

Smith, Ronda M.; Tarndamrong, Poompichai; Sebor, Terrence C.; Wolfe, Charlie A.

## Article

# Prepared to launch? A study of Thailand's New Entrepreneurs' Creation (NEC) education program

The International Journal of Management Science and Information Technology (IJMSIT)

## Provided in Cooperation with:

North American Institute of Science and Information Technology (NAISIT), Toronto

*Suggested Citation:* Smith, Ronda M.; Tarndamrong, Poompichai; Sebor, Terrence C.; Wolfe, Charlie A. (2015) : Prepared to launch? A study of Thailand's New Entrepreneurs' Creation (NEC) education program, The International Journal of Management Science and Information Technology (IJMSIT), ISSN 1923-0273, NAISIT Publishers, Toronto, Iss. 16, pp. 108-121

This Version is available at:

<https://hdl.handle.net/10419/178802>

### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

### Terms of use:

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

An official publication of The North American  
Institute of Science and Information Technology

ISSN:1923-0265

**INTERNATIONAL JOURNAL OF**

# **Management Science and Information Technology**



NAISIT  
PUBLISHERS **III**

[www.naisit.org](http://www.naisit.org)

# **The International Journal of Management Science and Information Technology (IJMSIT)**

NAISIT Publishers

Editor in Chief

J. J. Ferreira, University of Beira Interior, Portugal, Email: jjmf@ubi.pt

Associate Editors

Editor-in-Chief: João J. M. Ferreira, University of Beira interior, Portugal

Main Editors:

Fernando A. F. Ferreira, University Institute of Lisbon, Portugal and University of Memphis, USA

José M. Merigó Lindahl, University of Barcelona, Spain

Vanessa Ratten, La Trobe University, Melbourne, Australia

Assistant Editors:

Cristina Fernandes, Polythecnic Institute of Castelo Branco, Portugal

Jess Co, University of Southern Queensland, Australia

Marjan S. Jalali, University Institute of Lisbon, Portugal

Editorial Advisory Board:

Adebimpe Lincoln, Cardiff School of Management, UK

Aharon Tziner, Netanya Academic College, Israel

Alan D. Smith, Robert Morris University, Pennsylvania, USA

Ana Maria G. Lafuente, University of Barcelona, Spain

Anastasia Mariussen, Oslo School of Management, Norway

Christian Serarols i Tarrés, Universitat Autònoma de Barcelona, Spain

Cindy Millman, Business School -Birmingham City university, UK

Cristina R. Popescu Gh, University of Bucharest, Romania

Dessy Irawati, Newcastle University Business School, UK

Domingo Ribeiro, University of Valencia, Spain

Elias G. Carayannis, Schools of Business, USA

Emanuel Oliveira, Michigan Technological University, USA

Francisco Liñán, University of Seville, Spain

Harry Matlay, Birmingham City University, UK

Helen Lawton Smith, Birkbeck, University of London, UK

Irina Purcarea, Adjunct Faculty, ESC Rennes School of Business, France

Jason Choi, The Hong Kong Polytechnic University, HK

João Ricardo Faria, University of Texas at El Paso, USA

Jose Vila, University of Valencia, Spain

Kiril Todorov, University of National and World Economy, Bulgaria

Louis Jacques Fillion, HEC Montréal, Canada

Luca Landoli, University of Naples Federico II, Italy

Luiz Ojima Sakuda, Researcher at Universidade de São Paulo, Brazil

Mário L. Raposo, University of Beira Interior, Portugal

Marta Peris-Ortiz, Universitat Politècnica de València, Spain

Michele Akoorie, The University of Waikato, New Zealand

Pierre-André Julien, Université du Québec à Trois-Rivières, Canada

Radwan Karabsheh, The Hashemite University, Jordan

Ricardo Chiva, Universitat Jaume I, Spain

Richard Mhlanga, National University of Science and Technology, Zimbabwe

Rodrigo Bandeira-de-Mello, Fundação Getulio Vargas – Brazil  
Roel Rutten, Tilberg University - The Netherlands  
Rosa Cruz, Instituto Superior de Ciências Económicas e Empresariais, Cabo Verde  
Roy Thurik, Erasmus University Rotterdam, The Netherlands  
Sudhir K. Jain, Indian Institute of Technology Delhi, India  
Susana G. Azevedo, University of Beira Interior, Portugal  
Svend Hollensen, Copenhagen Business University, Denmark  
Walter Frisch, University of Vienna, Austria  
Zinta S. Byrne, Colorado State University, USA

