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# Network Marketing Businesses and Chinese Ethnicity Immigrants in Australia

by Fu Dai, Stephen T. T. Teo, and Karen Yuan Wang

This study adopts two theoretical perspectives, Social Cognitive Theory and Theory of Planned Behavior, to examine a model of network marketing business participation by Chinese immigrants in Australia. A structural equations modeling analysis showed that the social environment within a network marketing organization positively influences the self-efficacy of Chinese network marketers and their desire to seek opportunities. These factors positively influence the actions undertaken by network marketers, and subsequently, impact positively on their performance outcome.

#### Introduction

It is often the case that immigrants pursue a network marketing business (NMB) as they do not have adequate resources and the skills to establish their own small business in their newly adopted home country (Lin 2007). Network 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/her own network marketing organization (NMO) by recruiting, training, and motivating others to sell the same products and services (Harris 2004). Some studies (such as Biggart 1989; Lin 2007) argue that NMOs have been promoted as a way for ordinary people to pursue entrepreneurial opportunities and attain wealth. NMOs provide "an empowering tool" to socially disadvantaged individuals, such as females (Biggart 1989) and immigrants (Lin 2007), motivating them to take charge of their own life.

Kuntze (2001) claims individuals who pursue an NMB are entrepreneurial dreamers rather

than real entrepreneurs. He suggests that network marketers are far less innovative than real entrepreneurs, because there is no need for network marketers to invent or fund a new type of business (Kuntze 2001). Kuntze (2001) also claims that network marketers are motivated extrinsically as they are more focused on pursuing the name of "entrepreneur" rather than meeting their "need for achievement." Bhattacharya and Mehta (2000), however, express a different view on network marketers and suggest that these individuals have a strong sense of innovation that is embedded in pursuing a successful business in a creative way. The distribution of products in NMOs is through the organization of social events in business meetings (Bhattacharya and Mehta 2000). According to Biggart (1989) and Bhattacharya and Mehta (2000), this type of product distribution in NMBs represents a form of innovation. Groß (2010) found that spiritual elements are propagated within NMOs to motivate their network marketers. A meaningful life and personal goals are important motivators for network marketers

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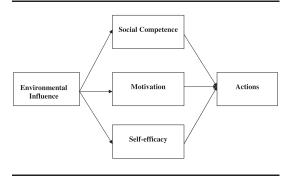
to pursue their NMBs. Groß's (2010) finding is supported by Biggart (1989). Thus, we argue that these individuals have an intrinsic motivation.

Some of the popular terminologies used in the literature for these individuals include representatives (Biggart 1989), agents (Koehn 2001), network marketers (Dai, Wang, and Teo 2011), distributors (Lin 2007; Pratt 2000), and multilevel marketing members (Sparks and Schenk 2006). One common theme shared among these individuals is their desire to pursue entrepreneurship via NMB (Sparks and Schenk 2006). Biggart (1989) argues 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 the emergence of capitalism" (Biggart 1989, p. 163). In the current paper, "network entrepreneur" is adopted to refer to these individuals, as they exhibit the traits of successful network marketers (McCelland 1987), such as the need for achievement (Lin 2007), innovation (Bhattacharya and Mehta 2000), and internal locus of control (Biggart 1989). They are intrinsically motivated to satisfy their internal needs (Groß 2010).

It has been shown that Chinese immigrants typically set up their own businesses in the host country (e.g., Collins 2002) and one of the business activities they pursue is network marketing (e.g., Lin 2007). Researchers such as Sequeira and Rasheed (2006) have recognized that the main reason immigrants pursue entrepreneurship is that they are disadvantaged in the labor market because of their inadequate host country language skills, and the depreciation of human capital. The willingness to become an entrepreneur for a particular immigrant group is driven by this adverse environment and the size of the immigrant group (Evans 1989).

Some studies have examined the motivations of Chinese immigrants participating in NMBs by adopting Social Cognitive Theory (SCT) (see, e.g., Dai, Wang, and Teo 2011). In their study, Dai, Wang, and Teo (2011) concluded that self-efficacy positively relates to actions undertaken in conducting an NMB. However, they did not examine how Chinese immigrants pursue entrepreneurship via building their NMBs in their newly adopted home country. This is an important research question as there are a significant number of Chinese immigrants joining NMBs in Australia (*Sing Tao Daily (Australia)*, September 28, 2007). This aim of the current study is to answer this question (Figure 1).

### Figure 1 Model of Network Marketing Business Entrepreneurial Action



Source: Dai, Wang, and Teo (2011).

# Conceptual Background and Hypotheses

SCT describes human functioning in terms of a model of triadic reciprocity in which behavioral factors (e.g., motivation and desire for opportunity in the present study), personal internal psychological factors (e.g., self-efficacy), and environmental events (e.g., environmental influence) all operate as interacting determinants to each other (Bandura 1986). It explains how motivation (behavior), desire for opportunity (behavior), and self-efficacy (personal internal psychological factors) are affected by the influence of the social environment in NMOs (Bandura 1986). SCT also suggests self-efficacy is critical for regulating the actions undertaken (Bandura 1997), which may in turn affect the actions undertaken (Wood and Bandura 1989).

