very much like a social movement (Biggart, 1989). Some people pursue economic satisfaction from operating network marketing business, some people pursue social satisfactions, and some people pursue both satisfactions (Bhattacharya & Mehta, 2000). In recent years, Groß (2010) studied NMOs from the point of view of spirituality. More studies on spirituality in NMOs may explain the phenomenon of cohesion in NMOs in future.

6.6 Conclusion

To answer the research question: *What factors determine immigrant network marketer's performance in conducting their network marketing business?* the current study applied a deductive research approach supplemented by a quantitative method in carrying out the research. In the research, the cross-sectional design was chosen in collecting the primary data. A path model of network marketing business entrepreneurial performance was developed. This model examined the factors explaining why 227 Chinese immigrants participated in network marketing business in Australia. In this model, there were eight constructs. Following the outlines recommended by Chin (2010) and Götz et al. (2010), the measurements for the constructs and the research model were examined. The results showed that these measurements were acceptable and the model performed well.

In the current research, thirteen hypotheses were proposed and tested. The results of hypotheses testing showed that all hypotheses proposed were supported. Based on these results, the answer to the research question obtained is: immigrants' successes in conducting their network marketing business are caused by the actions undertaken in conducting the network marketing business and the experiences of conducting such business; the action undertaken is positively determined by the factors of self-efficacy, the desire for opportunity, and social competence, which in turn, are positively determined by the influence of the social environment in NMOs. The current study is only interested in the action per se, rather than the *quality* of the action taken. The influence of the social environment in NMOs also positively determines human capital (experiences) and the motivation for conducting network marketing business. The motivation positively determines self-efficacy and the desire for opportunity.

The contributions made by the current research to the literature of NMO studies include: i) generating new knowledge in the area of NMO studies; ii) addressing the gap in the literature of NMO studies by answering to the research question; and iii) developing the causal model of network marketing business entrepreneurial performance which sheds light on an understanding of effective strategies for the development of studies on NMOs, immigrant entrepreneurship, and entrepreneurship. The practical implications of the current study include: i) creating an internal favourable business environment; ii) providing effective training to improve network marketer's competence; iii) raising the management's ability to engage a large number of network marketers; and vi) building reliable sales forces and maintaining customer loyalty.

APPENDIX

A. FOCUS GROUP

Questions asked in the focus group

- Why did you involve in network marketing business?
- Have you been influenced by the social environment in NMOs? If yes, in what way?
- How do you describe your desire for opportunities from network marketing business?
- What skills and knowledge do you need to build a successful network marketing business? How confident were you to obtain these skills and knowledge?
- Is it difficult to build a successful network marketing business?
- What actions have you taken in conducting the network marketing business?
- What is the best way to build a successful network marketing business?

Themes derived from answering the question: *Why did you involve in network marketing business?*

- Excellent opportunity to establish one's own business without substantial cost and much risk
- Making a lot of money with a small amount investment
- Obtaining financial security and time freedom from running network marketing business
- Becoming a successful entrepreneur
- Personal accomplishment
- Learning new skills and having personal development
- Being recognized
- Better use the skills
- Enjoying conducting network marketing business

Themes derived from answering the questions: *Have you been influenced by the social environment in NMOs? If yes, in what way?*

- Being proven by examples that network marketing business is viable to successfully build with limited resources and experiences
- Influence of successful examples set by others
- Enjoy cohesive, supportive and comfortable social environment in NMO
- Values of training provided on a continuous basis

Themes derived from answering the question: *What actions have you taken in conducting the network marketing business?*

- Presenting products and business opportunities to prospects
- Motivating and training others to present the products and business
- Selling the products.

Themes derived from answering the question: *What skills and knowledge do you need to build a successful network marketing business?*

- Communication skills

Socialization skill

- Adaptability
- Strong desire for entrepreneurial opportunities from a network marketing business
- Strong confidence in building a successful network marketing business.

B. DESCRIPTIVE STATISTICS (Chapter 4)

Items	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
NeedAch1	226	1	5	633	2.80	1.417	2.009
NeedAch2	226	1	5	906	4.01	1.166	1.360
NeedSym3	227	1	5	919	4.05	1.040	1.082
NeedAch4	226	1	5	950	4.20	.995	.989
NeedSym5	227	1	5	800	3.52	1.281	1.640
NeedAch6	227	1	5	762	3.36	1.347	1.815
NeedSym7	227	1	5	1030	4.54	.863	.745
NeedSym8	227	1	5	940	4.14	1.063	1.130
NeedAch9	226	1	5	898	3.97	1.207	1.457
NeedSym10	227	1	5	630	2.78	1.340	1.794
NeedSym11	226	1	5	798	3.53	1.314	1.726
NeedSym12	227	1	5	803	3.54	1.277	1.630
NeedAch13	227	1	5	598	2.63	1.371	1.879
NeedSym14	227	1	5	941	4.15	1.005	1.010
NeedAch15	227	1	5	815	3.59	1.246	1.553
NeedSym16	227	1	5	896	3.95	1.151	1.325
NeedSym17	227	1	5	725	3.19	1.475	2.175
NeedSym18	227	1	5	754	3.32	1.366	1.865
NeedAch19	226	1	5	979	4.33	.934	.872
NeedAch20	226	1	5	885	3.92	1.184	1.402
NeedB21	227	1	5	895	3.94	1.129	1.275
NeedB22	224	1	5	748	3.34	1.449	2.100
NeedB23	226	1	5	834	3.69	1.334	1.779
NeedB24	226	1	5	800	3.54	1.276	1.627
EnCoh1	226	2	5	920	4.07	.791	.626
EnCoh2	226	2	5	982	4.35	.709	.503
EnCoh3	226	1	5	988	4.37	.774	.599

Items	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
EnvCoh4	226	2	5	982	4.35	.740	.547
EnSp5	226	1	5	920	4.07	.926	.857
EnSp7	226	1	5	943	4.17	.890	.792
EnSp8	226	1	5	951	4.21	.814	.663
EnSp9	225	2	5	949	4.22	.763	.582
EnSp10	226	1	5	908	4.02	.864	.746
EnSp11	225	1	5	893	3.97	.918	.843
EnSp13	226	1	5	933	4.13	.907	.823
EnvironT14	225	1	5	967	4.30	.816	.665
EnvironT15	224	1	5	977	4.36	.720	.519
EnvironT16	226	3	5	1030	4.56	.580	.337
EnvironT17	226	3	5	1042	4.61	.580	.337
EnvironT18	226	2	5	1039	4.60	.627	.393
D1	227	1	5	996	4.39	.740	.548
D5	224	1	5	845	3.77	.882	.778
D6	224	1	5	827	3.69	.883	.779
D7	226	1	5	846	3.74	.897	.805
D10	227	2	5	969	4.27	.731	.534
D11	225	2	5	975	4.33	.707	.500
D12	226	2	5	986	4.36	.706	.499
SE1	227	1	5	581	2.56	1.026	1.053
SE2	227	1	5	604	2.66	1.011	1.022
SE3	227	1	5	664	2.93	1.076	1.158
SE4	226	1	5	591	2.62	.992	.984
SE8	226	1	5	826	3.65	1.048	1.098
SE10	226	1	5	756	3.35	.907	.823
SE11	226	1	5	796	3.52	.915	.837
SE12	226	1	5	721	3.19	.954	.910

Items	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
SEsp13	225	1	5	756	3.36	.935	.874
SEps14	226	1	5	774	3.42	.877	.770
SEsp15	225	1	5	771	3.43	.909	.826
SEsp16	225	1	5	779	3.46	.891	.794
SEsp17	226	1	5	800	3.54	.859	.738
SEsa18	224	1	5	842	3.76	.896	.803
SEsa19	226	1	5	908	4.02	.827	.684
SEsa20	225	1	5	835	3.71	.931	.867
SEsa21	225	1	5	894	3.97	.839	.705
SEsa22	225	1	5	859	3.82	.890	.793
Seep23	225	1	5	702	3.12	.871	.758
Seep24	225	1	5	687	3.05	.885	.783
Seep25	224	1	5	723	3.23	.802	.643
Seep26	225	1	5	726	3.23	.948	.899
Seep27	226	1	5	723	3.20	1.033	1.067
Seep28	225	1	5	850	3.78	.804	.647
Seep29	226	1	5	742	3.28	.914	.835
Act1	222	1	5	692	3.12	1.231	1.516
Act2	223	1	5	545	2.44	1.125	1.266
Act3	223	1	5	486	2.18	1.067	1.139
Act4	223	1	5	523	2.35	1.019	1.038
Act5	221	1	5	477	2.16	1.048	1.098
Act6	223	1	5	608	2.73	1.281	1.641
Act7	218	1	5	524	2.40	1.355	1.836
WoAmount	205	3	7140	168871	823.76	1056.920	1117080.702
LnIncome	215	1.39	8.59	1011.99	4.7069	1.56187	2.439

C. Items Used to Measure Constructs

Construct	Items
<i>Motivation</i>	1. To directly contribute to a company's success
	2. To keep learning
	3. To make a lot of money
	4. To be challenged
	5. To get rich quickly
	6. To be innovative
	7. To be free to name my own hours
	8. To be free to work wherever I want—including from home
	9. For personal accomplishment
	10. To have influence over and create a positive impact upon my community
	11. To be able to have a lavish lifestyle
	12. To buy all of the toys, cars, boats, vacation homes – have always wanted
	13. To have fun
	14. To have financial security
	15. To better use my skills
	16. To be able to vacation more often, and in more exotic locations
	17. To have the power to call my own shots
	18. To be known as a successful “entrepreneur” or business person
	19. In my work with this network marketing organization, I feel I'm part of a “cause” that's about more than earning money
	20. While earning money is nice, there are other more important reasons for my work with this network marketing organization
	21. To start up my own small business with lowest investment and risks
	22. It doesn't really matter if I fail in my network marketing business, because I have only invested a little money in it.
	23. It is a good opportunity for me to learn how to start up my own business, because it only cost a little money.
	24. To start up my own business without financial pressure.

Construct	Items
<i>Influence of social environment in NMO</i>	1. There is a great deal of trust among fellow members in my organization
	2. The members of my organization are very cooperative with each other
	3. The members of my organization believe we can depend on each other for advice and support concerning our distributorships
	4. The members of my organization support each other's work
	5. My sponsor and other uplines are able to get me committed to a positive vision of the future with this network marketing organization
	6. My sponsor and other uplines paint a positive picture of my possible future with this network marketing organization
	7. My sponsor and other uplines help me see a positive future for myself as member of this network marketing organization
	8. I receive valuable information from my sponsor and other uplines about how to make the most of being a member of this network marketing organization
	9. My sponsor and other uplines are excellent sources of information about being a successful member of this network marketing organization
	10. When it comes to making a success of my distributorship, I am satisfied with the information I receive from my sponsor and other uplines
	11. My sponsor and other uplines lead "doing" rather than "telling"
	12. My sponsor and other uplines lead by example
	13. I look to my sponsor and other uplines as examples of how to be an effective network marketing organization member
	14. Much of the training I received as a network marketer came from other network marketers in this network marketing organization
	15. The training I received in this network marketing organization is effective.
	16. Training provided by this network marketing organization is essential for me to operate my network marketing business
	17. Through the training provided by this network marketing organization, I have obtained large amount of knowledge about network marketing business
	18. Without training provided by network marketing organization, I won't be able to establish my network marketing business successfully.

Constructs	Items
<i>Desire for opportunity</i>	1. I would love to conduct my current network marketing business
	2. I would love to share the opportunity of the network marketing business with others
	3. I would love to share the products sold by this network marketing organization with others
	4. I would love to learn skills and knowledge about how to conduct network marketing business
	5. How tense would you be in conducting your current network marketing business?
	6. How tense would you be in sharing the opportunity of the network marketing business with others?
	7. How tense would you be in sharing the products sold by this network marketing organization with others?
	8. How tense would you be in learning skills and knowledge about how to conducting network marketing business?
	9. How enthusiastic would you be in your current network marketing business?
	10. How enthusiastic would you be in sharing the opportunity of the network marketing business with others?
	11. How enthusiastic would you be in sharing the products sold by this network marketing organization with others?
	12. How enthusiastic would you be in learning skills and knowledge about how to conducting network marketing business?

Constructs	Items
<i>Network marketing specific self-efficacy</i>	1. How hard do you think it would be to conduct your current network marketing business?
	2. How hard do you think it would be to introduce your current network marketing business to others?
	3. How hard do you think it would be to sell the products to others?
	4. How hard do you think it would be to recruit others to participate in your organization?
	5. How hard do you think it would be to train others to conduct their business?
	6. How hard do you think it would be to lead a network marketing organization?
	7. How hard do you think it would be to make a public speech?
	8. How certain of success are you in the conduct of your current network marketing business?
	9. How overworked would you be in conducting your current network marketing business?
	10. Do you know enough to conduct a network marketing business?
	11. How sure are you of yourself in communicating with others effectively?
	12. How sure are you of yourself in developing new leaders in your organization?

Constructs	Items
<i>Social competence</i>	1. I am a good judge of other people
	2. I can usually recognize others' traits accurately by observing their behavior
	3. I can usually read others well – tell how they are feeling in a given situation
	4. I can tell why people have acted the way they have in most situations
	5. I generally know when it is the right time to ask someone for a favour
	6. I can easily adjust to being in just about any social situation
	7. I can be comfortable with all types of people – young or old, people from the same or different backgrounds as myself
	8. I can talk to anybody about almost anything
	9. People tell me that I am sensitive and understanding
	10. I have no problems introducing myself to strangers
	11. People can always read my emotions even if I try to cover them up
	12. Whatever emotion I feel on the inside tends to show on the outside
	13. Other people can usually tell pretty much how I feel at a given time
	14. I am very sensitive to criticism from others
	15. I often concerned about what others think of me
	16. I'm good at flattery and can use it to my advantage when I wish
	17. I can appear to like someone even when I don't.