#### Editorial Review Board

Adem Ögüt, Selçuk University Turkey, Turkey  
Alexander B. Sideridis, Agricultural University of Athens, Greece  
Alexei Sharpanskykh, VU University Amsterdam, The Netherlands  
Ali Kara, Pennsylvania State University -York, York, USA  
Angilberto Freitas, University of Grande Rio, Brazil  
Arminda do Paço, University of Beira Interior, Portugal  
Arto Ojala, University of Jyväskylä, Finland  
Carla Marques, University of Trás-os-Montes e Alto Douro, Portugal  
Carla Pereira, University of Beira Interior, Portugal  
Cem Tanova, Çukurova University, Turkey  
Cristiano Tolfo, Universidade Federal de Santa Catarina, Brazil  
Cristina S. Estevão, Polytechnic Institute of Castelo Branco, Portugal  
Dario Miocevic, University of Split, Croatia  
Davood Askarany, The University of Auckland Business School, New Zealand  
Debra Revere, University of Washington, USA  
Denise Kolesar Gormley, University of Cincinnati, Ohio, USA  
Dickson K.W. Chiu, Hong Kong University of Science and Technology, Hong Kong  
Domènec Melé, University of Navarra, Spain  
Dina Miragaia, University of Beira Interior, Portugal  
Emerson Mainardes, FUCEPE Business School, Brazil  
Eric E. Otenyo, Northern Arizona University, USA  
George W. Watson, Southern Illinois University, USA  
Gilnei Luiz de Moura, Universidade Federal de Santa Maria, Brazil  
Jian An Zhong, Department of Psychology, Zhejiang University, China  
Joana Carneiro Pinto, Faculty of Human Sciences, Portuguese Catholic University, Lisbon, Portugal  
Joaquín Alegre, University of Valencia, Spain  
Joel Thierry Rakotobe, Anisfield School of Business, New Jersey, USA  
Jonathan Matusitz, University of Central Florida, Sanford, FL, USA  
Kailash B. L. Srivastava, Indian Institute of Technology Kharagpur, India  
Karin Sanders, University of Twente, The Netherlands  
Klaus G. Troitzsch, University of Koblenz-Landau, Germany  
Kuiran Shi, Nanjing University of Technology, Nanjing, China  
Liliana da Costa Faria, ISLA, Portugal  
Luiz Fernando Capretz, University of Western Ontario, Canada  
Lynn Godkin, College of Business, USA

Maggie Chunhui Liu, University of Winnipeg, Canada  
Marcel Ausloos, University of Liège, Belgium  
Marge Benham-Hutchins, Texas Woman's University, Denton, Texas, USA  
María Nieves Pérez-Aróstegui, University of Granada, Spain  
Maria Rosita Cagnina, University of Udine, Italy  
Mayumi Tabata, National Dong Hwa University, Taiwan  
Micaela Pinho, Portucalense University and Lusíada University, Portugal  
Paolo Renna, University of Basilicata, Italy  
Paula Odete Fernandes, Polytechnic Institute of Bragança, Portugal  
Paulo Rupino Cunha, University of Coimbra, Portugal  
Peter Loos, Saarland University, Germany  
Pilar Piñero García, F. de Economía e Administración de Empresas de Vigo, Spain  
Popescu N. Gheorghe, Bucharest University of Economic Studies, Bucharest, Romania  
Popescu Veronica Adriana, The Commercial Academy of Satu-Mare and The Bucharest University of Economic Studies, Bucharest, Romania  
Ramanjeet Singh, Institute of Management and Technology, India  
Ricardo Morais, Catholic University of Portugal  
Ruben Fernández Ortiz, University of Rioja, Spain  
Ruppa K. Thulasiram, University of Manitoba, Canada  
Soo Kim, Montclair State University, Montclair, NJ, USA  
Wen-Bin Chiou, National Sun Yat-Sem University, Taiwan  
Willaim Lawless, Paine College, Augusta, GA, USA  
Winston T.H. Koh, Singapore Management University, Singapore

**Table of Contents**

- 1        **AN EMPIRICAL INVESTIGATION OF GENDER IMPACT ON TECHNOLOGICAL INNOVATIVENESS AMONG THAI ENTREPRENEURS VIA GEM DATABASE**  
DR. MANASI SHUKLA, Bangkok University, Thailand  
ULRIKE GUELICH, Bangkok University, Thailand  
PROF AURILLA AURELIE BECHINA ARNTZEN, Buskerud University College, Norway
- 16       **FACTORS INFLUENCING STUDENTS' ENTREPRENEURIAL INTENTIONS: THE CRITICAL ROLES OF PERSONAL ATTRACTION AND PERCEIVED CONTROL OVER BEHAVIOR**  
AFSANEH BAGHERI , University of Tehran, Iran  
ZAIDATOL AKMALIAH LOPE PIHIE, University Putra Malaysia, Malaysia
- 29       **SME OPEN INNOVATION IMPLICATING FACTORS IN DIFFERENT INNOVATION PHASES**  
ALLAN LAHI, Estonian Business School, Estonia  
TIIT ELENURM, Estonian Business School, Estonia
- 46       **ENTREPRENEURS - DEMOGRAPHIC PROFILE, WHO HAS HIGHER CHANCES OF SURVIVAL?**  
ANETA PTAK-CHMIELEWSKA , Warsaw School of Economics , Poland
- 61       **EVALUATION OF THE IMPACT OF THE INNOVATIVE POTENTIAL OF THE COMPANIES FROM THE SMES SECTOR ON THE EFFICIENCY OF INNOVATIVE ACTIONS. SUGGESTION OF THE EVALUATION METHOD.**  
TOMASZ NOREK, University of Szczecin, Poland  
LEONARDO COSTA, Catholic University of Portugal at Porto, Portugal
- 82       **THE EFFECT OF KNOWLEDGE MANAGEMENT PRACTICES ON EMPLOYEES' INNOVATIVE PERFORMANCE**  
SEYED MOHAMMADBAGHER JAFARI, University of Tehran, Iran

MARIYAYEE SUPPIAH, Shell Business Service Centre SdnBhd, Malaysia  
THIAKU RAMALINGAM, Multimedia University , Malaysia

94      **LINKING MARKET ORIENTATION AND SERVICE RELATEDNESS TO NEW  
SERVICE DEVELOPMENT. THE CASE OF ITALIAN SMALL ACCOUNTING  
FIRMS**

MAURIZIO MASSARO , University of Udine, Italy  
GINA ROSSI , University of Udine, Italy  
CARLO BAGNOLI, University of Venice, Italy

108      **PREPARED TO LAUNCH? A STUDY OF THAILAND'S NEW ENTREPRENEURS'  
CREATION (NEC) EDUCATION PROGRAM**

RONDA M. SMITH, Ball State University, USA  
POOMPICHAJ TARNDAMRONG, Bangkok University, Thailand  
TERRENCE C. SEBORA, University of Nebraska-Lincoln, USA  
CHARLIE A. WOLFE, Fort Hays State University, USA