However, self-efficacy is not fully sufficient in encouraging immigrants to conduct their NMB if they do not have the desire to pursue the opportunity derived from an NMB (Krueger 1993). Furthermore, our literature review suggests that SCT does not specifically explain how the desire for opportunities interacts with actions undertaken. Without understanding this interaction, the dependent variable (performance outcomes) will not be addressed adequately and nor will the research question be answered properly. To explain the interaction between desire for opportunity and actions undertaken, Theory of Planned Behavior (TPB) (Ajzen 1991) is introduced as a complementary theory.

TPB is designed to predict and explain human behavior in a specific context (Ajzen 1991). A

central factor in this theory is the individual's intention to perform a given behavior. It postulates three conceptually independent determinants of intention: attitude toward the behavior, subjective norm, and the degree of perceived behavioral control (or self-efficacy). This theory was used to develop the Entrepreneurial Intention Model (Krueger 2000). The Entrepreneurial Intention Model suggests that an individual's desire to pursue entrepreneurship and selfefficacy determines his/her entrepreneurial intention (Krueger 2000). Researchers suggest entrepreneurial intention leads to entrepreneurial actions (Carsrud and Brannback 2011); however, we argue that entrepreneurial actions determine the performance (Kuratko, Ireland, and Hornsby 2001). In addition, TPB and SCT can be linked by self-efficacy, as self-efficacy is a critical factor in both TPB and SCT. Therefore, TPB is appropriate in explaining how the desire for opportunity and self-efficacy determines the actions undertaken by network marketers in their business activities, which in turn are related to performance outcomes (Kuratko, Ireland, and Hornsby 2001).

Nevertheless, the disadvantage of TPB is that this theory does not explain how the environmental influence within NMO affects the factors of an individual's desire for opportunity and self-efficacy. Thus, it is necessary for the present study to integrate SCT with TPB. The integration of SCT with TPB will sufficiently address the dependent variable (performance outcome).

Biggart (1989) points out the critical factor in a network marketing firm's success is its ability to engage the energies of thousands of people and shape them into a highly productive organization (NMO). To effectively engage with their salespersons, popular network marketing firms, such as AMWAY, Mary Kay, Nu Skin, and Shaklee, along with their network entrepreneurs organize many business or training events in their markets every year (Bhattacharya and Mehta 2000). By doing this, an energetic social environment is developed within NMOs (Biggart 1989). It follows that the influence of the social environment within an NMO will thereby affect individual network entrepreneurs' behaviors and personal factors (Bandura 1986).

In their study, Dai, Wang, and Teo (2011) identified that the *influence of social environment* comprises three subvariables: *cohesion* (Sparks and Schenk 2006), *peer influence* (*encouragement and support between network marketers*) (Biggart 1989), and *training*. Dai

et al. argue that the training provided by NMOs is essential because many inexperienced individuals pursue entrepreneurship via NMBs. A feature of the training undertaken in NMOs is that most training programs are delivered by other network entrepreneurs (Sparks and Schenk 2006). In their training sessions, network entrepreneurs share their knowledge and skills and encourage each other (Biggart 1989). Within NMOs, competition is not encouraged (Sparks and Schenk 2006); otherwise the training programs would not be successful. Therefore, cohesion within an NMO is essential and peer influences among an NMO should be considered. Cobesion, peer influence, and training within an NMO are important for network entrepreneurs in running their businesses (Dai, Wang, and Teo 2011). Following the study by Dai, Wang, and Teo (2011), the present study defines the influence of social environment as the effect of the social atmosphere on network entrepreneurs' cognition and behaviors. Social environment consists of three factors: training (Dai, Wang, and Teo 2011), peer influence (Biggart 1989), and perceived cohesion (Sparks and Schenk 2006).

Dai, Wang, and Teo (2011) suggest that the influence of social environment (training, peer influence, and perceived cohesion) positively affect NMB-specific self-efficacy. Similar to the study by Dai, Wang, and Teo (2011), NMBspecific self-efficacy is defined as a network entrepreneur's belief in their ability to attain the expected results when conducting NMB activities. Empirical support in the study of Dai et al. shows that that NMB specific self-efficacy consists of two subfactors: degree of easiness and confidence. The researchers used the degree of easiness to investigate network entrepreneurs' perception of the difficulties conducting NMB activities (e.g., introducing business opportunities to prospects and selling products to customers). Confidence was used to investigate network entrepreneurs' assurance in operating their business successfully.

SCT suggests that an individual's self-efficacy is related to the attainments of others in that "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). People appraise their capabilities in relation to the performance and attainment of others (Bandura 1997); that is, social comparison operates as a primary factor

in the self-appraisal of capabilities (Bandura 1997). Therefore, Chinese immigrants' self-efficacy in establishing successful NMBs is affected by their social environment.

The philosophy of "anyone can do it" promoted in NMOs (Biggart 1989; Pratt 2000) has attracted many inexperienced Chinese immigrants to NMBs in their new home countries (Lin 2007). To equip inexperienced network entrepreneurs with the required business knowledge and skills, training programs are provided and peer support/influence is encouraged within NMOs (Sparks and Schenk 2006).

The training programs offered by NMOs provide two sources for trainees to raise their selfefficacy. First, they provide opportunities for trainees to be exposed to successful network marketers and obtain vicarious experiences (Bandura 1986). Second, they let trainees practice business skills and gain knowledge to obtain mastery experience (Bandura 1986). Vicarious experiences and mastery experiences are two sources of self-efficacy (Bandura 1997). Therefore, we argue that the training programs offered by NMOs positively impact on Chinese immigrant network entrepreneurs' self-efficacy. This argument implies that the influence of the social environment in an NMO positively affects Chinese immigrant network entrepreneurs' selfefficacy. Thus, the following is hypothesized:

H1: The influence of the social environment (training, peer influence, and perceived cohesion) is positively associated with immigrant network entrepreneurs' self-efficacy in conducting NMB activities.