Constructs	Items
<i>Action undertaken</i>	1. Hours per week devoted to distributorship work.
	2. Hours per week devoted to presenting products and business opportunities to others.
	3. Hours per week devoted to motivating and training new network marketers.
	4. Hours per week devoted to learning business skills and knowledge.
	5. Hours per week devoted to customer services.
	6. Number of presentations conducted per week.
	7. Number of sales workshops held per month.

D. QUESTIONNAIRE



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Entrepreneurial Chinese Immigrants in Network Marketing Organizations

Ethical Clearance Number: UTS HREC REF NO. 2008-238A

I am a PhD student at the University of Technology, Sydney. As a part of my doctoral research, I have to conduct a survey to examine the relationships between entrepreneurial characteristics and the performance of Chinese immigrants involved in network marketing business. The purpose of this research is to find out the insight of network marketers conducting the network marketing business. Your help in filling this questionnaire would be greatly appreciated, and should only take a few minutes of your time.

Responses to the questionnaire will be anonymous and only the aggregate results will be reported. I hope you will answer all questions, but if you would rather not reply to any of the questions, feel free to omit them. An identity number will be used for survey administration only and they will be deleted after data input.

If you have any questions or concerns regarding this research project, please contact me on the phone number (mobile), or email given below. Alternatively, you can contact my supervisors listed below.

Principal supervisor: Dr. Karen Wang, University of Technology, Sydney
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Yours sincerely

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Section 1: Your motivations

What are your reasons for starting or owning your own business? For each reason below, rate in terms of how strong a motivation it is for you to become a network marketing business entrepreneur. Please use the following 1 to 5 scale:

1. Is not a motivation for me at all
2. Is only a slight motivation for me
3. Is a moderately important motivation for me
4. Is an important motivation for me
5. Is a very important motivation for me

No.		Not Import				Very Import.
1.1	To directly contribute to a company's success	1	2	3	4	5
1.2	To keep learning.	1	2	3	4	5
1.3	To make a lot of money	1	2	3	4	5
1.4	To be challenged	1	2	3	4	5
1.5	To get rich quickly	1	2	3	4	5
1.6	To be innovative	1	2	3	4	5
1.7	To be free to name my own hours	1	2	3	4	5
1.8	To be free to work wherever I want-including from home	1	2	3	4	5
1.9	For personal accomplishment.	1	2	3	4	5
1.10	To have influence over and create a positive impact upon my community	1	2	3	4	5
1.11	To be able to have lavish lifestyle	1	2	3	4	5
1.12	To buy all of the toys, cars, boats, vacation homes – have always wanted	1	2	3	4	5
1.13	To have fun	1	2	3	4	5
1.14	To have financial security	1	2	3	4	5
1.15	To better use my skills	1	2	3	4	5
1.16	To be able to vacation more often- and in more exotic locations	1	2	3	4	5
1.17	To have power to call my own shots	1	2	3	4	5
1.18	To be known as a successful “entrepreneur” or business person	1	2	3	4	5
1.19	In my work with this network marketing organization, I feel I'm part of a “cause” that's about more than earning money	1	2	3	4	5
1.20	While earning money is nice, there are other more important reasons for my work with this network marketing organization	1	2	3	4	5
1.21	To start up my own small business with lowest investment and risks	1	2	3	4	5
1.22	It doesn't really matter if I fail in my network marketing business, because I have only invested little money in it.	1	2	3	4	5
1.23	It is a good opportunity for me to learn how to start up my own business, because it only cost little money.	1	2	3	4	5

1.24	To start up my own business without financial pressure	1	2	3	4	5
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Section 2: The influence of Social Environment in NMO

For each statement below, please circle one number that is most applicable to you.

1. Strongly disagree (SD)
2. Disagree (D)
3. Neutral (N)
4. Agree (A)
5. Strongly agree (SA)

		SD	D	N	A	SA
2.1	There is a great deal of trust among fellow member in my organization	1	2	3	4	5
2.2	The member of my organization are very cooperative with each other	1	2	3	4	5
2.3	The member of my organization believe we can depend on each other for advice and support concerning our distributorships	1	2	3	4	5
2.4	The members of my organization support each others' work	1	2	3	4	5
2.5	My sponsor and other uplines are able to get me committed to a positive vision of the future with this network marketing organization	1	2	3	4	5
2.6	My sponsor and other uplines paint a positive pictures of my possible future with this network marketing organization	1	2	3	4	5
2.7	My sponsor and other uplines help me see a positive future for myself as member of this network marketing organization	1	2	3	4	5
2.8	I receive valuable information from my sponsor and other uplines about how to make the most of being a member of this network marketing organization	1	2	3	4	5
2.9	My sponsor and other uplines is an excellent source of information about being a successful member of this network marketing organization	1	2	3	4	5
2.10	When it comes to making a success of my distributorship, I am satisfied with information I receive from my sponsor and other uplines	1	2	3	4	5
2.11	My sponsor and other uplines lead "doing" rather than "telling"	1	2	3	4	5
2.12	My sponsor other uplines lead by example	1	2	3	4	5
2.13	I look to my sponsor and other uplines as examples of how to be an effective network marketing organization member	1	2	3	4	5
2.14	Much of the training I received as a network marketer came from other network marketers in this network marketing organization	1	2	3	4	5
2.15	The trainings I received in this network marketing organization are effective	1	2	3	4	5
2.16	Training provide by this network marketing organization is essential for me to operate my network marketing business	1	2	3	4	5
2.17	Through the training provided by this network marketing organization, I have obtained large amount of knowledge about network marketing business	1	2	3	4	5
2.18	Without training provided by network marketing organization, I won't be able to establish my network marketing business successfully.	1	2	3	4	5

Section 3: The Desire for Entrepreneurial Opportunity

For each statement below, please circle one number that is most applicable to you.

- 1 Strongly disagree (SD)
- 2 Disagree (D)
- 3 Neutral (N)
- 4 Agree (A)
- 5 Strongly agree (SA)

		SD	D	N	A	SA
3.1	I would love conducting my current network marketing business	1	2	3	4	5
3.2	I would love sharing the opportunity of the network marketing business with others	1	2	3	4	5
3.3	I would love sharing the products sold by this network marketing organization with others.	1	2	3	4	5
3.4	I would love learning skills and knowledge about how to conducting network marketing business	1	2	3	4	5
3.5	How tense would you be in conducting your current network marketing business?	1	2	3	4	5
3.6	How tense would you be in sharing the opportunity of the network marketing business with others?	1	2	3	4	5
3.7	How tense would you be in sharing the products sold by this network marketing organization with others?	1	2	3	4	5
3.8	How tense would you be in learning skills and knowledge about how to conducting network marketing business?	1	2	3	4	5
3.9	How enthusiastic would you be in your current network marketing business?	1	2	3	4	5
3.10	How enthusiastic would you be in sharing the opportunity of the network marketing business with others?	1	2	3	4	5
3.11	How enthusiastic would you be in sharing the products sold by this network marketing organization with others?	1	2	3	4	5
3.12	How enthusiastic would you be in learning skills and knowledge about how to conducting network marketing business	1	2	3	4	5

Section 4: Network Marketing Business Specific Self-Efficacy Belief and Social Competence

For each statement below, please circle one number that is most applicable to you.

- 1 Strongly disagree (SD)
- 2 Disagree (D)
- 3 Neutral (N)
- 4 Agree (A)
- 5 Strongly agree (SA)

	Self-efficacy	SD	D	N	A	SA
4.1	How easy do you think it would be to conduct your current network marketing business?	1	2	3	4	5
4.2	How easy do you think it would be to introduce your current network marketing business to others?	1	2	3	4	5
4.3	How easy do you think it would be to sell the products to others?	1	2	3	4	5
4.4	How easy do you think it would be to recruit others to participate in your organization?	1	2	3	4	5
4.5	How easy do you think it would be to train others to conduct their business?	1	2	3	4	5
4.6	How easy do you think it would be to lead a network marketing organization?	1	2	3	4	5
4.7	How easy do you think it would be to do public speech?	1	2	3	4	5
4.8	How certain of success are you in conduct your current network marketing business?	1	2	3	4	5
4.9	How overworked would you be in conducting your current network marketing business?	1	2	3	4	5
4.10	Do you know enough to conduct network marketing business?	1	2	3	4	5
4.11	How sure of yourself in communicating with others effectively?	1	2	3	4	5
4.12	How sure of yourself in developing new leaders in your organization?	1	2	3	4	5
	Social Competence					
4.13	I am a good judge of other people	1	2	3	4	5
4.14	I can usually recognize other's traits accurately by observing their behavior	1	2	3	4	5
4.15	I can usually read others well – tell how they are feeling in a given situation	1	2	3	4	5
4.16	I can tell why people have acted the way they have in most situation	1	2	3	4	5
4.17	I generally know when it is the right time to ask someone for a favor	1	2	3	4	5
4.18	I can easily adjust to being in just about any social situation	1	2	3	4	5
4.19	I can be comfortable with all types of people – young or old, people from the same or different backgrounds as myself	1	2	3	4	5

Section 4: Network Marketing Business Specific Self-Efficacy Belief and Social Competence – Cont.

For each statement below, please circle one number that is most applicable to you.

1. Strongly disagree (SD)
2. Disagree (D)
3. Neutral (N)
4. Agree (A)
5. Strongly agree (SA)

	Social Competence	SD	D	N	A	SA
4.20	I can talk to anybody about almost anything	1	2	3	4	5
4.21	People tell that I am sensitive and understanding	1	2	3	4	5
4.22	I have no problems introducing myself to strangers	1	2	3	4	5
4.23	People can always read my emotions even if I try to cover them up	1	2	3	4	5
4.24	What ever emotion I feel on the inside tends to show on the outside	1	2	3	4	5
4.25	Other people can usually tell pretty much how I feel at a given time	1	2	3	4	5
4.26	I am very sensitive to criticism from others	1	2	3	4	5
4.27	I often concerned about what others think of me	1	2	3	4	5
4.28	I'm good at flattery and can use it to my advantage when I wish	1	2	3	4	5
4.29	I can appear to like someone even when I don't.	1	2	3	4	5

Section 5: Entrepreneurial Actions

For each statement below, please circle one number that is most applicable to you.

		<5 hrs	6-10 hrs	11-20 hrs	21-40 hrs	>40 hrs
5.1	Hours per week devoted to distributorship work	1	2	3	4	5
5.2	Hours per week devoted to presenting products and business opportunities to others	1	2	3	4	5
5.3	Hours per week devoted to motivating and training new network marketers	1	2	3	4	5
5.4	Hours per week devoted to learning business skills and knowledge	1	2	3	4	5
5.5	Hours per week devoted to customer services	1	2	3	4	5

		< 1	1-2	3-4	5	>5
5.6	Number of presentations conducted per week	1	2	3	4	5
5.7	Number of sales workshops held per month	1	2	3	4	5

Section 6: Personal Details

- 6.1) Please specify your Associateship ID _____
- 6.2) Please specify your birth place (state or province and country)_____. If your birth place is not Australia or New Zealand, when did you come to Australia or New Zealand? _____
- 6.3) Please specify your age group
1) 18-30 2) 31 – 40 3) 41 – 50 4) 51 – 60 5) Above 60
() () () () ()
- 6.4) Please specify your gender
1) Male ()
2) Female ()
- 6.5) Please specify your marital status
1) Single () 2) Married or de-factor () 3) Divorced ()
- 6.6) Besides conducting the network marketing business, do you have the other job?
1) Yes (), Please specify your occupation _____, Full time () Part time ()
2) No ()
- 6.7) What is your highest level of education?
1) School Certificate (), in which country did you get this qualification _____
2) Diploma (), in which country did you get this qualification _____ 3)
Bachelor (), in which country did you get this qualification _____
4) Graduate Certificate (), in which country did you get this qualification _____
5) Graduate diploma (), in which country did you get this qualification _____
6) Master (), in which country did you get this qualification _____
7) PhD (), in which country did you get this qualification _____
- 6.8) How do you describe the level of your English?
1) Poor ()
2) Not good ()
3) Good ()
4) Very good ()
5) Native ()
- 6.9) When did you fill in the form and join this network marketing organization? (Please specify the year and month) _____
- 6.10) Did you start conducting this network marketing business immediately after you filled the form?
1) Yes ____, please go to Q 6.11
2) No ____, when did you start conducting this business? (Please specify the year and month)

- 6.11) Do you operate your network marketing business with your spouse?
1) Yes ()
2) No ()
3) not relevant to me, go to question 6.13

6.12) Is your spouse employed?

1) Yes (), Full time () Part time ()

2) No ()

6.13) Besides the network marketing business, do you have another business?

1) Yes ()

2) No ()

6.14) Please specify the average number of hours you spend on conducting your network marketing business in a given week. _____

6.15) During last ten weeks period, averagely, how much commission did you earn weekly? Please specify _____

The date of filling this form: _____(day)/ _____(Month) / _____(Year)

Thanks for spending your precious time on filling in this questionnaire !