This is one paper of  
The International Journal of Management Science and  
Information Technology (IJMSIT)  
Special Issue: ICIE 2014



## **Prepared to Launch? A Study of Thailand's New Entrepreneurs' Creation (NEC) Education Program**

**Ronda M. Smith**  
Ball State University, Muncie, IN, USA  
[rsmith@bsu.edu](mailto:rsmith@bsu.edu)

**Poompichai Tarndamrong**  
Bangkok University, Bangkok, Thailand  
[drpoom@live.com](mailto:drpoom@live.com)

**Terrence C. Sebora**  
University of Nebraska-Lincoln, Lincoln, NE, USA  
[tsebora1@unl.edu](mailto:tsebora1@unl.edu)

**Charlie A. Wolfe**  
Fort Hays State University, Hays, KS, USA  
[cawolfe@fhsu.edu](mailto:cawolfe@fhsu.edu)

**Abstract:** Facilitating the rate of new venture creation is an important goal of many governmental organizations. The goal of this study was to explore the effectiveness of a specific program, the New Entrepreneur's Creation (NEC) program being administered by the Thai government at 12 institutions in Bangkok, Thailand. In this study, 389 participants were recruited and surveyed from the 2008 training class of the NEC. In addition to examining founding intentions, this study assessed four cognitive measures that are likely to influence an individual's perception of his or her preparedness to start a business among participants in Thailand's New Entrepreneur Creation (NEC) education program. These include: entrepreneurial understanding, knowledge of entrepreneurial skills, entrepreneurial attitudes/beliefs, and entrepreneurial self-efficacy.

Entrepreneurial understanding measures basic knowledge of entrepreneurship, the role of entrepreneurs and profit in the economy. Knowledge of entrepreneurial skills assesses the awareness of skills needed during the founding process, such as leadership, persistence, and market opportunity identification. Entrepreneurial attitudes and beliefs assess how perceptions of social status and career satisfaction associated with starting a new venture. Entrepreneurial self-efficacy measures participants' confidence in their abilities to carry out startup and venture founding activities, such as risk management and internal business operations.

The government sponsored NEC program appears to enhance the desire of the participants to become entrepreneurs but might not provide enough concrete information to develop the requisite understanding and skill needed to actually start a business. These findings suggest that public policy initiatives might be better served by bolstering training that facilitates hands-on business creation skills in addition to developing or reinforcing self-efficacy about the process. These implications should provide a platform from which relevant parties can begin to strengthen efforts to develop both entrepreneurial understanding and entrepreneurial skill in aspiring Thai entrepreneurs. It is not sufficient that participants just enhance their

confidence in their abilities to start a business; rather they must also acquire necessary skills and abilities. Enhancements in these areas are argued to increase the likelihood that new ventures may actually be founded, which is the ultimate goal of the program.

**Keywords:** Entrepreneurship Education, Public Policy, Entrepreneurial Perspective, Entrepreneurial Understanding, Knowledge of Entrepreneurial Skills, Entrepreneurial Attitudes, Entrepreneurial Self-efficacy

## 1. Introduction

Thailand is one of the leading economies in Southeast Asia. However, the continued development of the second largest economy in Southeast Asia has not always been steady. Over a short period of just a few decades it has experienced tremendous economic changes. Beginning in the late 1980's, and through the years 1987-1990, Thailand's economic output grew by an astounding 69%. Although the region, in this period, was beginning to experience significant growth due to global demand, this was an exceptionally high growth rate even for the region. During the same time frame the economic output of Indonesia, Malaysia and the Philippines grew by 43%, 37% and 33% respectively (IMF World Outlook Database, 2014). The growth rate continued to hold steady as it sustained a level of 8 percent annually into the early 1990s. As the global economy continued to increase in strength, demand for exports from Thailand grew the nation's economy into one of the largest exporters in the world, with exports accounting for over one-third of the national GDP (CIA World Factbook, 2015). By the late 1990's the evolving global economy was booming and as a result Thailand, as a newly emerging industrialized economy, was beginning to out produce its Southeast Asia neighbors. Thailand's growth moved it substantially past the economic output of Malaysia, Singapore and the Philippines and the gap between Indonesia, the area's largest economy and Thailand began to shrink (IMF 2014, GDP database figures 1990-1997). At its peak, the nation's gross domestic product (GDP) was equivalent to approximately 280 billion US dollars and their share of the industrial sector in GDP increased to 32.6 percent. These represented shifts of 330% and 27.2% in just 10 years' time from previously reported levels in 1990.

Unfortunately, the good fortune did not last for long. In July 1997, a widespread financial crisis engulfed Asian economies and the Thai economy began to suffer along with much of Asia. As the growth rate decreased and bankruptcies mushroomed, a multi-dimensional crisis ensued, forcing changes in government policies and strategies on economic growth. Many large corporations, especially in the Southeast Asia region, collapsed during the crisis while many smaller enterprises were able to weather the storm, many remaining stable and some even grew. The economic collapse forced both the people and government of Thailand to search for new answers for improving economic conditions. Out of this search, the Thai government directed a new efforts towards the role of small and medium enterprises (SMEs) in boosting the current economy (Sevilla & Soonthornthada, 2000).