Network entrepreneurs who possess a high level of self-efficacy will stay in their business longer (Bandura 1997). Individuals tend to avoid tasks in which they have low self-efficacy and, conversely, are drawn toward tasks for which they have high self-efficacy (Bandura 1986; Forbes 2005). However, self-efficacy is not fully sufficient to encourage immigrants to conduct NMBs if they do not have the desire for the opportunity (Krueger 1993). Desire for profitable opportunities is an important trait of entrepreneurs (McMullen and Shepherd 2006). Following Krueger (1993), a network entrepreneur's desire for opportunity is defined as the degree to which he/she finds the prospect of conducting an NMB to be attractive; in essence, it reflects one's desire for opportunities derived from an NMB. This desire can be influenced by

group norms (Sekerka and Bagozzi 2007) and the social environment (Malhotra 2010).

Within NMOs, social events are hosted regularly and successful network entrepreneurs share their personal stories in an emotional manner with others to promote entrepreneurial opportunities derived from NMBs in NMOs (Biggart 1989; Sparks and Schenk 2006). The general impression of network entrepreneurs is of a group of disadvantaged people who are apt to be influenced by such entrepreneurship promotions (Kuntze 2001). Immigrants are commonly considered to be disadvantaged in terms of pursuing employment opportunities in their host country (Chaganti and Greene 2002). Chinese immigrants' desire for opportunities is influenced by the social environment of NMOs (Lin 2007) as they use the social events as an opportunity to socialize with others from similar cultural backgrounds. Adopting an SCT lens, this study expects the influence of the social environment in NMOs to be positively related to immigrant network entrepreneurs' desire for opportunities derived from conducting NMB activities. The following is, therefore, hypothesized:

H2: The influence of the social environment is positively associated with immigrant network entrepreneurs' desire for opportunity.

TPB (Ajzen 1991) and the literature on entrepreneurial intention (Krueger 2000) suggest that entrepreneurial intention is determined by both self-efficacy and the desire to pursue entrepreneurship. Entrepreneurial intention is the single best predictor of entrepreneurial action (Carsrud and Brannback 2011; Choo and Wong 2006). Furthermore, an individual's beliefs in his/her efficacy influences the course of action he/she chooses to pursue, how much effort he/she puts into the given endeavors, and how long he/she perseveres in the face of obstacles and failures (Bandura 1997). Self-efficacy is also associated with entrepreneurship (Trevelyan 2011). Selfefficacy has been found to be a determinant of the extent of ongoing involvement with network marketing activities by network entrepreneurs (Dai, Wang, and Teo 2011). Thus, the following hypothesis is proposed:

H3: There is a positive relationship between immigrant network entrepreneurs' self-efficacy and actions undertaken in conducting NMB activities.

TPB suggests that attitude is the first determinant of behavioral intentions (Carr and Sequeria 2007). Attitude represents the attractiveness of behavior (Ajzen 1991) and is one of the best predictors of desire (Armitage and Conner 2001). Attitude has also been defined by Krueger (2000) as the desire to pursue an entrepreneurial opportunity by starting a new venture.

Although previous research on entrepreneurial intention (Krueger 2000) has not addressed the relationship between desirability and entrepreneurial action, we argue that the desire for entrepreneurship is positively related to entrepreneurial actions (Choo and Wong 2006). As can be seen by SCT, an individual's desire for opportunity is regarded as a personal and cognitive factor (Bandura 1986) while entrepreneurial action is considered a behavioral factor. These two factors have a reciprocal relationship (Bandura 1986), which means the higher the level of desire for opportunity an individual has, the more actions he/she will undertake in conducting his/her NMB activities. Therefore, the following is hypothesized:

H4: There is a positive relationship between immigrants' desire for opportunity and actions undertaken in conducting NMB activities.

Bandura (1986) argues that actions that bring rewards are generally repeated, whereas those that bring unrewarding or punishing outcomes tend to be discarded. 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). Individuals are affected by rewards and punishments (Noe 1986; Taormina and Lao 2007); therefore, this research argues that an individual's motivation to pursue his/her goals is affected by the influence of the social environment.

Symbolic Self-Completion Theory can be used to explain the reasons why network marketers engage in their businesses. This theory argues that important symbols (such as indicators of self-definition) are used by individuals to define themselves as competent and accomplished (Wicklund and Gollwitzer 1981). Kuntze (2001) claims that network marketers are entrepreneurial dreamers rather than real entrepreneurs, because they are motivated extrinsically

to pursue the title of entrepreneurship over actually doing what it entails. Therefore, extrinsic motivation is an aspect of motivation for Chinese immigrants to conduct an NMB.