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网络直销组织中的中国移民创业者

悉尼科技大学道德委员批准号码: UTS HREC REF NO. 2008-238A

我是悉尼科技大学的博士研究生。作为博士研究的一部分，我将进行一项调查，以查证中国移民在网络直销行业中所表现出的创业特点和他们的网络直销业绩之间的关系。我衷心恳请您抽出几分钟时间，协助填写本问卷。对于您的慷慨相助，我将十分感谢！

本文卷以匿名方式填写，只有经过综合处理的数据才会出现在有关文献中。为了确保所收集的数据的有效性，我希望您能够回答问卷中的所有问题。为了便于管理所收集到的数据管理，问卷中要求您提供自己的会员号码。一旦数据输入完毕，您所提供的会员号码将被从数据库中删除。在整个研究中，您的个人隐私会得到充分的尊重与保护。

如果你对本研究项目有任何疑问，请按以下列出的电话或者电子邮件地址同我联系。当然，您也可以直接和我的导师们联系。他们的联系方式如下：

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您诚挚的

戴复

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2009年1月

第一部分: 参加网络组织的激励因素调查

是什么原因让您开始做自己的网络直销生意的? 以下列出了一些原因。请根据这些原因对您从事自己的网络直销生意的激励程度, 按1至5的计分方式, 为其打分:

- 1 同这个原因不相关
- 2 这个原因对我有少许的激励
- 3 这个原因对我有一定的激励
- 4 这个原因对我有重要的激励作用
- 5 这个原因对我有非常重要的激励作用

No.		不	相	中				非	重
1.1	直接为公司的成功作出贡献	1	2	3	4	5			
1.2	继续学习	1	2	3	4	5			
1.3	赚很多钱	1	2	3	4	5			
1.4	挑战自己	1	2	3	4	5			
1.5	快速致富	1	2	3	4	5			
1.6	为了创新	1	2	3	4	5			
1.7	为了获得时间自由	1	2	3	4	5			
1.8	为了在自己喜欢的地方(包括在家)工作	1	2	3	4	5			
1.9	为了个人成就	1	2	3	4	5			
1.10	为了影响自己所在社区,创造良好印象	1	2	3	4	5			
1.11	能够过上豪华生活	1	2	3	4	5			
1.12	购买自己想要的玩具,汽车,游艇,度假屋或其它贵重物品	1	2	3	4	5			
1.13	为了乐趣,好玩	1	2	3	4	5			
1.14	为了获得经济保障	1	2	3	4	5			
1.15	更好地应用自己的技能	1	2	3	4	5			

1.16	能够有更多的假期 – 到更刺激的地方度假	1	2	3	4	5
1.17	自己说了算	1	2	3	4	5
1.18	成为出名的成功“创业者”或者商人	1	2	3	4	5
1.19	我在从事这个网络直销时,觉得这不单单是在赚钱,而且还是在从事着一种“事业”	1	2	3	4	5
1.20	赚钱固然好,我从事这个网络直销还有其它更重要的原因.	1	2	3	4	5
1.21	为了以低投入和低风险的方式建立自己的小生意	1	2	3	4	5
1.22	如果我的网络直销生意失败了也不要紧,因为它是一门无本生意	1	2	3	4	5
1.23	由于这是一门无本生意,所以它是我学习如何做生意的好机会	1	2	3	4	5
1.24	我做这门生意没有财务上的压力.	1	2	3	4	5

第二部分: 环境影响

针对下列每个陈述,请在最适合自己本人情况的数字上打勾。

- 1 非常不同意 (SD)
- 2 不同意 (D)
- 3 中立 (N)
- 4 同意 (A)
- 5 非常同意 (SA)

		SD	D	N	A	SA
2.1	在我们组织中,成员之间存在着很大的信任度	1	2	3	4	5
2.2	在我们组织中,成员之间相互合作	1	2	3	4	5
2.3	在我们组织中,成员可依靠相互建议和支持从事网络直销生意	1	2	3	4	5
2.4	我们组织成员之间相互支持工作	1	2	3	4	5
2.5	我的保荐人和其他上线们能够让我通过投入网络直销公司的业务活动,实现美好的未来愿景	1	2	3	4	5
2.6	我的保荐人和其他上线们为我描绘了一幅通过这个网络公司可能实现的美好未来	1	2	3	4	5
2.7	我的保荐人和其他上线们帮助我看到自己作为这个网络直销组织一员的美好未来.	1	2	3	4	5
2.8	我从自己的保荐人和其他上线们那里获得最有价值的信息,让我知道如何作为这个网络直销组织的一员而获得最大收益	1	2	3	4	5
2.9	我的保荐人和其他上线们是我在这个网络直销组织获得成功的最佳信息来源	1	2	3	4	5

2.10	谈到网络直销成功,我为自己从保荐人和其他上线们那里获得的信息而满意	1	2	3	4	5
2.11	我的保荐人和其他上线们靠行动而不是说教进行领导	1	2	3	4	5
2.12	我的保荐人和其他上线们靠树立榜样来领导	1	2	3	4	5
2.13	我以保荐人和其他上线们为榜样,成为一名有效的网络直销商	1	2	3	4	5
2.14	作为直销商,我接受到网络组织中其他直销商的大量培训	1	2	3	4	5
2.15	我在这个网络组织中接受的培训是有效的	1	2	3	4	5
2.16	这个网络组织所提供的培训对我开展网络直销生意很重要	1	2	3	4	5
2.17	通过接受这个网络组织所提供的培训,我获得了大量的有关经营网络直销生意方面的知识	1	2	3	4	5
2.18	没有网络直销组织所提供的培训,我是不可能建立成功的网络直销生意的.	1	2	3	4	5

第三部分:对创业机会的渴望

针对下列每个陈述,请在最适合自己本人情况的数字上打勾。

- 1 非常不同意 (SD)
- 2 不同意 (D)
- 3 中立 (N)
- 4 同意 (A)
- 5 非常同意 (SA)

		SD	D	N	A	SA
3.1	我热爱从事自己现在的网络直销生意	1	2	3	4	5
3.2	我非常喜欢与他人分享网络直销生意机会	1	2	3	4	5
3.3	我非常喜欢与他人分享这个网络组织所销售的产品	1	2	3	4	5
3.4	我非常喜欢学习从事网络直销生意所需的技能与知识	1	2	3	4	5
3.5	我从事现在的网络直销生意的繁忙程度非常高	1	2	3	4	5
3.6	我与他人分享网络直销生意机会的繁忙程度非常高	1	2	3	4	5
3.7	我与他人分享网络直销组织所销售的产品的繁忙程度非常高	1	2	3	4	5

3.8	我学习从事网络直销生意的技能和知识的繁忙程度非常高	1	2	3	4	5
3.9	在从事目前的网络直销生意过程中, 我的热情很高	1	2	3	4	5
3.10	在与其他人分享网络直销生意过程中, 我的热情很高	1	2	3	4	5
3.11	在与其他人分享网络直销组织所销售的产品过程中, 我的热情很高	1	2	3	4	5
3.12	在学习网络直销生意的技能和知识过程中, 我的热情很高	1	2	3	4	5

第四部分: 从事网络直销能力的自我认识

针对下列每个陈述, 请在最适合自己本人情况的数字上打勾。

- 1 非常不同意 (SD)
- 2 不同意 (D)
- 3 中立 (N)
- 4 同意 (A)
- 5 非常同意 (SA)

		SD	D	N	A	SA
4.1	我觉得从事现在的网络直销生意非常容易	1	2	3	4	5
4.2	我觉得将现在的网络直销生意介绍给他人非常容易	1	2	3	4	5
4.3	我觉得将产品卖给别人有非常容易	1	2	3	4	5
4.4	我觉得招募他人加入自己的网络组织非常容易	1	2	3	4	5

4.5	我觉得培训他人从事网络直销生意非常容易?	1	2	3	4	5
4.6	我觉得领导网络组织非常容易	1	2	3	4	5
4.7	我觉得做公众演说非常容易	1	2	3	4	5
4.8	我对自己的网络生意的成功把握非常大	1	2	3	4	5
4.9	我非常忙碌地从事现在的网络直销生意	1	2	3	4	5
4.10	您对如何开展网络直销生意了解非常透彻	1	2	3	4	5
4.11	我对自己与他人进行有效沟通的把握很高	1	2	3	4	5
4.12	我对培养网络组织中的新领导人的把握很高	1	2	3	4	5
4.13	我善于识别人	1	2	3	4	5
4.14	通过观察人们的行为,我通常可以准确地识别其特点	1	2	3	4	5
4.15	我能够看出人们心里想什么,知道他们对所处环境的感受	1	2	3	4	5
4.16	在大多数情况下,我能知道为什么人们这么做事情	1	2	3	4	5
4.17	通常我知道在什么时候张口求人帮助	1	2	3	4	5
4.18	我可以很容易地适应任何社会环境	1	2	3	4	5
4.19	我能够很容易地同各类人(年轻的,老年人,相同和不同背景的人)相处	1	2	3	4	5
4.20	我能够和任何人谈论任何事	1	2	3	4	5
4.21	人们说我善解人意	1	2	3	4	5
4.22	我可以很容易地将自己介绍给生人	1	2	3	4	5
4.23	即便我尽量掩饰,人们总能看出我的情绪	1	2	3	4	5
4.24	我总是将自己的情绪表露出来	1	2	3	4	5
4.25	在特定的时候,人们通常能够在很大程度上识别我的感受	1	2	3	4	5

第四部分: 从事网络直销能力的自我认识 (续)

针对下列每个陈述, 请在最适合自己本人情况的数字上打勾。

- 1 非常不同意 (SD)
- 2 不同意 (D)
- 3 中立 (N)
- 4 同意 (A)
- 5 非常同意 (SA)

		SD	D	N	A	SA
4.26	我对他人的批评很敏感	1	2	3	4	5
4.27	我常常在意人们怎么看自己	1	2	3	4	5
4.28	我善于赞美别人, 并且能够利用这种赞美	1	2	3	4	5
4.29	即便我不喜欢某人, 但是我仍然能够表现出喜欢这个人的样子.	1	2	3	4	5

第五部分: 对创业行动

针对下列每个陈述, 请在最适合自己本人情况的数字上打勾。

		<5 小时	6-10 小时	11-20 小时	21-40 小时	>40 小时
5.1	我平均每周用于从事网络直销所花的时间为	1	2	3	4	5
5.2	我平均每周用于向他人讲解产品和生意所花的时间为	1	2	3	4	5
5.3	我平均每周用于激励和培训新会员所花的时间为	1	2	3	4	5
5.4	我平均每周用于学习网络直销技能和知识所花的时间为	1	2	3	4	5
5.5	我平均每周用于提供顾客服务所花的时间为	1	2	3	4	5

		< 1次	1-2次	3-4次	5次	>5次
5.6	我平均每周讲解产品生意的次数为	1	2	3	4	5
5.7	我平均每月举办说明会的次数为	1	2	3	4	5

第六部分：个人资料

6.1) 请写出您的会员号码_____

6.2) 请指出您的出生地点 (国家、省份) _____。如果您的出生地点不是澳大利亚或新西兰，请指出您是那年来到澳大利亚或者新西兰的_____

6.3) 请按下列年龄段，指出您所属的年龄段组别

1) 18-30 2) 31 - 40 3) 41 - 50 4) 51 - 60 5) 60 岁以上

() () () () ()

6.4) 请指出您的性别

1) 男 () 2) 女 ()

6.5) 请指出您的婚姻状况

1) 单身 () 2) 已婚 (或同居) () 3) 离婚 ()

6.6) 除了做网络直销生意，您还有别的工作吗？

1) 有的 ()， 全职 () 兼职 () 2) 没有 ()

6.7) 请指出您的最高教育程度

1) 中学毕业 ()，您在_____ (国家) 完成的中学学习
2) 技术文凭 ()，您在_____ (国家) 获得的技术文凭
3) 学士 ()，您在_____ (国家) 获得的学士学位
4) 研究生证书 ()，您在_____ (国家) 获得的研究生证书
5) 研究生文凭 ()，您在_____ (国家) 获得的研究生文凭

- 6) 硕士 (), 您在_____ (国家) 获得的硕士学位
7) 博士 (), 您在_____ (国家) 获得的博士学位

6.8) 您认为自己的英语程度如何?

- 1) 差 ()
2) 不好 ()
3) 好 ()
4) 非常好 ()
5) 母语水平 ()

6.9) 您于何年何月填表参加这个网络组织的? _____

6.10) 您是否填完表格, 就开始从事这门生意?

- 1) 是的 ____, (请回答 6.11 题);
2) 不是 ____, 您是什么时候开始从事这门生意中的? (请指出年和月) _____

6.11) 您配偶有别的工作吗?

- 1) 有的 () (全职 () 兼职 ()), 2) 没有 ()
3) 这个问题不适合于我, (请回答第 6.13 题)

6.12) 您配偶有别的工作吗?

- 1) 有的 () (全职 () 兼职 ()), 2) 没有 ()

6.13) 除了网络直销生意, 您还有其它生意吗?

- 1) 有的 (), 2) 没有 ()

6.14) 请指出平均每周您花多少小时用于网络直销生意 _____

6.15) 在过去的十周里, 您每周的平均佣金收入是多少? 请具体指出: _____

填写本问卷的日期: 年_____月_____日_____

衷心感谢您利用自己的宝贵时间帮我填写本问卷!

E. ANALYZING AND DETERMINING CONSTRUCTS AS FORMATIVE OR REFLECTIVE

To determine whether the constructs in the current study were formative or reflective, the constructs are analysed one by one following the decision rules suggested by Jarvis et al (2003).