### 1.1 History of the SME Promotion Action Plan and the Development of the New Entrepreneur Creation Training Program

As a result of the changing needs of the Thai economy and in pursuit of increased new venture creation, Thailand designated The Department of Industrial Promotion (DIP),

Ministry of Industry, as the nodal agency for SMEs. In January 2000, the SME Promotion Action Plan Law was approved by the parliament. As a public policy initiative, the SME Promotion Bill was intended to be comprehensive in its coverage of support to SME's. These areas included: financing and financial support, the development of capital markets specifically for SMEs, attention towards research and development and the dissemination of modern technologies that could assist SMEs. Additionally, goals included advances in product development and quality standards, marketing promotional support, skill development in managerial techniques, informational support including navigating bureaucratic and legal obstacles associated with intellectual property rights, investments and other legislation and regulations associated with doing business in Thailand.

As a comprehensive initiative, a more focused plan, the SME Master Plan was introduced and approved by the Cabinet in April of that year. The SME Master Plan included a significant agenda directed at providing educational support for aspiring entrepreneurs. The SME Promotion Action Plan brought introduced specific goals to facilitating SME development and new venture creation. It called for the promotion and encouragement of new SME establishment and related assistance to existing SMEs to help them survive, grow and compete, with a specific emphasis on the education of entrepreneurs and the personnel with small and medium size enterprises.

### **1.2 Entrepreneurship Education and Thai's Entrepreneurship Training Program: New Entrepreneur Creation (NEC)**

To accomplish these goals the Ministry asked universities and related institutions to organize education and training programs for nascent entrepreneurs that developed their understanding of these changes within the nation and the global economy as well as their abilities to respond entrepreneurially. The Thai government's support for entrepreneurship education was predicated on the assumption that the attitudes, behaviors, understanding, and skills necessary to start a new business could be taught.

In response to the directive of the Thai Government, the Department of Industrial Promotion, initiated the New Entrepreneurs Creation (NEC), program a sixteen-day program offered at no cost to participants. The NEC program was designed to assist citizens in all walks of life in a variety of personal and economic situations. In particular, it was tasked to assist prospective entrepreneurs in developing necessary skills to pursue business opportunities, and promote the adoption of information and communication technology (ICT), particularly internet access in communities and villages.

The program was considered to be the most organized entrepreneurship training program in the nation at the time. The program aimed to 1) support participants to start their own business, 2) support and increase new businesses, 3) strengthen new SMEs within the first three years, and 4) prepare the descendants of entrepreneurs so that businesses could be maintained, as well as continue to employ others and create the opportunity for business expansion (Thailand Productivity Institute, 2007). To be considered for participation, an applicant must be determined to start a business, have achieved at least a vocational education and not be over 60 years old. Included in the program was a day of on-site company visits to initiate relationships with business owners and transfer practical and functional knowledge (i.e., marketing strategy, production technology, human resource, legal, accounting and finance) needed in developing a sound business plans.

The examination of the relationship of cognitions on preparedness to start a new venture in this setting is predicated on the following assumptions: 1) the choice to start one's own

business is a career choice and intentional; 2) the perspective and skills necessary to have a successful entrepreneurial career can be learned; and 3) people will not choose a career they do not understand or appreciate.

### 1.3 Theory and Hypotheses

The study of entrepreneurship as a career choice has been gaining attention as the demand for entrepreneurship education has increased. As the field has progressed, attempts were made to better understand the choice to enter into entrepreneurship as a career option (in other words, who is more likely to choose entrepreneurship as a career) and later more specifically to understand what influenced the specific intentions for startup. (c.f. Kolvereid, 1996 for a brief review).

The focus in some studies has emphasized attitudinal variables (i.e., attitudes/beliefs and self-efficacy) of intention rather than or in addition to situational and individual variables (Ajzen, 1991; Shapero, 1982). At the heart of many of these inquiries has been Ajzen's Theory of Planned Behavior (1991) which suggests that human action, is guided by the individuals' attitudes and beliefs.

In 1994, Krueger and Brazeal advanced a framework for entrepreneurial potential based on Shapero's (1981; 1982) earlier work on the entrepreneurial event. They suggested that entrepreneurial potential is developed by increasing knowledge of entrepreneurship, building confidence and self-efficacy, and presenting entrepreneurship as a highly regarded, socially acceptable, personally rewarding career choice (i.e., perception of personal desirability, feasibility, and propensity to act).

Drawing on Ajzen's (1991), Shapero's (1981, 1982) and Krueger and Brazeal's (1994) work, Godsey (2006) argued that entrepreneurship education should begin with the development of a perspective that presents entrepreneurship as a viable, attractive career choice for students. It is this perspective that will encourage a student's interest in acquiring the necessary skills to pursue new venture creation. A proper introduction to entrepreneurship has the potential to aid in establishing a solid foundation upon which skill development can more effectively occur in potential and aspiring entrepreneurs. To this end, she proposed a measure of four cognitive constructs that when acting together she termed, entrepreneurial perspective.

These four factors could operate independently or as a higher order construct and be impacted by education. She posited that they were directly involved in both an individual's career choices and their intention to become an entrepreneur. This study assesses, as an initial test, the relationship between each of the four dimensions of entrepreneurial perspective (entrepreneurial understanding, knowledge of entrepreneurial skills, entrepreneurial attitudes/beliefs, and entrepreneurial self-efficacy), independently impacted NEC participants' perceived preparation to start their business. We discuss each below.