The literature also suggests that successful network marketers are motivated intrinsically (Groß 2010) to pursue entrepreneurship (Lin 2007; Sparks and Schenk 2006). The need to establish a successful business (Lin 2007), need for identification (Sparks and Schenk 2006), and spiritual satisfactions (Groß 2010) are traits identified among successful network marketers, which are similar to entrepreneurial traits (such as the need for achievement, the need for internal locus of control, and the need for autonomy) identified by previous studies (Collins, Hanges, and Locke 2004). All of these are examples of intrinsic motivation (Ryan and Deci 2000), which "refers to doing something because it is inherently interesting or enjoyable" (Ryan and Deci 2000, p. 55). Therefore, we argue that Chinese immigrants possess a level of intrinsic motivation that is essential in conducting NMB in the host country.

Researchers explain the main reason immigrants pursue self-employment businesses in their new country is because of their lack of advantages in the labor market caused by their inadequacy in their new home country's language, their lack of education and specific career-related skills, and the depreciation of human capital (Sequeira and Rasheed 2006). These explanations are supported by the literature on necessity entrepreneurship (Bergmann and Sternberg 2007). Necessity theory suggests immigrant entrepreneurs are pushed into entrepreneurship because they have no better choices for working or making a living (Henrekson 2005). NMOs promote themselves as an opportunity for ordinary individuals who lack resources and/or required skills to establish their own small businesses (Biggart 1989). Therefore, the attractiveness of an NMB is another factor that motivates Chinese immigrants to pursue NMBs.

Thus, we argue that the motivation for Chinese immigrants to pursue NMBs is composed of extrinsic and intrinsic motivation. The present study defines the motivation for individuals to pursue NMBs as internal and external factors that stimulate the desire and energy of network entrepreneurs to be continually interested and committed to NMBs. This motivation is affected by the influence of the social environment of

the NMO (Bandura 1986). In this study, the following hypothesis is proposed:

H5: There is a positive relationship between the influence of the social environment within an NMO and immigrant network entrepreneurs' motivations in conducting their NMB activities.

Researchers suggest individuals with a strong need for achievement are more likely to seek entrepreneurial opportunities (Zhao and Seibert 2006). This need for achievement can be expressed as a desire to be successful in a competitive situation (Rahman and Rahman 2011). Therefore, the following hypothesis is proposed:

H6: There is a positive relationship between immigrant network entrepreneurs' motivation and their desire for opportunities.

Bandura (2001) asserts individuals select a course of action within their perceived capabilities. An individual's level of motivation is based more on what he/she believes than on what is objectively true (Bandura 1997); therefore, the present study argues that there is a positive relationship between self-efficacy and motivation. This argument is supported by empirical studies in the area of workplace training (Tai 2006; Tracey et al. 2001). Tai (2006) demonstrated that a trainee's self-efficacy belief is positively influenced his/her motivation to learn. Tracey et al.'s (2001) study showed that trainees' pretraining self-efficacy positively influences their pretraining motivation to learn. Thus, this study argues motivation is positively related to selfefficacy. Therefore the following hypothesis is proposed:

H7: There is a positive relationship between the self-efficacy of immigrant network entrepreneurs and immigrant network entrepreneurs' motivation.

Our literature review suggests that the operations of an NMB are composed of collective oriented operations and individual oriented operations (Sparks and Schenk 2001, 2006). In the collective oriented operations, network entrepreneurs work collectively to share their business skills and resources in operating their NMBs (Bhattacharya and Mehta 2000). The main purposes of the collective-oriented opera-

tions are to motivate each other and train new network entrepreneurs (Sparks and Schenk 2006). In the individual-oriented operations, each network entrepreneur is responsible for his/her profit and cost, which directly relates to business activities such as sales, new member recruiting, and network constructions (Lin 2007). The main purpose of these operations is to generate income (commission) (Harris 2004). Therefore, the measurement for performance outcome (financial achievement) should be based on individual oriented operations. The present study defines performance outcome as financial results achieved by individual network entrepreneurs. We argue that performance outcome is positively related to actions undertaken in conducting NMB activities (Kuratko, Ireland, and Hornsby 2001). Therefore, the following hypothesis is proposed:

H8: There is a positive relationship between actions undertaken in conducting NMB activities and performance outcome.

### Methodology

#### Sample and Data Characteristics

This study used two different sources of data: perceptual data and objective performance data. To make sure that the perceptual data and objective performance data were matched, all respondents were recruited from the same company. During our survey, we requested all respondents to provide their unique identification numbers issued by the company. With this number, we were able to link the perceptual data provided by each respondent to their objective performance data obtained from the company's database.

To ensure a representative sample, we carefully located a network marketing firm which had the largest population of Chinese immigrant network entrepreneurs in Australia. To collect perceptual data (such as the influence of the social environment, motivation, self-efficacy, desire for opportunity, and actions undertaken), questionnaires were randomly distributed and personally collected at the front door of the network marketing company's major training venues in the states of New South Wales, Victoria, and Queensland. All respondents were volunteers. With the permission of the network marketing firm and institutional ethics clearance, objective performance data were obtained from

Table 1
Demographic Characteristic of
Sampled Chinese Network
Marketers

Characteristics	Percentage
Gender	
Male	26.4
Female	73.6
Marital status	
Single (Including Divorced)	16.7
Married (Include De Facto)	77.5
Divorced	5.8
Age	
18–30	16.3
31-40	21.6
41-50	40.5
51-60	16.7
>60	4.9
Education	
School Certificate and	26
Post School Diploma	
Bachelor Degree	48.5
Post Graduate	4.9
Certificate/Diploma	
Master Degree	12.8
PhD Degree	2.6
English competency	
Don't Speak	9.7
English At All	
Some English	39.2
Competent	38.3
Proficient	8.4
Native	0.9
Sample Size	227

the company's database. The characteristics of the sample are summarized and presented in Table 1. It was found that most of the respondents were socially disadvantaged individuals (for instance, 73.6 percent of the respondents were females, and less than 10 percent could speak English proficiently). This finding is consistent with other studies (e.g., Biggart 1989; Lin 2007) which argue that NMOs provide "an empowering tool" to socially disadvantaged individuals to pursue entrepreneurship.