3.5.1 Motivation in Conducting Network Marketing Business

The literature review in Chapter Two and Focus Group Studies in Appendix A showed that the causes of motivation for Chinese network marketers to pursue network marketing business are *extrinsic motivation* (Kuntze, 2001; Appendix A), *intrinsic motivation*, (Biggart, 1989, Bhattacharya and Mehta, 2000; Zhao and Seibert, 2006; Appendix A) and *business attractiveness* (Biggart, 1989; Sequeira and Rasheed, 2006; Appendix A). Extrinsic motivation, intrinsic motivation and business attractiveness consist

of the indicators of motivation to conduct a network marketing business and the direction of causality is from indicators to the construct motivation. Therefore, the construct of motivation for a Chinese immigrant to conduct a network marketing business is collectively defined by extrinsic motivation, intrinsic motivation and business attractiveness.

The first rule proposed by Jarvis et al. (2003) in determining whether the construct is formative or reflective states: if the direction of causality is from indicators to construct, the construct is formative; if the direction of causality is from construct to indicators, the construct is reflective. According to the first rule (Jarvis et al., 2003), the construct of motivation should be formative.

Extrinsic motivation is “the perceived ‘extrinsic’ rewards of money, fame, social standing, and anticipated power and freedom that are driving the desire” (Kuntze, 2001, p. 34). This concept was developed by Kuntze (2001) on the basis of symbolic self-completion theory. The symbolic self-self-completion theory suggests that when important symbols – indicators of self-definition – are lacking, individuals will use indicators of attainment to define themselves as competent and accomplished in these self-defining areas (Wicklund and Gollwitzer, 1981).

The concept of intrinsic motivation is “the pure enjoyment and sense of accomplishment in the work or endeavor” (Kuntze, 2001, p 62). This concept was developed by Kuntze (2001) on the basis of the literature of the personality traits of the entrepreneur (Stewart, 1996; Kuntze, 2001). According to Stewart (1996), the need for achievement, innovation, locus of control, need for autonomy and risk-taking are widely considered to be the classic hallmarks of the entrepreneur. Among these traits, the need for achievement is claimed as the most important trait for the success of entrepreneurs (Johnson, 1990; Lee and Tsang, 2001; Zhao and Seibert, 2006; Stewart and Roth, 2007).

The concept of business attractiveness was developed on the basis of the literature of necessity entrepreneurship (Henrekson, 2005; Bergmann and Sternberg, 2007; Block and Keollinger, 2009). According to necessity theory, immigrant entrepreneurs are pushed into entrepreneurship because they have no better choices for work or for making a living (Henrekson, 2005; Bergmann and Sternberg, 2007). Immigrants are disadvantaged in the labour market because of their inadequacy in the host country’s language skills, their lack

of education and specific career-related skills, the depreciation of human capital, etc. (Iyer and Shapiro, 1999; Chaganti and Greene, 2002; Zhou, 2004; Ley, 2006; Sequeira and Rasheed, 2006), therefore, they are pushed into entrepreneurship (Henrekson, 2005; Bergmann and Sternberg, 2007).

Thus, the concepts of extrinsic motivation, intrinsic motivation and business attractiveness are substantially different; they do not share the same theme, and are not interchangeable. In addition, dropping any one of these three concepts will alter the conceptual domain of the construct of motivation for Chinese immigrant network marketers conducting network marketing business. The second rule proposed by Jarvis et al. (2003) in determining whether the construct is formative or reflective states: indicators of a formative construct need not be interchangeable; the indicators of a reflective construct should be interchangeable. According to the second rule (Jarvis et al., 2003), the construct motivation should be formative.

Because the extrinsic motivation, intrinsic motivation and business attractiveness were conceptualized on different theories, a change in one of them is not associated with changes in the others (rule three). The third rule proposed by Jarvis et al. (2003) in determining whether the construct is formative or reflective states: indicators are not necessary to covary with each other for a formative construct, but are expected to covary with each other for a reflective construct. According to the third rule suggested by Jarvis et al. (2003), the construct of motivation should also be formative,

Finally, extrinsic motivation, intrinsic motivation and business attractiveness are not required to have the same antecedents and consequences because of differences of theories on which they were conceptualized. The fourth rule proposed by Jarvis et al. (2003) in determining whether the construct is formative or reflective states: indicators of a formative construct are not required to have the same antecedents and consequences; but the indicators of a reflective construct are required to have the same antecedents and consequences. According to rule four (Jarvis et al. 2003), the construct of motivation should be formative.

Thus, the construct of motivation in conducting network marketing business is a formative construct formed with three sub-constructs: extrinsic motivation, intrinsic

motivation and business attractiveness. Next, extrinsic motivation, intrinsic motivation and business attractiveness is going to be determined as formative or reflective respectively.

Extrinsic Motivation

According to Kuntze (2001), the concept of *extrinsic motivation* is collectively explained by eleven indicators which are:

1. To make a lot of money
2. To get rich quickly
3. To be free to name my own hours
4. To be free to work wherever I want – including from home
5. To have influence over and create a positive impact upon my community
6. To be able to have a lavish lifestyle
7. To buy all of the toys, cars, boats, vacation homes – I have always wanted
8. To have financial security
9. To be able to vacation more often – and in more exotic locations
10. To have power to call my own shots
11. To be known as a successful “entrepreneur” or business person.

These items are the causes of extrinsic motivation for Chinese network marketers to conduct their business (Kuntze, 2001, Appendix A). Therefore, the direction of causality of extrinsic motivation is from items to the sub-construct *extrinsic motivation*. According to the first rule proposed by Jarvis et al. (2003) in determining whether the construct is formative or reflective, the sub-construct *extrinsic motivation* should be formative.

The items of the *extrinsic motivation* are not interchangeable, because most of these express different themes of extrinsic motivations. For example, item 1, item 2, and item 8 express the themes of “rewards of money” from three different perspectives; item 3, item 4, and item 10 express the theme of “anticipated power and freedom” from different perspectives; item 5 and item 11 express the theme of “fame”; item 6 and item 7 express the theme of a luxury life from different perspectives and item 9 expresses the theme of social status. These themes and perspectives are different and are not interchangeable. In addition, dropping any one of these items will alter the conceptual domain of the sub-construct of extrinsic motivation for Chinese immigrant network marketers conducting

network marketing business, because the characteristics of extrinsic motivation are defined by all of these items collectively (Kuntze, 2001; Appendix A). The second rule proposed by Jarvis et al. (2003) in determining the construct is formative or reflective states: items of a formative construct need not be interchangeable; the items of a reflective construct should be interchangeable. According to the second rule (Jarvis et al. 2003), the sub-construct *extrinsic motivation* should be formative.

Because the items of extrinsic motivation reflect different themes from different perspectives, the change in one indicator is not necessary to associate with changes in others. According to the third rule (Jarvis et al. 2003), the sub-construct *extrinsic motivation* should be formative. In addition, items of *extrinsic motivation* are not required to have the same antecedents and consequence because of their expressing different themes from different perspectives. According to rule four (Jarvis et al. 2003), the sub-construct *extrinsic motivation* should also be formative. Thus, the sub-construct of *extrinsic motivation* is a formative sub-construct formed with eleven indicators.

Intrinsic motivation

Based on Kuntze (2001) and the results obtained from the focus groups (Appendix A), the sub-construct of *intrinsic motivation* to conduct a network marketing business is collectively expressed by nine indicators which are:

1. To directly contribute to a company's success
2. To keep learning
3. To be challenged
4. To be innovative
5. For personal accomplishment
6. To have fun
7. To better use my skills
8. In my work with this network marketing organization, I feel I'm part of a "cause" that's about more than earning money
9. While earning money is nice, there are other more important reasons for my work with this network marketing organization.

These items are the causes of the intrinsic motivation for Chinese network marketers to conduct their business (Kuntze, 2001, Appendix A). Therefore, the direction of causality of intrinsic motivation is from items to the sub-construct *intrinsic motivation*. According to the first rule proposed by Jarvis et al. (2003) in determining whether the construct is formative or reflective, the sub-construct *intrinsic motivation* should be formative.

Most items used to express intrinsic motivation express different themes. They are not interchangeable. For example, the theme expressed by items 1 and 5 is the sense of achievement from different perspectives. Items 2, 3 and 7 express the theme of personal development from three different perspectives. Items 6, 8 and 9 express personal intrinsic satisfaction. Item 4 expresses the theme of the creation. The themes expressed by these items are not interchangeable. In addition, dropping any one of these items will alter the conceptual domain of the sub-construct *intrinsic motivation*, because the characteristics of intrinsic motivation are defined by all of these items collectively (Kuntze, 2001). In addition, the items of *intrinsic motivation* are not expected to covary with each other, because they reflect different themes from different perspectives, the change in one item is not necessary to associate with changes in others. Furthermore, the items of *intrinsic motivation* are not required to have the same antecedents and consequences because of their expressing different themes from different perspectives. According to the second, the third and the fourth rules (Jarvis et al. 2003), the sub-construct *intrinsic motivation* is formative. Thus, the sub-construct *intrinsic motivation* is a formative sub-construct formed with nine indicators.

Business Attractiveness

According to the results obtained from focus groups (Appendix A), the latent construct *business attractiveness* is expressed with four items presented below:

1. To start up my own small business with lowest investment and risks
2. It doesn't really matter if I fail in my network marketing business, because I have only invested a little money in it.
3. It is a good opportunity for me to learn how to start up my own business, because it only cost a little money.
4. To start up my own business without financial pressure.

These items are manifestations of the sub-construct *business attractiveness*. The direction of causality is from the sub-construct *business attractiveness* to these items. In addition, these items share the same theme: to start up the business with a small amount of cost, and they are interchangeable. According to the first and second rules (Jarvis et al. 2003), the sub-construct *business attractiveness* should be reflective.

Because the items of *business attractiveness* reflect a similar theme (to start up the business with small cost), they are expected to covary with each other. The change in one item may be to associate with changes in others. Furthermore, these items are required to have the same antecedents and consequences. According to the third and fourth rules (Jarvis et al. 2003), the sub-construct *business attractiveness* should also be reflective. Thus, *business attractiveness* is a reflective sub-construct formed with four indicators.

Summary: From the examination of first and second order latent constructs, the current research concludes that the motivation in conducting network marketing business is a hypothesised construct with three first order latent constructs as formative indicators, and two of these first order latent constructs (*intrinsic motivation, extrinsic motivation*) have multiple formative indicators, one (*business attractiveness*) has multiple reflective indicators.

3.5.2 The Influence of Social Environment in NMO

The influence of the social environment in NMOs was conceptualised on the base of Social Cognitive Theory (Bandura, 1986). The characteristics of the influence of social environment in NMOs (hypothesized construct) are collectively defined with three latent variables, *cohesion* in the social environment of NMOs, *social influence*, and *training* (Chapter Two). The influence of social environment in NMOs is caused by cohesion (Biggart, 1989; Bhattacharya and Mehta, 2000; Sparks and Schenck, 2006), social influence (Sparks and Schenck, 2001; Pratt, 2000) and training (Sparks and Schenk, 2001). Therefore, the direction of causality is from indicators (*cohesion, social influence, and training*) to the construct (the influence of social environment in NMOs). According to the first rule (Jarvis et al., 2003), the construct of the influence of social environment in NMOs should be formative.

Cohesion means the social environment of the NMO is characterised as cooperating between network marketers, supporting each other, and competition free (Biggart, 1989; Kuntze, 2001; Sparks and Schenk, 2001; 2006). *Social influence* refers to the influence from other network marketers (Biggart, 1989; Kuntze, 2001; Sparks and Schenk, 2001; 2006). *Training* refers to the training programs mainly provided by NMOs and other network marketers (peers) (Biggart, 1989; Sparks and Schenk, 2001). The concepts of *cohesion*, *social influence* and *training* are substantially different; they do not share the same theme, and are not interchangeable. In addition, dropping any one of these three concepts will alter the conceptual domain of the construct, the influence of the social environment in NMOs. According to the second rule (Jarvis et al. 2003), the construct of the influence of the social environment in NMO should be formative as well.

Because *cohesion*, *social influence*, and *training* were conceptualised on different theories, a change in one of them is not associated with changes in the others. The third rule proposed by Jarvis et al., (2003) in determining the construct as formative or reflective states: indicators are not necessary to covary with each other for formative construct, but are expected to covary with each other for reflective construct. In addition, *cohesion*, *social influence*, and *training* are not required to have the same antecedents and consequences. According to the third and the fourth rules (Jarvis et al., 2003), the construct of the influence of the social environment in NMOs should also be formative,

Thus, the construct of the influence of social environment in NMOs is a formative construct formed with three sub-constructs: *cohesion*, *social influence*, and *training*. Next, *cohesion*, *social influence*, and *training* are going to be determined as formative or reflective.

Cohesion

Cohesion is one of important characteristics of the social environment in a NMO (Sparks and Schenk, 2006). Sparks and Schenk (2006) developed four items to express cohesion, which were cited by the current research and presented below:

1. There is a great deal of trust among fellow members in my organization
2. The members of my organization are very cooperative with each other

3. The member of my organization believe we can depend on each other for advice and support concerning our distributorships
4. The members of my organization support each other's work

These four indicators are manifestations of the sub-construct cohesion (Sparks and Schenk, 2006). According to Sparks and Schenk (2006), the cause of these items is the cohesion in the organization. Therefore, the direction of causality is from the sub-construct *cohesion* to items. According to the first rule (Jarvis et al. 2003), the sub-construct *cohesion* should be reflective.

The items used to measure cohesion share the same theme: the members in the organization rely on each other and they are interchangeable. According to the second rule (Jarvis et al. 2003), the sub-construct *cohesion* should also be reflective.

Because the items used to measure cohesion share the same theme, they are expected to covary with each other, a change in one item may be associated with changes in others. In addition, items of cohesion are required to have the same antecedents and consequences. According to the third and fourth rules (Jarvis et al., 2003), the sub-construct *cohesion* should be reflective. Thus, *cohesion* is a reflective sub-construct formed with four indicators.