*Entrepreneurial Understanding.* Communicating a basic knowledge of the concept of entrepreneurship, what it involves and the potential options associated with it as a career is, according necessary to achieve both primary and secondary objectives for effective entrepreneurship education (Hills, 1998). Similarly, career choice relies upon fundamental

awareness of a career alternative's necessary processes, required skills, and potential options within a career. According to Gottfredson's Theory (1981; 1996), prior to becoming more active in their personal career development sometime after age 14, individuals subconsciously eliminate certain careers from their realm of possibility or desire. The theory also holds that occupations outside of a created social space are not likely to be considered unless an individual is called to do so. Within the development of cognitive ability and self-creation, some individuals are not even exposed to certain career options due to social and cultural circumstances (be them national, regional, local, or familial). For purposes of this study, entrepreneurial understanding incorporates creating awareness of new venture creation as a career choice and presenting the fundamental concepts associated with starting a business. This element serves to assess the development of knowledge of entrepreneurship and general opportunity recognition (recognition that an opportunity to own a business exists), indicating the following hypothesis:

Hypothesis 1: Entrepreneurial understanding is positively associated with perceived preparedness to start a business.

*Knowledge of Entrepreneurial Skills* is defined as general awareness of skills associated with becoming an entrepreneur. As individuals become more aware of themselves, they begin recognizing and developing personal skill sets. Knowledge of skills is required in order that a person can align personal and occupational skill requirements. Career choices involve aligning individual interests and goals and skills, abilities, and temperaments. The start of the alignment process requires awareness of both personal skill sets and the skills required within each career alternatives (Gottfredson, 2005; Swanson & D'Achiardi, 2005). The focus of recent educational development efforts on entrepreneurial skill development demonstrates the importance of the knowledge of skills in potential entrepreneurs. For purposes of this study, knowledge of entrepreneurial skills refers to the awareness of the skills required to start a new venture. Knowledge of entrepreneurial skills imparted from successful venture founders helps those not previously exposed to venture creation associate a set of acquirable skills with this potential career option. Specific entrepreneurial skills mentioned in previous research include such things as willingness to take calculated risks (time, equity, or career), creativity in the acquisition and allocation of resources, specific opportunity recognition and evaluation and the ability to assemble an effective venture team (Kuratko, 2005), suggesting the following hypothesis:

Hypothesis 2: Knowledge of entrepreneurial skills is positively associated with perceived preparedness to start a business.

*Entrepreneurial Attitudes and Beliefs.* According to Armitrage and Christian (2004) and their applied research on the Theory of Planned Behavior, attitudes direct behavior to the extent that they influence intentions. Attitudes have been linked to both career choices in general, and entrepreneurial intentions, specifically. Attitudes and beliefs are justifiably included as elements of Entrepreneurial Perspective due to their relationship with behavioral intentions. The career selection process is one of continuous evaluation. Part of this evaluation consists of assessing the rewards associated with the career. These rewards come in many forms (personal, monetary, social, etc.) and help to form the attitudes that aid in the decision to pursue certain career directions, suggesting the following hypothesis:

Hypothesis 3: Entrepreneurial attitudes and beliefs are positively associated with perceived preparedness to start a business.

*Entrepreneurial Self-efficacy.* Self-efficacy is a psychological construct proposed by Bandura (1977) that describes an individual's perceptions about his/her capabilities to successfully perform a given task or fulfill a role (Hackett & Betz, 1981; Krumboltz et al., 1976). People pursue tasks for which they feel confident and avoid tasks for which they do not. Self-efficacy has been theoretically and empirically related to both entrepreneurial intentions (Mariola, 2013) and career development for example, Lent and colleagues (1994) suggested that occupational interests are linked to occupational choices through efficacy. Betz and Hackett (1981; 1986) argued that career self-efficacy is a measure of a person's judgment of their effectiveness in relation to the processes associated with career choice and vocational interests and an extension of the concept of generalized self-efficacy. Krueger (1993) suggested that the perceived level of feasibility for successfully starting a new business is an important precursor to the formation of entrepreneurial intentions. Boyd and Vozikis (1994, p. 73), argued "People who have strong beliefs regarding their capabilities will be more persistent in their efforts and will exert greater effort to master a challenge." The perspective of this study is that as individuals become more aware of the skills and roles required of entrepreneurs they become more confident in their abilities to use skills they already have and to acquire skills they need. This confidence then impacts their perspective regarding the possibility of a career in entrepreneurship, suggesting the following hypothesis.

Hypothesis 4: Entrepreneurial self-efficacy is positively associated with perceived preparedness to start a business.

## 2. Data and Methodology

The list of NEC training programs was obtained from the Department of Industrial Promotion, Ministry of Industry (<http://nec.dip.go.th>). Over the previous three years the programs had averaged approximately 8,000 participants throughout the country. The majority of the programs (80%) were conducted in Bangkok. Participants were recruited from the 2008 training course by researchers attending the last session of the program and distributing questionnaires. Four hundred eighty-eight questionnaires were distributed to course participants and 389 questionnaires were returned (an 85% response rate).

### 2.1 Measures

**Preparedness to start** was measured using two items from Godsey's (2006) entrepreneurial intentions scale. These items included "I am prepared to start my own business" and "I will start my own business in the next year" and were measured on a six-point scale likert scale of agreement, where "1" is strongly disagree, and "6" is strongly agree. Responses to these two items were multiplied to create a product score as a measure of both preparedness and planning.

**Entrepreneurial Perspective** Godsey (2006) synthesized several factors that are impacted by education and directly involved in both career choices and the choice to become an entrepreneur. These included entrepreneurial understanding, knowledge of entrepreneurial skills, entrepreneurial attitudes/beliefs, and entrepreneurial self-efficacy. While proposed by Godsey (2006) as a higher order factor, we chose to examine their role as individual constructs with to understand the independent influence of each on the outcomes of the training program.

**Entrepreneurial understanding** was measured with a 7-item likert scale of agreement ( $\alpha=.704$ ), where “1” is strongly disagree, and “6” is strongly agree. Sample items included, “A person who starts and operates a new business’ describes an entrepreneur better than a manager of a large corporation” and “Over the last 10 years, new small businesses have created more new jobs in the economy than existing large businesses or the Government.”