#### Measures

Both validated and newly developed scales were used in the current study. The procedures

set out in Turker (2009) to develop new scales and confirm existing ones were followed. The process included four focus groups and a pilot study. The participants in the focus groups were Chinese immigrant network marketers who had been in an NMB for more than three years and built solid businesses (note: these participants were excluded from the path analysis). Each focus group had between six and eight participants. A pilot study was then conducted with 32 experienced Chinese immigrant network marketers (7 males and 25 females). The findings obtained suggested all items described were properly understood by participants, but the instructions for how to answer the questions were reworded. Exploratory factor analysis (EFA) was undertaken to identify and validate the scales used to measure the constructs in the path model. Confirmatory factor analysis (CFA) was then undertaken to examine the reflective scales. Sample items, together with the internal reliability coefficients, where appropriate, are reported in the Appendix. Figure 2 shows the hypothesized path model.

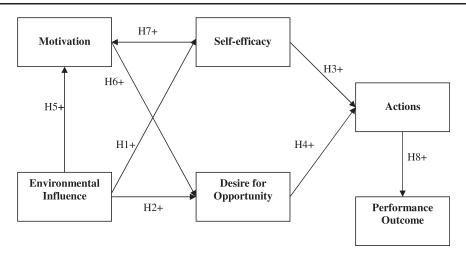
Motivation (Formative Scale). In the current study, motivation for conducting an NMB was operationalized as a formative, second-order, latent construct. It consisted of two first-order latent constructs (intrinsic and extrinsic motivation). The study utilized the scales developed by Kuntze (2001) to operationalize extrinsic (11 items) and intrinsic (9 items) motivation.

Influence of social environment (formative scale): Following Sparks and Schenk (2001, 2006) and Biggart (1989), "influence of social environment" comprise three reflective dimensions (training, peer influence, and perceived cohesion). Following Sparks and Schenk (2001, 2006), four items were used to measure cohesion and seven items were used to measure peer influence. Training was measured with the five-item scale from Dai, Wang, and Teo (2011).

Self-Efficacy (Reflective Scale). Items used to measure self-efficacy in this study were adopted from Dai, Wang, and Teo (2011) and they comprised two "dimensions": degree of easiness and confidence. Results of the CFA indicated a good fit ( $\chi^2 = 34.57$ , df = 19, p = .02, CFI = 0.98, RMSEA = 0.07). Convergent and discriminant validity were established.

Desire for Opportunity (Reflective Scale). As there were no existing scales which measure NMO's desire for opportunity in the literature,

## Figure 2 Hypothesized Model



we adopted Krueger's (1993) measurement of *desirability* which contains three subscales (*love, enthusiastic,* and *tense*) to operationalize "*desire for opportunity*" scale. EFA showed that *desire for opportunity* comprised three factors, namely *love/enthusiastic, tense, and business attractiveness* subscale (four items) was adopted from Dai, Wang, and Teo (2011). This construct had good fit ( $\chi^2 = 57.766$ , df = 40, p = .03, CFI = 0.99, RMSEA = 0.05), and convergent and discriminant validity were established.

Actions Undertaken (Reflective Scale). Following Dai, Wang, and Teo (2011), the actions undertaken by network marketers were measured with seven items. The actions consisted of the number of hours spent on business activities weekly, and the number of presentations and sales conducted weekly and monthly.

Performance Outcome. An objective performance indicator was used as the dependent variable. This was operationalized by computing the natural logarithm of the average weekly financial income earned by the respondent in the past 10 weeks. The data were obtained from the network marketing firm's accounting records.

#### **Measurement Analysis**

Considering a substantial proportion of the study's model was constructed with unobservable variables measured by formative indicators, Partial Least Square (PLS) modeling was chosen as the statistical technique (Haenlein and Kaplan 2004). PLS allows for the examination of both latent and manifest variables simultaneously. PLS deals effectively with reflective and formative scales, it is distribution free, and is a powerful instrument for analyzing small samples (Chin 1998). Although the measurement and structural parameters are estimated together, a PLS model is analyzed and interpreted in two stages: the assessment of the reliability and validity of the measurement model, and the assessment of the structural model. This sequence ensures that the constructs measured are valid and reliable before attempting to draw conclusions regarding their relationships to one another (Brettel and Rottenberger 2013).

Tables 2 and 3 show the details of the analysis of the dimensionality, reliability, and validity of the scales. First, the study examined items and subconstruct reliability according to loading. Although one item from action and one subconstruct from motivation had loading values less than 0.7, they were not eliminated as they were formative indicators (Petter, Straub, and Rai 2007). In addition, the average variance extracted (AVE) of the construct were greater than the critical value of 0.5 (Fornell and Larcker 1981). Therefore, the convergent validity of the construct was satisfactory. The composite reliability of all scales was greater than the recommended value of 0.6 (Bagozzi and Yi 1988; Fornell and Larcker 1981).