Social Influence

According to Social Cognitive Theory (Bandura, 1986), *social influence* in the NMO is one of four sources for a Chinese network marketer to develop self-efficacy in conducting network marketing business (Bandura, 1997). Based on items developed by Sparks and Schenk (2001; 2006) and results derived from focus group interviews (Appendix A), the items used to express the *social influence* are:

1. My sponsor and other uplines are able to get me committed to a positive vision of the future with this network marketing organization
2. My sponsor and other uplines paint a positive picture of my possible future with this network marketing organization
3. My sponsor and other uplines help me see a positive future for myself as a member of this network marketing organization

4. I receive valuable information from my sponsor and other uplines about how to make the most of being a member of this network marketing organization
5. My sponsor and other uplines are excellent sources of information about being a successful member of this network marketing organization
6. When it comes to making a success of my distributorship, I am satisfied with the information I receive from my sponsor and other uplines
7. My sponsor and other uplines lead by “doing” rather than by “telling”
8. My sponsor and other uplines lead by example
9. I look to my sponsor and other uplines as examples of how to be an effective network marketing organization member.

These nine indicators are manifestations of the sub-construct *social influence* and are caused by social influence (Sparks and Schenk, 2006; Appendix A). Therefore, the direction of causality is from the sub construct *social influence* to the items. According to the first rule (Jarvis et al. 2003), the sub-construct *social influence* should be reflective.

The items used to measure *social influence* share the same theme: influence from other members (sponsor) in the organization. They are interchangeable. According to the second rule (Jarvis et al. 2003), the sub-construct *social influence* should be reflective, too.

Because the items used to measure *social influence* share the same theme, they are expected to covary with each other and are required to have the same antecedents and consequences. According to the third and fourth rules (Jarvis et al. 2003), the sub-construct *social influence* should be reflective. Thus, *social influence* is a reflective sub-construct of the influence of social environment in NMOs formed with nine indicators.

Training

Results obtained from the focus group studies suggest that training provided by experienced network marketers is one of the most popular activities in NMOs. Based on the results obtained from focus group studies (Appendix A), the items used to express the influence of training are:

1. Much of the training I received as a network marketer came from other network marketers in this network marketing organization
2. The training I received in this network marketing organization is effective.

3. Training provide by this network marketing organization is essential for me to operate my network marketing business
4. Through the training provided by this network marketing organization, I have obtained a large amount of knowledge about network marketing business
5. Without training provided by network marketing organization, I won't be able to establish my network marketing business successfully.

Above five items are manifestations of the sub-construct *training* and caused by *training* (Appendix, A). Therefore, the direction of causality is from the sub-construct *training* to the items. In addition, items used to measure *training* share the same theme: training provided by NMOs is important. They are interchangeable. According to the first and second rules (Jarvis et al. 2003), the sub-construct *training* should be reflective.

Because the items used to measure *training* share the same theme (training provided by NMOs is important), the change in one item may be associated with changes in others; these items are required to have the same antecedents and consequences.

According to the third and fourth rules (Jarvis et al. 2003), the sub-construct *training* should be reflective. Thus, *training* is a reflective sub-construct of the influence of the social environment in NMOs formed with five indicators.

Summary: From the examination of first and second order latent constructs, the current research concludes that the construct of the influence of social environment in NMOs is a hypothesised construct with three first order latent constructs as formative indicators, and each of these first order latent constructs has multiple reflective indicators.

3.5.3 Desire for Entrepreneurial Opportunity from Network Marketing Business

A review of the literature indicates that the themes included in the desire for opportunity are: i) *love*; ii) *tense*; and iii) *enthusiastic* (Krueger, 1993) in conducting network marketing business. These themes form the sub-constructs of the desire for opportunity and are the indicators of the desire for opportunity. These indicators are the manifestations of the desire for opportunity. They are caused by the desire for opportunity (Krueger, 1993; Appendix A). Therefore, the direction of causality is from the construct of

desire for opportunity to the indicators (*love, tense and enthusiastic*). According to the first rule (Jarvis et al. 2003), the construct of desire for opportunity should be reflective.

The indicators (*love, tense and enthusiastic*) of desire for opportunity share a similar theme: want to do it. They are interchangeable. Dropping an indicator will not alter the conceptual domain of the construct of desire for opportunity. According to the second rule (Jarvis et al. 2003), the construct of desire for opportunity should also be reflective.

Because the indicators (*love, tense and enthusiastic*) of the desire for opportunity share a similar theme: want to do it, they are expected to covary with each other. The change in one indicator may be associated with changes in others. In addition, these indicators are required to have the same antecedents and consequences. According to the third and fourth rules (Jarvis et al. 2003), the construct of desire for opportunity should be reflective.

Based on the above analysis with the rules proposed by Jarvis et al. (2003), the current study concludes that the construct of the desire for opportunity is reflective. Next, *love, tense and enthusiastic* are going to be determined as formative or reflective.

Love

According to (Krueger, 1993) and the focus groups (Appendix, A), the sub-construct *love* is measured with the items presented as below:

- I would love conducting my current network marketing business
- I would love sharing the opportunity of the network marketing business with others
- I would love sharing the products sold by this network marketing organization with others
- I would love learning skills and knowledge about how to conduct a network marketing business.

These four indicators are manifestations of the sub-construct *love* (Krueger, 1993), and are caused by *love* (Appendix, A). Therefore, the direction of causality is from the sub-construct (*love*) to the items. According to the first rule (Jarvis et al. 2003), the sub-construct *love* should be reflective.

These items share the same theme: love operating network marketing business. They are interchangeable. Dropping an indicator should not alter the conceptual domain of

the sub-construct *love*. According to the second rule (Jarvis et al. 2003), the sub-construct (*love*) should be reflective, too.

Because the items used to measure *love* reflect a similar theme (love operating network marketing business), they are expected to covary with each other, and the change in one item may be associated with changes in others. In addition, these items are required to have the same antecedents and consequences. According to the third fourth rules (Jarvis et al. 2003), the sub-construct (*love*) should be reflective. Thus, *love* is a reflective sub-construct of desire for opportunity formed with four items.

Tense

According to (Krueger, 1993) and focus groups (Appendix, A), *tense*, is a sub-construct of the desire for opportunity, and is measured in terms of the items presented below:

- How tense would you be in conducting your current network marketing business?
- How tense would you be in sharing the opportunity of the network marketing business with others?
- How tense would you be in sharing the products sold by this network marketing organization with others?
- How tense would you be in learning skills and knowledge about how to conduct a network marketing business?

These four items are manifestations of the sub-construct *tense* (Krueger, 1993), they are caused by *tense* (Appendix, A). Therefore, the direction of causality is from the sub-construct *tense* to the items. According to the first rule (Jarvis et al. 2003), the sub-construct *tense* should be reflective.

These indicators share the same theme: tense in operating network marketing business. They are interchangeable. Dropping an item should not alter the conceptual domain of the sub-construct: *tense*. According to the second rule (Jarvis et al. 2003), the sub-construct *tense* should be reflective, too.

Because the items used to measure *tense* reflect the same theme (tense in operating a network marketing business), they are expected to covary with each other. The change in one item may be associated with changes in others. In addition, the items of *tense* are

required to have the same antecedents and consequences. According to the third and fourth rules (Jarvis et al. 2003), the sub-construct *tense* should be reflective. Thus, *tense* is a reflective sub-construct of desire for opportunity formed with four items.

Enthusiastic

According to (Krueger, 1993) and focus groups (Appendix, A), *enthusiastic*, the sub-construct of the desire for opportunity, is measured with indicators as presented below:

- How enthusiastic would you be in your current network marketing business?
- How enthusiastic would you be in sharing the opportunity of the network marketing business with others?
- How enthusiastic would you be in sharing the products sold by this network marketing organization with others?
- How enthusiastic would you be in learning skills and knowledge about how to conduct a network marketing business?

These four items are manifestations of the sub-construct *enthusiastic* (Krueger, 1993), they are caused by *enthusiastic*. Therefore, the direction of causality is from the sub-construct (*enthusiastic*) to the items. According the first rule (Jarvis et al. 2003), the sub-construct *enthusiastic* should be reflective.

The items used to measure *enthusiastic* share the same theme: excitement of operating a network marketing business. They are interchangeable. Dropping an item should not alter the conceptual domain of the sub-construct: *enthusiastic*. According to the second rule (Jarvis et al. 2003), the sub-construct *enthusiastic* should also be reflective.

Because the items used to measure *enthusiastic* reflect the same theme (excitement of operating a network marketing business), these items are expected to covary with each other. The change in one item may be associated with changes in others. In addition, these items are required to have the same antecedents and consequences. According to the third and fourth rules (Jarvis et al. 2003), the sub-construct *enthusiastic* should be reflective. Thus, *enthusiastic* is a reflective sub-construct of the desire for opportunity formed with four indicators.

Summary: From an examination of the first and second order latent constructs, the current research concludes that the construct of desire for opportunity is a hypothesised construct with three sub-constructs as reflective indicators, and each of these sub-constructs has multiple reflective indicators.

3.5.4 Network Marketing Specific Self-efficacy

A review of the literature indicates that the themes expressed by self-efficacy include: i) *perceived degree of difficulty*; and ii) *confidence* (Krueger, 1993). These themes form the sub-constructs of self-efficacy and are the indicators of self-efficacy. These indicators are the manifestations of self-efficacy and caused by self-efficacy (Krueger, 1993). Therefore, the direction of causality is from the construct of self-efficacy to the indicators: *perceived degree of difficulty* and *confidence*. According to the first rule (Jarvis et al. 2003), the construct of self-efficacy should be reflective.

The indicators (*perceived degree of difficulty*, and *confidence*) of self-efficacy share a similar theme: self-perceived capability of conducting a network marketing business. They indicators are interchangeable. Dropping an indicator will not alter the conceptual domain of the construct of desire for opportunity. According to the second rule (Jarvis et al. 2003), the construct of self-efficacy should be reflective, too.

Because the indicators (*perceived degree of difficulty* and *confidence*) of self-efficacy share a similar theme (self-perceived capability of conducting network marketing business), these indicators are expected to covary with each other. The change in one indicator may be associated with change in the other. In addition, the indicators of self-efficacy are required to have the same antecedents and consequences. According to the third and fourth rules (Jarvis et al. 2003), the construct of self-efficacy should be reflective.

Based on above analysis, the current study concludes that the construct of self-efficacy is reflective. Next, the indicators of *perceived degree of difficulty* and *confidence* will be determined as formative or reflective.

Perceived Degree of Difficulty

According to (Krueger, 1993) and the focus groups (Appendix, A), the items used to measure the sub-construct *perceived degree of difficulty* are presented as below:

- How easy do you think it would be to conduct your current network marketing business?
- How easy do you think it would be to introduce your current network marketing business to others?
- How easy do you think it would be to sell the products to others?
- How easy do you think it would be to recruit others to participate in your organization?
- How easy do you think it would be to train others to conduct their business?
- How easy do you think it would be to lead a network marketing organization?
- How easy do you think it would be to make a public speech?

These seven indicators are manifestations of the sub-construct *perceived degree of difficulty* (Krueger, 1993; Appendix, A). These items are caused by perceived degree of difficulty (Appendix, A). Therefore, the direction of causality is from the sub-construct (*perceived degree of difficulty*) to the indicators. According to the first rule (Jarvis et al. 2003), the sub-construct *perceived degree of difficulty* should be reflective.

The items used to measure the *perceived degree of difficulty* share the same theme: self-assessment of the difficulty of conducting a network marketing business. They are interchangeable. Dropping an item should not alter the conceptual domain of the sub-construct *perceived degree of difficulty*. According to the second rule (Jarvis et al. 2003), sub-construct *perceived degree of difficulty* should be reflective.

Because items used to measure *perceived degree of difficulty* reflect the same theme: (self-assessment on the difficulty of conducting network marketing business), they are expected to covary with each other. The change in one item may be associated with changes in others. In addition, these items are required to have the same antecedents and consequences. According to the third and fourth rules (Jarvis et al. 2003), the sub-construct *perceived degree of difficulty* should be reflective. Thus, *perceived degree of difficulty* is a reflective sub-construct of self-efficacy with seven indicators.

Confidence

According to (Krueger, 1993) and focus groups (Appendix, A), the sub-construct *confidence* is measured with the items as presented below:

- How certain of success are you in the conduct of your current network marketing business?
- How overworked would you be in conducting your current network marketing business?
- Do you know enough to conduct a network marketing business?
- How sure are you of yourself in communicating with others effectively?
- How sure are you of yourself in developing new leaders in your organization

These five indicators are manifestations of the sub-construct *confidence* (Krueger, 1993) and caused by *confidence* (Appendix, A). Therefore, the direction of causality is from the sub-construct (*confidence*) to the indicators. According to the first rule (Jarvis et al. 2003), the sub-construct *confidence* is reflective.

Items used to measure *confidence* share the same theme: self-perceived assurance for the success of operating a network marketing business. These items are interchangeable. Dropping an item should not alter the conceptual domain of the sub-construct *confidence*. According to the second rule (Jarvis et al. 2003), sub-construct *confidence* should be reflective.

Because items used to measure *confidence* reflect the same theme, they are expected to covary with each other. The change in one item may be associated with changes in others. In addition, all items are required to have the same antecedents and consequences. According to the third and fourth rules (Jarvis et al. 2003), the sub-construct *confidence* should be reflective. Thus, *confidence* is a reflective sub-construct of self-efficacy with five indicators.

Summary: From the analysis of first and second order latent constructs, the current research concludes that the construct of network marketing business specific self-efficacy is a hypothesised construct with two first order latent constructs as reflective indicators, and each of these first order latent constructs has multiple reflective indicators.