**Knowledge of entrepreneurial skills** was measured with Walstad and Kourilsky’s (1999) 11-item measure of entrepreneurial skills which ( $\alpha=.906$ ) asked participants to appraise the importance of different skills in starting a business. Sample items included: “Skill in developing a business plan” and “Skill in assembling a team” is important for those who start businesses.

**Entrepreneurial attitudes/beliefs** were measured with an eight item likert scale ( $\alpha=.765$ ) based on Fedorshyn and Tyson’s work (2003). It assessed the level of importance of attitudes to successfully starting a business. Sample items included: “A career as an entrepreneur builds better wealth than a career as a manager in a large company” and “I would rather attempt a career in entrepreneurship and fail than reach the end of my life and regret not having tried to start my own business.”

**Entrepreneurial self-efficacy** was measured by eighteen items ( $\alpha = .939$ ) from DeNoble, Jung, and Ehrlich (1999), such as “I can develop new methods of production, marketing and management” and “I can develop relationships with people who are connected to capital (funding) sources,” using a six-point scale where 1 = not confident/capable and 6 = very confident/capable.

**Control Variables.** Finally, previous literature has suggested that the choice to start a business may be associated with factors other than the curriculum of an education program. Based on their potential influence on our dependent variable, we controlled for the following variables: age, gender, education level, marital status, children, previous management experience, and prior experience starting a business.

### 3. Results

Descriptive statistics and correlation statistics for the participant, and study variables are presented in Table 1. The sample was almost evenly distributed between males and females, the majority of participants were single adults, and about half had children. In terms of age, the participants were almost evenly distributed across the three age groups with the majority of participants over the age of 30. Somewhat surprising was the finding that more than 80% of the participants had a bachelors or graduate degree. Almost 60% of the participants had less than 3 years’ experience as managers in businesses. Finally, and most unexpectedly, more than 60% of the participants indicated they had experience starting a business.

The the independent variables, entrepreneurial understanding ( $r = .173, p = .01$ ), knowledge of entrepreneurial skill ( $r = .164, p = .01$ ), entrepreneurial attitudes and beliefs ( $r = .343, p = .01$ ) and entrepreneurial self-efficacy ( $r = .446, p = .01$ ) are positively associated with preparedness to start a business.

**Table1.** Results of the Correlation Analysis of the Data

Variable	Mean	Std. Dev.	N	Prepared	Age	Gender	Marital	Children	Education	MgmtExp	PrevStart	EntUnder	EntSkill	EntAtt
Prepared	22.313	10.696	377											
Age	2.940	0.837	389	.108*										
Gender	0.530	0.499	387	-0.017	-0.076									
Marital	0.380	0.485	389	0.051	.461*	-0.012								
Children	1.410	0.725	389	-0.057	.384*	-0.004	-.374**							
Education	3.910	1.078	389	-.157**	-0.043	-0.047	-0.062	.329**						
MgmtExp	2.400	1.241	389	0.099	.388*	.157*	.330**	-.208**	-0.018					
PrevStart	1.870	0.866	389	.101*	.224*	.113*	.181**	-.195**	-.259**	.458**				
EntUnder	0.000	1.000	389	.173**	0.058	0.049	.269**	-.213**	-0.053	.121*	-0.059			
EntSkill	0.000	1.000	389	.164**	0.084	-.118*	.170**	-0.018	-0.036	0.074	0.011	.335**		
EntAttitude	0.000	1.000	389	.348**	0.089	0.01	0.011	-0.082	-.105*	0.039	0.041	.473**	.431**	
EntSelfEfficacy	0.000	1.000	389	.446**	.156*	0.0*5	.158**	-.296**	-.177**	.295**	.214**	.448**	.338**	.563*

\*Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).



The study hypotheses were tested via a multiple regression with all study variables and controls included in the model and are presented in Table 2. Support was found for two of the four study hypotheses.

Hypothesis 1, “Entrepreneurial understanding is positively associated with perceived preparedness to start a business,” *was not* supported ( $\beta = .028, p = .598$ ). Hypothesis 2, “Knowledge of entrepreneurial skills is positively associated with perceived preparedness to start a business,” *was not* supported ( $\beta = .046, p = .342$ ). Hypothesis 3, “Entrepreneurial attitudes and beliefs are positively associated with perceived preparedness to start a business,” ( $\beta = .126, p = .029$ ) and Hypothesis 4, “Entrepreneurial self-efficacy is positively associated with perceived preparedness to start a business,” ( $\beta = .402, p = .000$ ) were both supported.

**Table 2.** Results of Regression Analysis

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	127.632	10	12.763	19.352	0.000
Residual	245.345	372	0.66		
Total	372.977	382			

  

	B	Std. Err	$\beta$	t	Sig.
(Constant)	4.857	0.239		20.357	0.000
Age	-0.041	0.059	-0.035	-0.687	0.492
Gender	-0.081	0.086	-0.041	-0.937	0.350
Marital	0.123	0.105	0.060	1.172	0.242
Education	0.003	0.039	0.003	0.072	0.943
MgmtExp	0.120	0.040	0.151	3.033	0.003
PrevStart	-0.071	0.088	-0.036	-0.812	0.417
EntUnder	0.028	0.052	0.028	0.528	0.598
EntSkill	0.045	0.048	0.046	0.952	0.342
EntAttitude	0.124	0.057	0.126	2.186	0.029
EntSelfEff	0.396	0.055	0.402	7.130	0.000

#### 4. Discussion

The examination of the results reveals mixed results in that only two out of four sub-constructs (i.e., entrepreneurial attitude, entrepreneurial self-efficacy) were significantly related with preparedness at the conclusion of the Thai Government's sponsored training program. While these partially significant results are in line with theory of planned behavior (Ajzen, 1991) and career development that an individual's attitudes and beliefs and entrepreneurial self-efficacy may facilitate the perception of preparedness and the intention to start a business, the lack of significance for the understanding of what entrepreneurship requires for success and the knowledge of the skills required to accomplish business start-up success are troubling.