Table 2
Reliability and Validity of the Measurement Model<sup>a</sup>

	Loading	<i>t</i> -Value	Composite Reliability	AVE
Actions			0.91	0.59
Hours per week devoted to distributorship work	0.85	51.45		
Hours per week devoted to presenting products and business opportunities to others	0.86	45.54		
Hours per week devoted to motivating and training new network marketers	0.84	36.32		
Hours per week devoted to learning business skills and knowledge	0.66	13.13		
Hours per week devoted to customer services	0.71	15.00		
Number of presentations conducted per week	0.76	24.46		
Number of sales workshops held per month	0.65	15.74		
<b>Desire for Opportunity</b>			N/A	N/A
Tense (Three items)	0.81	19.16		
Love/Enthusiastic (Four items)	0.89	40.45		
Establishing Business (Four items)	0.39	4.37		
Self-efficacy			0.85	0.75
Degree of Easiness (Four items)	0.82	21.60		
Confidence (Four items)	0.91	51.80		
Influence of Social Environment			N/A	N/A
Cohesion (Four items)	0.75	N/A		
Peer Influence (Seven items)	0.79	N/A		
Training (Five items)	0.86	N/A		
Motivation [formative]			N/A	N/A
Intrinsic Motivation (Nine items)	0.72	N/A		
Extrinsic Motivation (11 items)	0.43	N/A		

<sup>&</sup>lt;sup>a</sup>N/A, not applicable as these are formative constructs.

A criterion to confirm discriminant validity is that the square root of a construct's AVE should be greater than its bivariate correlation with other constructs in the model (Fornell and Larcker 1981). Table 3 shows that the discriminant validity was satisfied as the square root of the AVEs was greater than the intercorrelation coefficients. The formative construct for multicollinearity was also tested using variance inflation factors (Diamantopoulos and Winklhofer 2001), and in all cases, as the values were below the cutoff threshold of 3.33, multicollinearity was of no major concern (Cenfetelli and Bassellier 2009).

#### Results

#### **Evaluation of Structure Model**

Model estimation was undertaken utilizing *SmartPLS 2.0* (Ringle, Wende, and Will 2005).

Figure 3 shows the results. The significance of the coefficients was obtained by means of a bootstrap of 1,000 subsamples (Chin 1998). To further estimate the structural model, global criterion of goodness of fit (GoF) index (Tenenhaus et al. 2005) was computed. A GoF index of 0.444 indicated that the data had a high level GoF with the model (Wetzels, Odekerken-Schröder, and Oppen 2009, p. 187).

#### **Testing of Hypotheses**

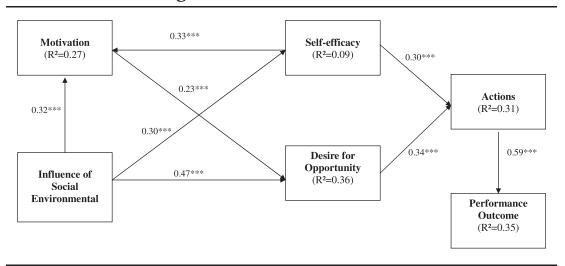
Table 4 summarizes the results obtained in the testing of the hypotheses. The path leading from the influence of social environment to self-efficacy was positive and statistically significant ( $\beta = 0.30$ , t = 3.19, p < .01). Hence, H1 was supported. The path from the influence of social environment to desire for opportunities was positive and statistically significant ( $\beta = 0.47$ ,

Table 3
Means, Standard Deviations, and Correlations<sup>a</sup>

	Mean	S.D.	α	1	2	3	4	5	6
1. Actions Undertaken	17.18	6.22	0.91	0.77					
2. Desire for Opportunity	60.56	8.05	0.75	0.44***	0.73				
3. Self-Efficacy	33.01	7.90	0.85	0.44***	0.42***	0.86			
4. Influence of Social Environment <sup>b</sup>	43.61	4.89	-	0.23***	0.54***	0.26***	1.00		
5. Motivation <sup>b</sup>	67.44	12.11	_	0.30***	0.42***	0.42***	0.40***	1.00	
6. Performance Outcome (log)	4.66	1.55	-	0.58***	0.37***	0.31***	0.15*	0.14*	1.00

<sup>&</sup>lt;sup>a</sup>Diagonal values show the square of the AVE for reflective scales.

Figure 3
Significance of Path Estimates



<sup>\*\*\*</sup>p<.001.

 $t=8.10,\ p<.001$ ), thus providing support for H2. H3 was supported as there was a positive and statistically significant path from self-efficacy to actions ( $\beta=0.30,\ t=3.72,\ p<.001$ ). The path from desire for opportunities to action was found to be positive and statistically significant ( $\beta=0.34,\ t=4.77,\ p<.001$ ), thus H4 was supported. The path from the influence of social

environment to network entrepreneur's motivation was found to be positive and statistically significant ( $\beta=0.32,\,t=4.71,\,p<.001$ ), thus H5 was supported. The path from network entrepreneurs' motivation to the desire for opportunities was found to be positively and statistically significant ( $\beta=0.23,\,t=3.19,\,p<.001$ ), thus H6 was supported. H7 was supported, as the path

<sup>&</sup>lt;sup>b</sup>Denotes formative scales.

<sup>-,</sup> not applicable.