3.5.5 Social Competence

The concept of social competence (hypothesised construct) was adopted from Baron and Markman (2003). According to Baron and Markman (2003), the construct of

social competence is formed with four sub-constructs (*social perception, impression management, social adaptability* and *expressiveness*) as indicators. The social competence (hypothesised construct) is defined by these indicators. These indicators are caused by social competence (Baron and Markman, 2003). Therefore, the direction of causality is from the indicators (*social perception, impression management, social adaptability* and *expressiveness*) to the construct of social competence. According to the first rule (Jarvis et al., 2003), the construct of social competence should be formative.

Social perception is the accuracy in perceiving others, *impression management* is a wide range of techniques for inducing favorable reactions in others, *social adaptability* is the ability to adapt to a wide range of social situations, and *expressiveness* is the ability to express one's emotions and feelings clearly to generate enthusiasm in others (Baron and Markman, 2003). These sub-constructs are not interchangeable, because the concepts of these sub-constructs are different; they do not share the same theme. In addition, dropping any one of these four concepts will alter the conceptual domain of the construct of social competence (Baron and Markman, 2003). According to the second rule (Jarvis et al. 2003), the construct, social competence, should be formative.

Because the concepts of *social perception, impression management, social adaptability* and *expressiveness* are different, these indicators do not covary. Change in one of them is not associated with changes in the others. In addition, these indicators are not required to have the same antecedents and consequences. According to the third and fourth rules (Jarvis et al. 2003), the construct of social competence should also be formative.

According to above analysis, the current study concludes that the construct of social competence is formative. Next, *social perception, impression management, social adaptability* and *expressiveness* will be determined as being either formative or reflective.

Social Perception

According to Baron and Markman (2003), the indicators used to measure *social perception* are presented below:

1. I am a good judge of other people
2. I can usually recognize others' traits accurately by observing their behaviour
3. I can usually read others well – tell how they are feeling in a given situation

4. I can tell why people have acted the way they have in most situations
5. I generally know when it is the right time to ask someone for a favour.

These five indicators are manifestations of the sub-construct *social perception* (Baron and Markman, 2003). They are caused by social perception (Baron and Markman, 2003). Therefore, the direction of causality is from the sub-construct (*social perception*) to the items. According to the first rule (Jarvis et al. 2003), the sub-construct *social perception* should be reflective.

Items used to measure *social perception* share the same theme: self-perceived capability in reading people. They are interchangeable. Dropping an item should not alter the conceptual domain of the *social perception*. According to the second rule (Jarvis et al. 2003), sub-construct *social perception* should be reflective.

Because the items used to measure social perception share the same theme (self-perceived capability in reading people), they are expected to covary with each other. The change in one item may be associated with changes in others. In addition, these items are required to have the same antecedents and consequences. According to the third and fourth rule (Jarvis et al. 2003), the sub-construct *social perception* should be reflective. Thus, *social perception* is a reflective sub-construct of social competence with five indicators.

Impression Management

According to Baron and Markman (2003), *impression management* is measured with the items below:

1. I'm good at flattery and can use it to my advantage when I wish
2. I can appear to like someone even when I don't

These two items are manifestations of the sub-construct *impression management* and caused by *impression management* (Baron and Markman, 2003). Therefore, the direction of causality is from the sub-construct (*impression management*) to the items. According to the first rule (Jarvis et al. 2003), the sub-construct *impression management* should be reflective.

The items used to measure *impression management* share the same theme: the skills of making people happy. They are interchangeable. Dropping an item should not

alter the conceptual domain of the *impression management*. According to the second rule (Jarvis et al. 2003), sub-construct *impression management* should be reflective.

Because the items used to measure *impression management* share the same theme (the skills of making people happy), these items are expected to covary with each other. The change in one item may be to associate with changes in others. In addition, these items are required to have the same antecedents and consequences. According to the third and fourth rules (Jarvis et al. 2003), the sub-construct *impression management* should be reflective. Thus, *impression management* is a reflective sub-construct of social competence with two indicators.

Social Adaptability

According to Baron and Markman (2003), the items used to measure *social adaptability* are as below:

1. I can easily adjust to being in just about any social situation
2. I can be comfortable with all types of people – young or old, people from the same or different backgrounds as myself
3. I can talk to anybody about almost anything
4. People tell me that I am sensitive and understanding
5. I have no problems introducing myself to strangers.

These five indicators are manifestations of the sub-construct *social adaptability* and caused by *social adaptability* (Baron and Markman, 2003). Therefore, the direction of causality is from the sub-construct (*social adaptability*) to the items. According to the first rule (Jarvis et al. 2003), the sub-construct *social adaptability* should be reflective.

The items used to measure *social adaptability* share the same theme: the capability of adjusting oneself to different social environment. They are interchangeable. Dropping an item should not alter the conceptual domain of the *social adaptability*. According to the second rule (Jarvis et al. 2003), sub-construct *social adaptability* should be reflective.

Because the items used to measure *social adaptability* share the same theme (the capability of adjusting oneself to different social environment), these items are expected to covary with each other. The change in one item may be associated with changes in others. In addition, these items are required to have the same antecedents and consequences.

According to the third and fourth rule (Jarvis et al. 2003), the sub-construct *social adaptability* should be reflective. Thus, *social adaptability* is a reflective sub-construct of social competence with five indicators.

Expressiveness

According to Baron and Markman (2003), the items used to measure *expressiveness* are presented below:

1. People can always read my emotions even if I try to cover them up
2. Whatever emotion I feel on the inside tends to show on the outside
3. Other people can usually tell pretty much how I feel at a given time
4. I am very sensitive to criticism from others
5. I am often concerned about what others think of me.

These five indicators are manifestations of the sub-construct *expressiveness* and caused by *expressiveness* (Baron and Markman, 2003). Therefore, the direction of causality is from the sub-construct (*expressiveness*) to the indicators. According to the first rule (Jarvis et al. 2003), the sub-construct *expressiveness* should be reflective.

The items used to measure *expressiveness* share the same theme: expressing one's own feelings. These items are interchangeable. Dropping an item should not alter the conceptual domain of the *expressiveness*. According to the second rule (Jarvis et al. 2003), sub-construct *expressiveness* should be reflective.

Because the items used to measure *expressiveness* share the same theme (expressing one's own feelings), these are expected to covary with each other. The change in one item may be associated with changes in others. In addition, these items are required to have the same antecedents and consequences. According to the third and fourth rules (Jarvis et al. 2003), the sub-construct *expressiveness* should be reflective. Thus, *expressiveness* is a reflective sub-construct of social competence with five indicators.

Summary: From the analysis of first and second order latent constructs, the current research concludes that the construct social competence is a hypothesised construct with four first order latent constructs as formative indicators, and each of these first order latent constructs has multiple reflective indicators.

3.5.6 Actions Undertaken in Conducting Network Marketing Business

According to Sparks and Schenk (2001; 2006) and the focus groups (Appendix A), the hypothesised construct, action undertaken in conducting a network marketing business, was collectively defined with seven items as follows:

- Hours per week devoted to distributorship work
- Hours per week devoted to presenting products and business opportunities to others
- Hours per week devoted to motivating and training new network marketers
- Hours per week devoted to learning business skills and knowledge
- Hours per week devoted to customer services
- Number of presentations conducted per week
- Number of sales workshops held per month.

These items are the causes of actions undertaken (Appendix A). Therefore, the direction of causality of action undertaken is from items to the construct, action undertaken. According to the first rule proposed by Jarvis et al. (2003) in determining the construct it is either formative or reflective. Therefore the construct, action undertaken, should be formative.

The items of the action undertaken are not interchangeable, because they express different themes of the action undertaken. In addition, dropping any one of these items will alter the conceptual domain of the action undertaken, because the characteristics of the action undertaken in conducting the business are defined by all of these items collectively (Appendix A). According to the second rule (Jarvis et al. 2003), the construct action undertaken should be formative.

Because the items of action undertaken reflect different themes, the change in one indicator is not necessarily associated with changes in the others. According to the third rule (Jarvis et al. 2003), the construct action undertaken should be formative. In addition, items of action undertaken are not required to have the same antecedents and consequences because they express different themes. According to rule four (Jarvis et al. 2003), the construct action undertaken should also be formative. Thus, the construct of action undertaken is a formative construct formed with seven indicators.

F. COMPONENT WEIGHTS (Formative Latent Constructs)

Table 3.8.2a Formative Latent Constructs: Component Weights

	Component Weights			T Statistics (O/STERR)
	Intrinsic motivation	Extrinsic motivation	Actions undertaken	
NeedAch1	0.1485			1.636
NeedAch13	0.1655			1.9514
NeedAch15	0.0065			0.0677
NeedAch19	0.4122			5.2247
NeedAch2	0.0644			0.7876
NeedAch20	0.1363			1.4784
NeedAch4	0.0433			0.445
NeedAch6	0.2347			2.5128
NeedAch9	0.3868			4.6163
NeedSym10		0.3995		4.6143
NeedSym11		-0.1076		0.9911
NeedSym12		0.1481		1.2299
NeedSym14		0.2085		2.2061
NeedSym16		0.035		0.3391
NeedSym17		0.0328		0.394
NeedSym18		0.362		3.4995
NeedSym3		0.1571		1.4643

NeedSym5		-0.0003		0.0036
NeedSym7		0.2063		2.013
NeedSym8		0.0631		0.6794
Act1			0.6947	9.6255
Act2			-0.1428	1.6023
Act3			0.2477	3.3057
Act4			-0.0367	0.4748
Act5			-0.0885	1.0865
Act6			0.2752	4.2459
Act7			0.1778	3.2739

G. TESTING THE CO-LINERARITY (Item level)

Table 3.8.2b Calculation of Variance Inflation Factors (Intrinsic Motivation)

Items	VIF Calculations	Items	VIF Calculations
NeedAch1 → NeedAch13	1.26	NeedAch4 → NeedAch1	1.50
NeedAch1 → NeedAch15	1.56	NeedAch4 → NeedAch13	1.26
NeedAch1 → NeedAch19	1.43	NeedAch4 → NeedAch15	1.56
NeedAch1 → NeedAch2	1.20	NeedAch4 → NeedAch19	1.37
NeedAch1 → NeedAch20	1.40	NeedAch4 → NeedAch2	1.44
NeedAch1 → NeedAch4	1.47	NeedAch4 → NeedAch20	1.47
NeedAch1 → NeedAch6	1.50	NeedAch4 → NeedAch6	1.39
NeedAch1 → NeedAch9	1.26	NeedAch4 → NeedAch9	1.18
NeedAch13 → NeedAch1	1.55	NeedAch6 → NeedAch1	1.55
NeedAch13 → NeedAch15	1.52	NeedAch6 → NeedAch13	1.19
NeedAch13 → NeedAch19	1.43	NeedAch6 → NeedAch15	1.43
NeedAch13 → NeedAch2	1.43	NeedAch6 → NeedAch19	1.43
NeedAch13 → NeedAch20	1.44	NeedAch6 → NeedAch2	1.43
NeedAch13 → NeedAch4	1.51	NeedAch6 → NeedAch20	1.47
NeedAch13 → NeedAch6	1.41	NeedAch6 → NeedAch4	1.40

NeedAch13 → NeedAch9	1.26	NeedAch6 → NeedAch9	1.27
NeedAch15 → NeedAch1	1.55	NeedAch9 → NeedAch1	1.55
NeedAch15 → NeedAch13	1.23	NeedAch9 → NeedAch13	1.25
NeedAch15 → NeedAch19	1.41	NeedAch9 → NeedAch15	1.51
NeedAch15 → NeedAch2	1.40	NeedAch9 → NeedAch19	1.42
NeedAch15 → NeedAch20	1.44	NeedAch9 → NeedAch2	1.42
NeedAch15 → NeedAch4	1.51	NeedAch9 → NeedAch20	1.47
NeedAch15 → NeedAch6	1.38	NeedAch9 → NeedAch4	1.41
NeedAch15 → NeedAch9	1.23	NeedAch9 → NeedAch6	1.50
NeedAch19 → NeedAch1	1.55	NeedAch2 → NeedAch1	1.30
NeedAch19 → NeedAch13	1.26	NeedAch2 → NeedAch13	1.25
NeedAch19 → NeedAch15	1.53	NeedAch2 → NeedAch15	1.52
NeedAch19 → NeedAch2	1.44	NeedAch2 → NeedAch19	1.43
NeedAch19 → NeedAch20	1.33	NeedAch2 → NeedAch20	1.47
NeedAch19 → NeedAch4	1.45	NeedAch2 → NeedAch4	1.51
NeedAch19 → NeedAch6	1.50	NeedAch2 → NeedAch6	1.49
NeedAch19 → NeedAch9	1.25	NeedAch2 → NeedAch9	1.25
NeedSym10 → NeedSym11	2.77	NeedSym14 → NeedSym10	1.46
NeedSym10 → NeedSym12	2.32	NeedSym14 → NeedSym11	2.75
NeedSym10 → NeedSym14	1.54	NeedSym14 → NeedSym12	2.32
NeedSym10 → NeedSym16	1.98	NeedSym14 → NeedSym16	1.91
NeedSym10 → NeedSym17	1.41	NeedSym14 → NeedSym17	1.40
NeedSym10 → NeedSym18	1.55	NeedSym14 → NeedSym18	1.81
NeedSym10 → NeedSym3	1.74	NeedSym14 → NeedSym3	1.71
NeedSym10 → NeedSym5	1.73	NeedSym14 → NeedSym5	1.73
NeedSym10 → NeedSym7	1.73	NeedSym14 → NeedSym7	1.69
NeedSym10 → NeedSym8	1.38	NeedSym14 → NeedSym8	1.42
NeedSym11 → NeedSym10	1.46	NeedSym16 → NeedSym10	1.46
NeedSym11 → NeedSym12	1.89	NeedSym16 → NeedSym11	2.70
NeedSym11 → NeedSym14	1.53	NeedSym16 → NeedSym12	2.15
NeedSym11 → NeedSym16	1.93	NeedSym16 → NeedSym14	1.48
NeedSym11 → NeedSym17	1.42	NeedSym16 → NeedSym17	1.37
NeedSym11 → NeedSym18	1.74	NeedSym16 → NeedSym18	1.84
NeedSym11 → NeedSym3	1.67	NeedSym16 → NeedSym3	1.74
NeedSym11 → NeedSym5	1.69	NeedSym16 → NeedSym5	1.73

NeedSym11 → NeedSym7	1.72	NeedSym16 → NeedSym7	1.64
NeedSym11 → NeedSym8	1.42	NeedSym16 → NeedSym8	1.41
NeedSym12 → NeedSym10	1.46	NeedSym17 → NeedSym10	1.46
NeedSym12 → NeedSym11	2.26	NeedSym17 → NeedSym11	2.77
NeedSym12 → NeedSym14	1.54	NeedSym17 → NeedSym12	2.32
NeedSym12 → NeedSym16	1.84	NeedSym17 → NeedSym14	1.52
NeedSym12 → NeedSym17	1.41	NeedSym17 → NeedSym16	1.92
NeedSym12 → NeedSym18	1.81	NeedSym17 → NeedSym18	1.78
NeedSym12 → NeedSym3	1.73	NeedSym17 → NeedSym3	1.73
NeedSym12 → NeedSym5	1.75	NeedSym17 → NeedSym5	1.71
NeedSym12 → NeedSym7	1.72	NeedSym17 → NeedSym7	1.72
NeedSym12 → NeedSym8	1.42	NeedSym17 → NeedSym8	1.37

Table 3.8.2c Calculation of Variance Inflation Factors (Extrinsic Motivation) – Cont.