These results suggest that the NEC program might be reinforcing participants' self-confidence to a point of over-confidence. As a result of such over-confidence participants, might retain the perception that all that is required to start and operate a new business successfully is their belief that they can do it. While confidence in their ability is important, overconfidence or disillusionment can be as significant disadvantage to participants, and is likely an unintended outcome of this version of the NEC program.

Certainly efficacy is a critical attitude that must be developed in order to motivate aspiring entrepreneurs to consider the risks and rewards of business ownership; however a strong practical without the practical knowledge and understanding they are likely to fall victim to the problem of not being able to recognize root causes and symptoms when they arise in their business. Statistics on business startup failure suggest that the more successful startups have actually been less confident at startup than those who failed (Hogarth & Karelaia, 2012). This suggests that a certain amount of confidence is needed, but overconfidence could be detrimental.

Ropega (2011) reviewed the reasons for small enterprise failure and argues that perspective, awareness and being able to identify issues in time to make adjustments is critical. Over confidence could impede a founder's perspective on problem identification regardless of their skills and abilities to solve the problem. Finding that the NEC program was overly successful in building confidence in their participants is both encouraging and discouraging because this outcome was not balanced with the other needed areas of entrepreneurial perspective, namely: entrepreneurial understanding and knowledge of entrepreneurial skills which appeared to be major motivations behind the initiatives of the Thai Government.

The Consortium for Entrepreneurship Education (p. 1, 2008) defines entrepreneurship education as "... not just about teaching someone to run a business. It is also about encouraging creative thinking and promoting a strong sense of self-worth and accountability." Based on these findings it could be suggested that the NEC accomplished the latter, but potentially at the expense of the former. These results suggest that additional inquiry should be directed towards program evaluation and the fundamental knowledge, skills and abilities that are pre-requisite for a successful new venture to launch, as well as to sustain operations over a period of time and avoid an unintended failure.

Finally, the lack of significance with entrepreneurial understanding suggests that the NEC program might not inform or change the minds of its participants about the economic realities that confront new businesses as they had hoped. The non-significant relationship with knowledge of entrepreneurial skills suggest that more attention is needed to address skill

awareness and development associated with not just the launch and startup of the new venture, but in its ability to operate and survive in its current economy.

The Thai government's program (NEC) appears to enhance the desire to the participants to become entrepreneurs but might not do enough to develop the requisite understanding and skill needed to move from belief to action to start a business. This finding should provide support for relevant parties to pursue programmatic change specifically in these two areas (i.e. entrepreneurial understanding and entrepreneurial skill). While they have strong confidence that they can start a business, they should also acquire necessary understanding and skill. This may insure the rate of founding and operational success which is the ultimate goal of the program.

As previously discussed, the NEC program aimed to 1) support participants in starting their own business, 2) support and increase new businesses, 3) strengthen new SMEs within the first three years, and 4) prepare the descendants of entrepreneurs so that their businesses could be maintained, and continue to employ others and create the opportunity for business expansion (Thailand Productivity Institute, 2007). While these are good goals to have, they may not have been specific enough for the development of the training program itself. Attention towards learning objectives could assist in the development or refinement of future programs of this nature.

Changes such as these to the NEC may increase the likelihood of new ventures being founded and their eventual success. Although Thailand, as well as much of Southeast Asia, has recovered economically from the worst of the downturn in the late 1990's and early 2000's, economic growth is still a concern for the country and the region.

While this study was conducted in 2008 and we are unable to connect this training program to the country's current economic climate, recent analysis suggests that GDP growth rates from 2012-2018 for the region (i.e. Malaysia, the Philippines, and Thailand) will all be relatively flat or actually decrease. Leaving Singapore as the only one projected to experience economic growth (OECD, 2013).

For Thailand the importance of these findings are even more important as they look to their economic future. Recent political changes may adversely impact future economic growth (The Economist, 2014) and a re-emphasis on entrepreneurial training may be paramount.

This study was conducted on an existing training program and was an early test of Godsey's (2006) Entrepreneurial Perspective constructs. Future research could consider measurement of the participants at the beginning and throughout the program. The constructs of Entrepreneurial Perspective could be a means to measure the accomplishment of entrepreneurial training program goals for this NEC program as well as similar entrepreneurial development programs throughout the world.