<sup>\*</sup>p < .05.

<sup>\*\*\*</sup>p < .001.

Table 4
Results of Hypotheses Tests

	Path Coefficients	t-Statistic	<i>p</i> -Value
H1: Influence of Social Environment → Self-Efficacy	0.29	4.76	***
H2: Influence of Social Environment → Desire for Opportunity	0.42	8.10	***
H3: Self-Efficacy → Actions	0.30	3.72	***
H4: Desire for Opportunity → Actions	0.34	4.77	***
H5: Influence of Social Environment → Motivation	0.32	5.77	***
H6: Motivation → Desire for Opportunity	0.25	3.19	**
H7: Self-Efficacy → Motivation	0.33	4.71	***
H8: Actions → Performance	0.59	16.09	***

<sup>\*\*</sup>p < .01.

from self-efficacy to network entrepreneurs' motivation was positive and statistically significant ( $\beta = 0.33$ , t = 5.77, p < .001). The path from action to performance outcome was found to be positive and statistically significant ( $\beta = 0.59$ , t = 15.68, p < .001), hence H8 was supported.

#### Discussion and Conclusion

NMOs provide "an empowering tool" to socially disadvantaged individuals, such as females (Biggart 1989) and immigrants (Lin 2007), and motivate them to pursue entrepreneurship via NMB and take charge of their own life. This study aimed to examine the factors influencing the performance outcome of Chinese immigrants in NMBs. The findings suggested that the performance outcome of Chinese immigrant network marketers was influenced by the actions they undertook when conducting NMB activities. According to the findings, the more actions that were undertaken, the better was the performance outcome achieved. The analysis also suggested the actions undertaken were connected to Chinese immigrant network marketers' self-efficacy, their desire for opportunity from an NMB, their motivation to conduct NMB activities, and the influence of the social environment in NMOs. The results indicated that an increase in self-efficacy and the desire for opportunity increased the number of actions undertaken. The results also indicated that desire for opportunity was positively affected by the influence of the social environment within NMOs, and this desire for opportunity was affected by the motivation to conduct NMB activities. It appeared that motivation to conduct NMB activities was also positively affected by the influence of the social environment and self-efficacy.

The findings obtained in this study corroborate those in the literature and have several important theoretical and practical implications. The study shows that network marketers work together in a cohesive manner, despite being responsible for their individual profit and cost (Biggart 1989). Also in support of the literature (see Biggart 1989; Sparks and Schenk 2006), it was found that ethnic Chinese network marketers work together by influencing and training each other in the required capabilities. The social environment within NMOs positively influences network marketers' motivation, self-efficacy and desire for opportunity, thus providing support for Bandura's (1986) SCT.

This study demonstrates that the self-efficacy and desire for opportunity of Chinese network marketers positively influence their actions in pursuing NMB activities. This finding is consistent with the ethnic entrepreneurship model proposed by Krueger (2000). The study also demonstrates that marketers' activities lead to a higher level of objective performance outcome, a finding that corroborates the findings of Kuratko, Ireland, and Hornsby (2001), Sparks and Schenk (2006), and Lin (2007).

The present study provides empirical support for understanding the antecedents and

<sup>\*\*\*</sup>p < .001.

consequences of NBM participation by Chinese immigrants in Australia. The findings suggest that the social environment has a positive influence on network marketers' desire for opportunity, and the positive influence of the social environment on motivation is positively mediated by network marketers' self-efficacy. The findings also suggest that self-efficacy and desire for opportunity positively affect actions undertaken, which in turn positively determine performance outcomes.

The present study provides new theoretical insights. First, a contribution to the literature is made by showing the influence of the social environment on the desire for opportunity. This finding shows that there is support for SCT (Bandura 1986). SCT suggests that environmental events, behavior, and personal factors all operate as interacting determinants of each other. This study presents specific definitions of environmental events as they influence the social environment, which is comprised of three subfactors: training, peer influence, and cohesion. The study also defines the specific meanings of behaviors and personal factors as motivation, desire for opportunities, and NMB specific self-efficacy. These findings show how the influence of the social environment within NMOs positively impacts on the desire for opportunity and supports SCT (Bandura 1986). One of this study's contributions to Bandura's (1986) study is that it provides empirical evidence to demonstrate environmental events (influence of social environment) and determines behaviors (motivation and desire for opportunity). The other contribution made is that the study provides empirical evidence to show that the personal factor (self-efficacy) determines the behavior (motivation).

The present study shows that entrepreneurial intention is the single best predictor of entrepreneurial action (Choo and Wong 2006). The entrepreneurial actions undertaken in the context of NMBs can be predicated by the desire for opportunity and self-efficacy. This study provides empirical evidence to support this argument and contributes to the findings of the studies of Krueger, Reilly, and Carsrud (2000) and Choo and Wong (2006).

This study integrates SCT (Bandura 1986) with TPB (Ajzen 1991) to explain the relationships between the influence of the social environment and self-efficacy, the desire for opportunity, and actions undertaken in the context of NMOs that have so far been elusive. Pre-

vious researchers suggest that network marketers are independent small business owners (Biggart 1989; Harris 2004), but they work collectively in operating their businesses under the cohesive social environment within the NMO (Sparks and Schenk 2006). This study suggests that training and peer influence within the cohesive social environment of an NMO raises network marketers' self-efficacy and desire for opportunity, which in turn increases the actions undertaken and leads to better performance outcomes.