Items	VIF Calculations	Items	VIF Calculations
NeedSym18 →NeedSym10	1.23	NeedSym7 → NeedSym10	1.46
NeedSym18 →NeedSym11	2.61	NeedSym7 →NeedSym11	2.76
NeedSym18 →NeedSym12	2.29	NeedSym7 →NeedSym12	2.31
NeedSym18 →NeedSym14	1.51	NeedSym7 →NeedSym14	1.51
NeedSym18 →NeedSym16	1.98	NeedSym7 →NeedSym16	1.88
NeedSym18 →NeedSym17	1.37	NeedSym7 →NeedSym17	1.41
NeedSym18 →NeedSym3	1.71	NeedSym7 →NeedSym18	1.84
NeedSym18 →NeedSym5	1.74	NeedSym7 →NeedSym3	1.74
NeedSym18 →NeedSym7	1.73	NeedSym7 →NeedSym5	1.67
NeedSym18 → NeedSym8	1.41	NeedSym7 → NeedSym8	1.25
NeedSym3 →NeedSym10	1.46	NeedSym8 → NeedSym10	1.42
NeedSym3 →NeedSym11	2.65	NeedSym8 →NeedSym11	2.77
NeedSym3 →NeedSym12	2.31	NeedSym8 →NeedSym12	2.31
NeedSym3 →NeedSym14	1.51	NeedSym8 →NeedSym14	1.54
NeedSym3 →NeedSym16	1.98	NeedSym8 →NeedSym16	1.97
NeedSym3 →NeedSym17	1.41	NeedSym8 →NeedSym17	1.37
NeedSym3 →NeedSym18	1.81	NeedSym8 →NeedSym18	1.83
NeedSym3 →NeedSym5	1.54	NeedSym8 →NeedSym3	1.74
NeedSym3 →NeedSym7	1.72	NeedSym8 →NeedSym5	1.74
NeedSym3 → NeedSym8	1.42	NeedSym8 →NeedSym7	1.52
NeedSym5 → NeedSym10	1.45	NeedSym5 → NeedSym17	1.38
NeedSym5 → NeedSym11	2.67	NeedSym5 → NeedSym18	1.84
NeedSym5 →NeedSym12	2.32	NeedSym5 → NeedSym3	1.53
NeedSym5 →NeedSym14	1.53	NeedSym5 →NeedSym7	1.65
NeedSym5 → NeedSym16	1.96	NeedSym5 → NeedSym8	1.42

Table 3.8.2d Calculation of Variance Inflation Factors (Action undertaken)

Items	VIF Calculations	Items	VIF Calculations
Act1 → Act2	2.392	Act5 → Act1	2.899
Act1 → Act3	2.371	Act5 → Act2	3.168
Act1 → Act4	2.098	Act5 → Act3	2.428
Act1 → Act5	2.303	Act5 → Act4	1.713
Act1 → Act5	2.052	Act5 → Act6	2.065
Act1 → Act7	1.627	Act5 → Act7	1.624
Act2 → Act1	2.123	Act6 → Act1	2.882
Act2 → Act3	2.626	Act6 → Act2	3.005
Act2 → Act4	2.057	Act6 → Act3	2.612
Act2 → Act5	2.233	Act6 → Act4	2.094
Act2 → Act6	1.899	Act6 → Act5	2.302
Act2 → Act7	1.626	Act6 → Act7	1.335
Act3 → Act1	2.619	Act7 → Act1	2.904
Act3 → Act2	3.267	Act7 → Act2	3.271
Act3 → Act4	2.002	Act7 → Act3	2.574
Act3 → Act5	2.130	Act7 → Act4	2.094
Act3 → Act6	2.055	Act7 → Act5	2.302
Act3 → Act7	1.593	Act7 → Act6	1.697
Act4 → Act1	2.904	Act4 → Act5	1.882
Act4 → Act2	3.206	Act4 → Act6	2.063
Act4 → Act3	2.509	Act4 → Act7	1.623

Calculation of Variance Inflation Factors (Latent Variable Level)

Variables	Indicator	Results of VIF Calculations
Influence of social environment	Cohesion- ->Social influence	1.38
	Cohesion - ->Train	1.38
	Social influence - ->Cohesion	1.24
	Social influence- ->Train	1.24
Motivation	Train- ->Cohesion	1.29
	Train- ->Social influence	1.29
	Intrinsic motivation- ->Extrinsic motivation	1.12
	Intrinsic motivation- ->Business attractiveness	1.12
Social Competence	Extrinsic motivation- ->Intrinsic motivation	1.11
	Extrinsic motivation - ->Business attractiveness	1.11
	Business attractiveness - ->Intrinsic motivation	1.58
	Business attractiveness - ->Extrinsic motivation	1.58
Social adaptability - ->Social Perception	Social adaptability - ->Expressiveness	1.01
	Social adaptability - ->Impression management	1.15
	Social adaptability - ->Social Perception	1.16

Calculation of Variance Inflation Factors (Latent Variable Level)

Variable	Indicator	Results of VIF Calculations
	Expressiveness - -> Social adaptability	1.93
	Expressiveness - -> Impression management	1.29
	Expressiveness - -> Social Perception	1.74
	Impression management - -> Social adaptability	1.72
	Impression management - -> Expressiveness	1.01
	Impression management - -> Social Perception	1.73
	Social Perception - -> Social adaptability	1.29
	Social perception - -> Expressiveness	1.01
	Social Perception - -> Impression management	1.28

H. SAMPLE ITEMS USED TO MEASURE VARIABLES IN THE RESEARCH MODEL

The following sub-scales are formed using first order reflective scales. Subsequently, they are combined to form a formative second order latent variable.

Influence of social environment in NMO

1. Social influence (Cronbach's alpha=0.91)

- My sponsor and other uplines lead by “doing” rather than “telling”
- I receive valuable information from my sponsor and other uplines about how to make the most of being a member of this network marketing organization
- I look to my sponsor and other uplines as examples of how to be an effective network marketing organization member
- My sponsor and other uplines are an excellent source of information about being a successful member of this network marketing organization
- When it comes to making a success of my distributorship, I am satisfied with the information I receive from my sponsor and other uplines
- My sponsor and other uplines help me see a positive future for myself as a member of this network marketing organization
- My sponsor and other uplines are able to get me committed to a positive vision of the future with this network marketing organization.

2. Training (Cronbach's alpha=0.87)

- Training provided by this network marketing organization is essential for me to operate my network marketing business
- Through the training provided by this network marketing organization, I have obtained a large amount of knowledge about network marketing business
- The training I received in this network marketing organization are effective
- Much of the training I received as a network marketer came from other network marketers in this network marketing organization
- Without training provided by the network marketing organization, I won't be able to establish my network marketing business successfully.

3. Cohesion (Cronbach's alpha=0.81)

- The members of my organization are very cooperative with each other
- The members of my organization believe we can depend on each other for advice and support concerning our distributorships
- The members of my organization support each other's work
- There is a great deal of trust among fellow members in my organization.

Social Competence

1. Social Perception (Cronbach's alpha=0.91)

- I can tell why people have acted the way they have in most situations
- I can usually read others well – tell how they are feeling in a given situation
- I can usually recognize others' traits accurately by observing their behavior
- I am a good judge of other people
- I generally know when it is the right time to ask someone for a favour.

2. Social Adaptability (Cronbach's alpha=0.83)

- I can easily adjust to being in just about any social situation
- I can be comfortable with all types of people – young or old, people from the same or different backgrounds as myself
- I can talk to anybody about almost anything
- People tell me that I am sensitive and understanding
- I have no problems introducing myself to strangers.

3. Expressiveness (Cronbach's alpha= 0.73)

- Whatever emotion I feel on the inside tends to show on the outside
- People can always read my emotions even if I try to cover them up
- I am very sensitive to criticism from others
- Other people can usually tell pretty much how I feel at a given time
- I often concerned about what others think of me.

4. Impression Management (Cronbach's alpha= 0.60)

- I'm good at flattery and can use it to my advantage when I wish
- I can appear to like someone even when I don't

The following sub-scales are formed using first order reflective scales, and the second order latent variables are also reflective.

Network marketing business specific self-efficacy

The result of the test with AMOS (CFI = 0.98, RMSEA = 0.07, $\chi^2 = 34.57$, df = 19, p = 0.02) shows the measurement equation fits the data. Discriminant validity and convergent validity are confirmed.

1. Degree of difficulty (Cronbach's alpha=0.89)

- How easy do you think it would be to introduce your current network marketing business to others?
- How easy do you think it would be to recruit others to participate in your organization?
- How easy do you think it would be to conduct your current network marketing business?
- How easy do you think it would be to sell the products to others?

2. Confidence (Cronbach's alpha=0.88)

- How sure are you of yourself in developing new leaders in your organization?
- Do you know enough to conduct a network marketing business?
- How certain of success are you in conduct your current network marketing business?
- How sure are you of yourself in communicating with others effectively?

Desire for opportunity from network marketing business

The result of the test with AMOS (CFI = 0.98, RMSEA = 0.08, $\chi^2 = 29.79$, df = 13, p = 0.05) shows the measurement equation fits the data. Discriminant validity and convergent validity are confirmed.

Love and enthusiastic (Cronbach's alpha=0.86)

- How enthusiastic would you be in learning skills and knowledge about how to conduct a network marketing business

- How enthusiastic would you be in sharing the opportunity of the network marketing business with others?
- I would love to conduct my current network marketing business
- How enthusiastic would you be in sharing the products sold by this network marketing organization with others?

Tense (Cronbach's alpha= 0.90)

- How tense would you be in sharing the opportunity of the network marketing business with others?
- How tense would you be in sharing the products sold by this network marketing organization with others?
- How tense would you be in conducting your current network marketing business?

Two of three of the following sub-scales (extrinsic motivation, intrinsic motivation) are formed using first order formative scales, and one of them (business attractiveness) is formed using a first order reflective. Subsequently, they are combined to form a formative second order latent variable.

Motivation for conducting network marketing business

1. Extrinsic motivation

- To make a lot of money
- To get rich quickly
- To be free to name my own hours
- To be free to work wherever I want – including from home
- To have influence over and create a positive impact upon my community
- To be able to have a lavish lifestyle
- To buy all of the toys, cars, boats, vacation homes – have always wanted
- To have financial security
- To be able to vacation more often – and in more exotic locations
- To have power to call my own shots
- To be known as a successful “entrepreneur” or business person.

2. Intrinsic motivation

- To directly contribute to a company's success
- To keep learning
- To be challenged
- To be innovative
- For personal accomplishment
- To have fun
- To better use my skills
- In my work with this network marketing organization, I feel I'm part of a "cause" that's about more than earning money
- While earning money is nice, there are other more important reasons for my work with this network marketing organization.