## References

- Ajzen, I. (1991). The theory of planned behavior, *Organizational Behavior and Human Decisions Processes*, Vol 5, pp 179-211.
- Armitrage, C. J. & Christian, J. (2004). From attitudes to behavior: Basic and applied research on the Theory of Planned Behavior. In C. J. Armitrage & J. Christian (Eds.), *Planned Behavior: The relationship between human thought and action* (pp. 1 - 12). New Brunswick, NJ: Transaction Publishers.
- Bandura, A. (1977). *Social Learning Theory*. Englewood cliffs NJ prentice hall.
- Betz, N. E. & Hackett, G. (1981). The relationship of career-related self-efficacy expectations to perceived career options in college women and men. *Journal of Counseling Psychology*, Vol 28, No. 5, pp 399 - 410.
- Betz, N. E. & Hackett, G. (1986). Applications of self-efficacy theory to understanding career-choice behavior. *Journal of Social and Clinical Psychology*, Vol 4, pp 279 - 289.
- Boyd, N. G. & Vozikis, G. S. (1994). The Influence of Self-Efficacy on the Development of Entrepreneurial Intentions and Actions. *Entrepreneurship Theory and Practice*, pp 63-77.
- Central Intelligence Agency. (2015). Thailand. CIA World Factbook. Retrieved February 25, 2015, from [cia.gov](http://cia.gov).
- Consortium for Entrepreneurship Education. (2008). *Entrepreneurship everywhere: The case for entrepreneurship education*. Columbus, USA.
- De Noble, A., Jung, D. & Ehrlich, S. (1999). Entrepreneurial Self-efficacy: The Development of a Measure and Its Relationship to Entrepreneurial Action. In R.D. Reynolds, W.D. Bygrave, S. Manigart, C.M. Mason, G.D. Meyer, H.J. Sapienza, & K.G. Shaver (Eds.), *Frontiers of Entrepreneurship Research* (pp.73-78). Waltham, MA: P& R Publication, Inc.
- The Economist. (2014, October 8). Thailand's economy: The high cost of stability. Retrieved February 25, 2015 from [www.economist.com/blogs/banyan/2014/10/thailands-economy](http://www.economist.com/blogs/banyan/2014/10/thailands-economy)
- Fedoryshyn, M. W. & Tyson, T. N. (2003). The Impact of Practitioner Presentations on Student Attitudes about Accounting. *Journal of Education for Business*, Vol 78, No. 5, pp 273-284.
- Godsey, M. L. (2006). *Gaining Entrepreneurial Perspective: The Impact of Venture Creation Role Models on High-School Career Intention*. University of Nebraska.
- Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations [Monograph]. *Journal of Counseling Psychology*, Vol 28, pp 545 - 579.
- Gottfredson, L. S. (1996). Gottfredson's Theory of Circumscription and Compromise. In D. Brown, L. Brooks & Associates (Eds.), *Career Choice and Development* (Third Edition ed., pp. 179 - 232). SanFrancisco: Jossey-Bass.

- Hackett, G. & Betz, N. E. (1981). A Self-Efficacy Approach to the Career Development of Women, *Journal of Vocational Behavior*, Vol 18, pp 326-336.
- Hills, G. E. (1988). Variations in University Entrepreneurship Education: An Empirical Study of an Evolving Field. *Journal of Business Venturing*, Vol 3, pp 109-122.
- Hogarth, R.M. and Karelaia, N. (2012). Entrepreneurial success and failure: Confidence and fallible judgment. Vol 23, No 6, pp 1733-1747.
- International Monetary Fund. (2014). World Economic Outlook Database October 2014. Retrieved February 25, 2015, from <http://www.imf.org/external/pubs/ft/weo/2014/02/weodata/index.aspx>
- Kolvereid, L. (1996). Organizational Employment Versus Self-Employment: Reasons for Career Choice Intentions. *Entrepreneurship Theory and Practice*, (20, 3) 23-3.
- Krueger, N. & Brazeal, D. (1994). Entrepreneurial Potential and Potential Entrepreneurs. *Entrepreneurship Theory and Practice*, pp 91-104.
- Krueger, N. (1993). The Impact of Prior Entrepreneurial Exposure on Perceptions of New Venture Feasibility and Desirability. *Entrepreneurship: Theory and Practice*, Vol 18, No. 31, pp 5-21.
- Krumboltz, J. D., Mitchell, A. & Jones, G. B. (1976). A Social Learning Theory of Career Selection, *The Counseling Psychologist*, Vol 6, pp 71-81.
- Kuratko, D. F. (2005). The Emergence of Entrepreneurship Education: Development, Trends and Challenges. *Entrepreneurship, Theory and Practice*, Vol 29, No. 5, pp 577-597.
- Lent, R.W., Brown, S.D. & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45, 79-122.
- Mariola, L. (2013). Self-efficacy, self-esteem and entrepreneurship among the unemployed. *Journal of Applied Social Psychology*, Vol 43, No. 2, pp 253-262.
- OECD. (2013). Economic Outlook for Southeast Asia, China and India 2014: Beyond the Middle-Income Trap, OECD Publishing, Paris. Retrieved February 25, 2015 from <http://dx.doi.org/10.1787/saeo-2014-en>
- Ropega, J. (2011). The reasons and symptoms of failure in SME. *International Advances in Economic Research*, Vol 17, pp 476-483.
- Sevilla, R. C. & Soonthornthada, K. (2000). SME Policy in Thailand: Vision and Challenges. *Institute for Population and Social Research*, Mahidol University.
- Shapiro, A. (1981). Self-renewing economies. *Economic Development Commentary*, Vol 5, pp 19 - 22.

Shapero, A. (1982). Some Social Dimensions of Entrepreneurship. In C. Kent, D. Seton & K. Vesper (Eds.), *The Encyclopedia of Entrepreneurship* (pp. 72-90). Englewood Cliffs, NJ: Prentice-Hall.

Swanson, J. L. & D'Achiardi, D. (2005). Beyond interests, needs/values, and abilities: Assessing other important career constructs over the life span. In S. D. Brown & R. W. Lent (Eds.), *Career Development and Counseling: Putting theory and research to work* (pp. 353 - 381). Hoboken, NJ: John Wiley & Sons, Inc.

Thailand Productivity Institute (2007). [Online] Available at:  
<http://202.183.190.22/Default.aspx?tabid=180> (accessed 2007).

Walstad, W. & Kourilsky, M. (1999). Entrepreneurial Attitudes and Knowledge of Black Youth. Entrepreneurship Theory and Practice, 23, 5-18.