The model developed in this study suggests if individuals work together in a group and form a social environment characterized by training, peer influence, and cohesion, then they will be more motivated and their self-efficacy and desire for opportunity to be successful will be at a higher level. As a result, individuals will develop the competence to take the necessary actions in conducting their business activities.

Individual network marketers may also gain benefits from this study. This study suggests that network marketers should work with others to create a favorable social environment within NMOs when they are building their own NMBs. In addition, immigrants who lack resources may be informed by this study to establish their own NMB using the collective power of immigrants.

An NMB is a home-based business (Biggart 1989); hence, most of the business owners are housewives who need to look after their family's lives as well their business (Biggart 1989). The female dominant sample implies that the findings obtained in the present study reflect the truth of the network marketing industry (World Federation of Direct Selling Association 2014). However, to generalize these findings to a non-network marketing industry more research/theorizing should be undertaken.

#### **Managerial and Practical Implications**

The present study provides several managerial and practical implications. First, the results obtained may assist managers of NMBs to understand the behaviors of their network marketers in operating their businesses. With such an understanding, managers can invest in projects that train ethnic Chinese network marketers to conduct an NMB. This will allow the creation of a cohesive social environment, which is essential for improving the confidence and competence of network marketers. This cohesive social environment will reinforce the self-

efficacy and confidence of these immigrants in undertaking entrepreneurial activities in a country dissimilar to their country of origin. Network marketers may gain potential benefits from this study. Some network marketers dislike participating in business events (Pratt 2000) because they cannot perceive the values of these events. By learning from the findings from the present study, these network marketers may be more willing to work together with other network marketers, such as learning business skills and becoming more confident in running their NMB.

## **Limitations and Future Study Implications**

Despite specific contributions made, this study has its limitations. First, the sample was limited to Chinese immigrants in selected Australian states (New South Wales, Queensland, and Victoria). To generalize the findings of this study, more studies with heterogeneous samples, such as network entrepreneurs from other ethnicities and different host countries, should be examined. 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 and Bell 2007).

It is important that future research continues in this direction with further extension of the current study. Future research may consider moderating or mediating factors such as social skills to extend the current model. Social skills are an individual's ability to successfully interpret and manage social interactions (Witt and Ferris 2003). They allow individual network marketers to participate cohesively in the social environment of NMBs.

In summary, the current study has sought to identify the factors that determine the performance of Chinese immigrants in NMOs. Results of the path analysis provide support for integrating the SCT with a TPB lens to show the positive effects of the social environment within NMOs in influencing the self-efficacy and desire for opportunity and motivation of Chinese network marketers, and the continued participation in NMB activities. Together, these were found to positively result in a higher level of performance outcomes. The current study contributes to a better understanding of the management of NMOs.

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# Appendix : Sample Items Used in the Questionnaire

**Influence of Social Environment** [Formative Scale]

For each statement below, 1 = strongly dis- agree ... 5 = strongly agree

- (1) Peer influence (reflective subscale,  $\alpha = 0.91$ )
  - My sponsor and other uplines lead by "doing" rather than "telling"
  - My sponsor and other uplines are an excellent source of information about being a successful member of this NMO
- (2) *Training* (reflective subscale,  $\alpha = 0.87$ )
  - Training provided by this NMO is essential for me to operate my NMB

- The training I receive in this NMO is effective
- (3) *Cohesion* (reflective subscale,  $\alpha = 0.81$ )
  - The members of my organization are very cooperative with each other
  - There is a great deal of trust among fellow members in my organization

#### **Self-Efficacy** [Reflective Scale]

- (1) Degree of easiness (reflective subscale,  $\alpha = 0.89$ )
  - How easy do you think it would be to introduce your current NMB to others?
  - How easy do you think it would be to sell the products to others?

For each statement above, 1 = very difficult... 5 = very easy

- (2) Confidence (reflective subscale,  $\alpha = 0.86$ )
  - Do you know enough to conduct an NMB?
  - How sure are you of yourself in communicating with others effectively?

For each statement above, 1 = not confident at all ...5 = very confident

#### **Desire for Opportunity [Reflective Scale]**

- (1) Love and enthusiastic (reflective subscale,  $\alpha = 0.87$ )
  - I would love to conduct my current NMB.
  - How enthusiastic would you be in sharing the products sold by this NMO with others?

For each statement above, 1 = not enthusiastic at all ... 5 = very enthusiastic

- (2) Tense (reflective subscale,  $\alpha = 0.91$ )
  - How tense would you be in sharing the opportunity of the NMB with others?
  - How tense are you in conducting your current NMB?

For each statement above, 1 = not tense at all ... 5 = very strongly tense

- (3) Business Attractiveness (reflective subscale,  $\alpha = 0.79$ )
  - To start up my own business without financial pressure
  - To start up my own small business with the lowest investment and risks

#### **Motivation [Formative Scale]**

For each statement below, "1" = it is not a motivation for me at all ... "5" = it is a very important motivation for me.

- (1) Extrinsic motivation (formative subscale)
  - To make a lot of money
  - To have influence over and create a positive impact upon my community
- (2) Intrinsic motivation (formative subscale)
  - For personal accomplishment
  - To have fun

#### **Actions Undertaken [Reflective Scale]**

- Hours per week devoted to distributorship work
- Number of presentations conducted per week