3. Business Attractiveness (Cronbach's alpha= 0.79.)

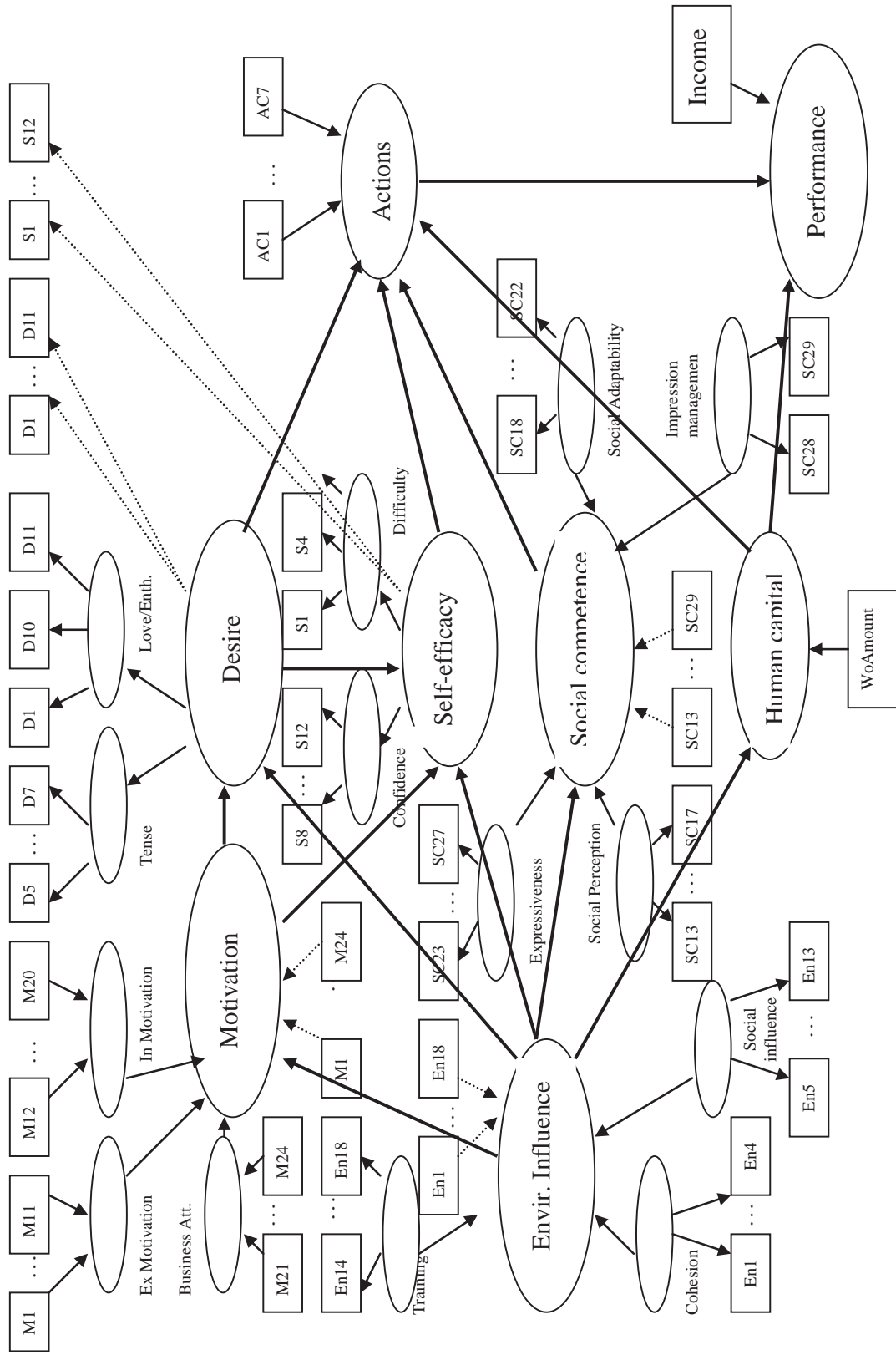
- It doesn't really matter if I fail in my network marketing business, because I have only invested a little money in it
- It is a good opportunity for me to learn how to start up my own business, because it only cost little money
- To start up my own business without financial pressure
- To start up my own small business with the lowest investment and risks

The following scale is formed with formative scales:

Action Undertaken in Conducting Network Marketing Business

- Hours per week devoted to distributorship work
- Hours per week devoted to presenting products and business opportunities to others
- Hours per week devoted to motivating and training new network marketers
- Hours per week devoted to learning business skills and knowledge
- Hours per week devoted to customer services
- Number of presentations conducted per week
- Number of sales workshops held per month

Figure 3.9 Research Model



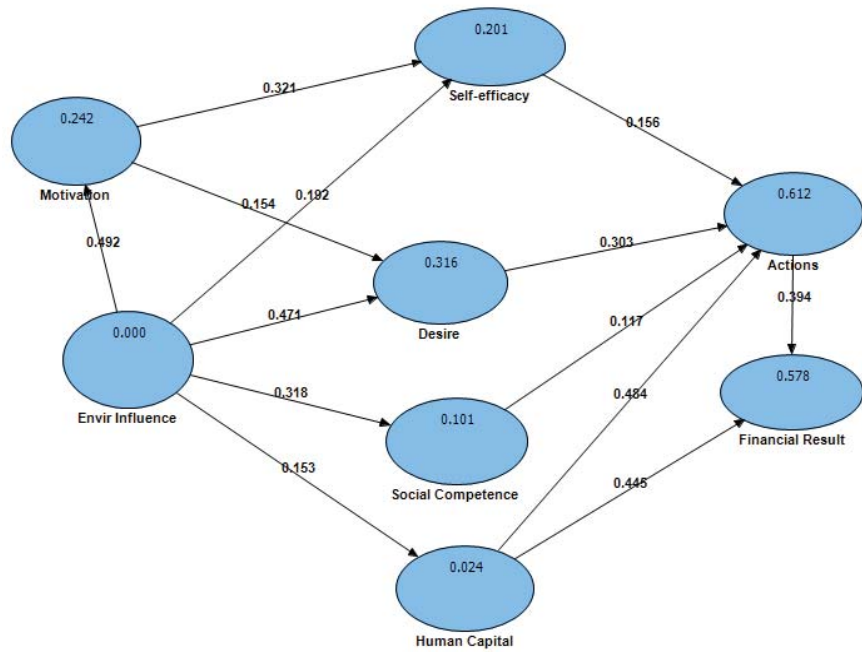


Figure 3.9.1-1 Structure of the Measurement for Motivation

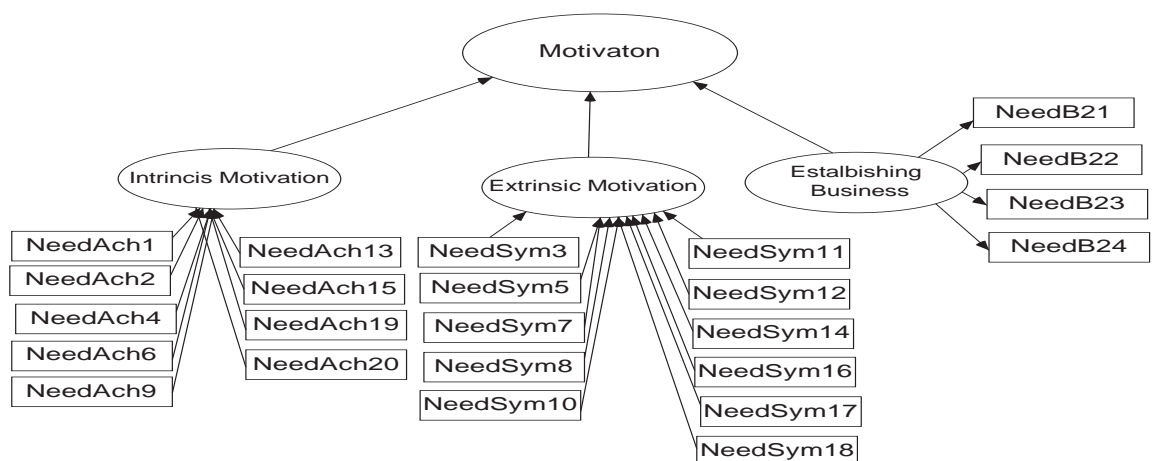


Figure 3.9.1-2 Structure of the Influence of Social Environment in NMO

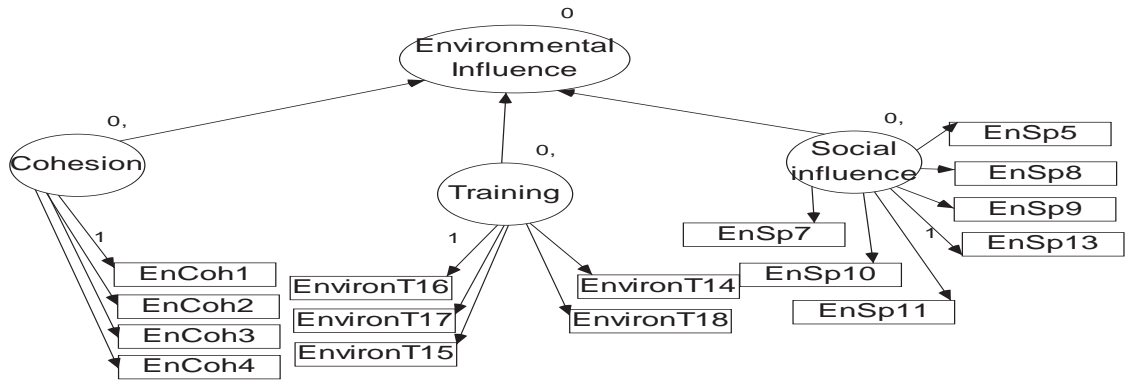


Figure 3.9.1-3 Structure of the Desire for Entrepreneurial Opportunity

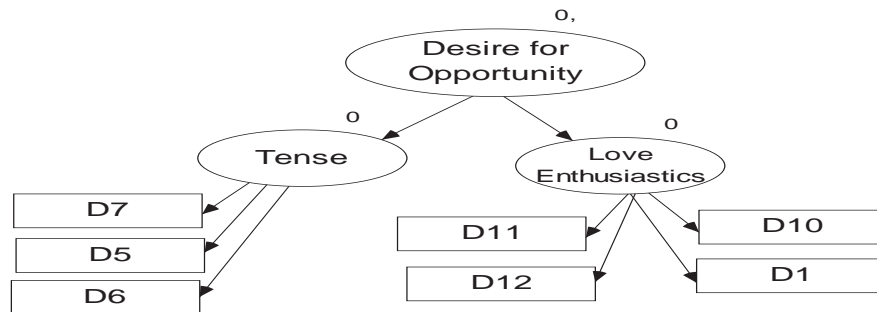


Figure 3.9.1-4. Structure of the Network Marketing Specific Self-efficacy

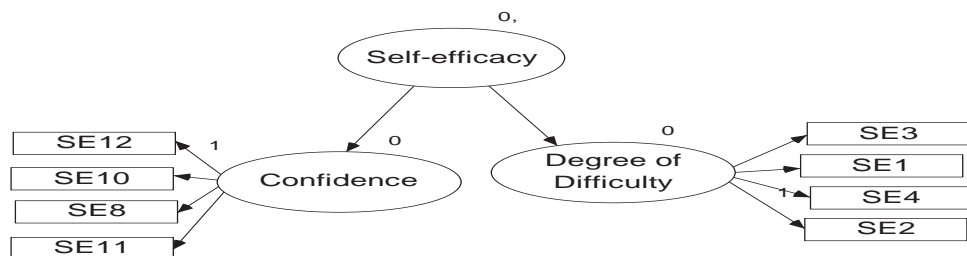


Figure 3.9.1-5. Structure of Social Competence

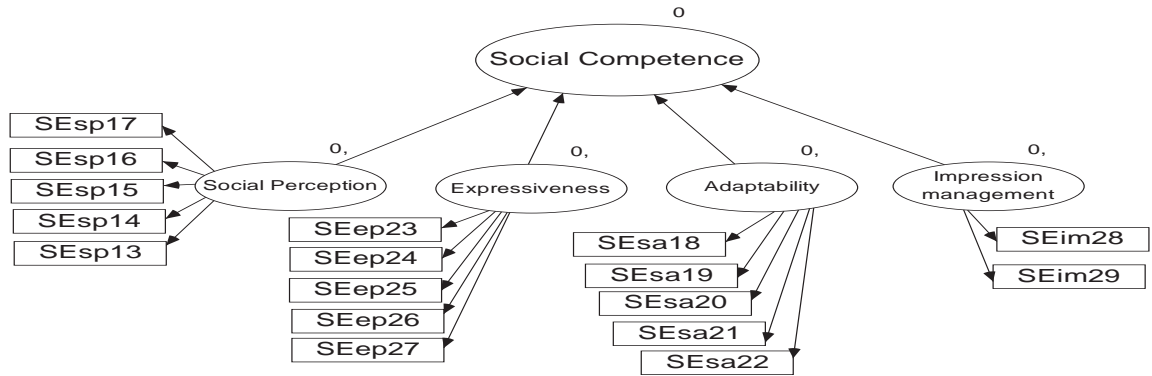


Figure 3.9.1-6. Structure of Actions Undertaken

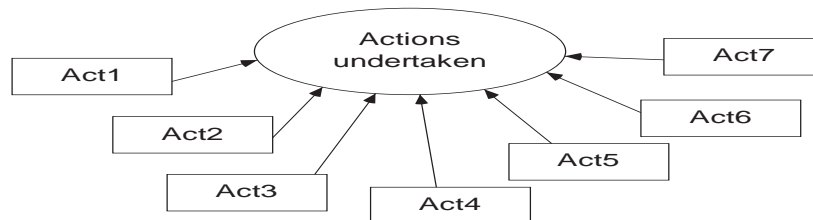


Figure 3.9.1-7. Structure of Human Capital

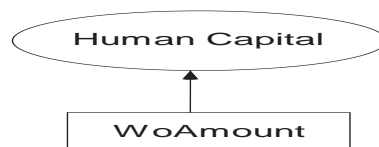
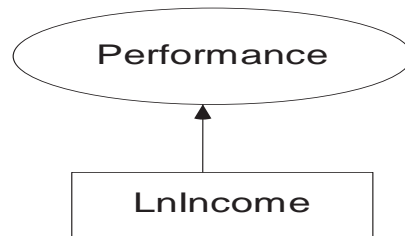


Figure 3.9.1-8. Structure of Performance



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