

## **An Exploratory Survey of Prospective Childcare Givers' Entrepreneurial Potential in Taiwan**

*Lung-Sheng Lee, Chun-Chin Lai\**

*Department of Business Management, National United University, 1 Lienda, Miaoli  
360, Taiwan*

*\*Department of Infant and Child Care, National Taipei College of Nursing, 365  
Mingte Rd, Taipei 112, Taiwan*

*lslee@nuu.edu.tw, cclai@ntcn.edu.tw\**

### **ABSTRACT**

Prospective child care givers need to prepare themselves not only for employment but also for entrepreneurship in the field of child care service. In order to explore the entrepreneurial potential of prospective child care givers, an exploratory survey was conducted to survey 68 senior students of a department of child care in a public university/college of technology. As a result, it is found: (1) Prospective child care givers have moderate entrepreneurial potential; (2) There is no significant difference in entrepreneurial potential between 2-year-program and 4-year-program students; (3) “Collaborative,” “be comfortable with partnerships,” and “family and friends are supportive,” under the categories Motivation, Capacity, and Support, respectively, are the top three entrepreneurial skills; and (4) “Innovative” under Motivation, “have two or more partnerships” under Capacity and “community is actively helpful” under Support are the bottom three skills. Based upon the above findings, the following three interlocking conclusions and implications are made: (1) Prospective child care givers need to increase their entrepreneurial potential; (2) Multi-skills have to be addressed to increase prospective child care givers' entrepreneurial potential; and (3) More subjects and aspects should be surveyed to increase the generaliability and validity.

Keyword: Child Care, Competency Model, Entrepreneurship Education

## INTRODUCTION AND PURPOSE

In Taiwan, child care givers nurture, teach and care for children who have not yet entered kindergarten and also supervise older children before and after school hours. They are generally classified into the following three different groups based on where they work: (1) household child care givers, who care for children at the children's homes; (2) family child care givers, who care for children in the child care providers' homes; and (3) child care center workers, who care for children in the child care centers. Training requirements of child care givers range from a high school diploma to a college degree, but some jobs are offered to people with a lower-secondary or upper-secondary diploma (United States Department of Labor, 2009).

### **Prospective Child Care Givers Need to Prepare Themselves Not Only for Employment But Also for Entrepreneurship**

In the United States, "one emerging trend in postsecondary education is to link an entrepreneurship minor to a major in a specific industry area..." (Consortium for Entrepreneurship Education, 2007). Benefits of entrepreneurship education to postsecondary students include: (1) demonstrate skills in business startup, maintaining business longevity and business management/operation; (2) demonstrate knowledge of business closings versus failure; (3) find next level of training or access other needed resources and services; (3) use components of a business plan; (4) determine impact on unemployment; (5) change attitude toward entrepreneurship as a means of making a living; and (6) change in personal and career attitudes or abilities such as self-worth, self awareness, self management, transfer of learning, teamwork, creativity, and problem solving (Consortium for Entrepreneurship Education, 2004).

In the past decade, higher education in Taiwan has rapidly grown. Many universities/colleges of technology and their departments/programs of child care were established to prepare child care givers. Many of the undergraduate students in those departments/programs (henceforth, called "prospective child care givers") have received child care training when they studied at the upper-secondary school and/or junior college levels. Therefore, the large number of prospective child care givers has to diversify their career pathways.

Creativity, innovation and entrepreneurship are often called the "three *chuang's*" because in mandarin Chinese they are pronounced as "*chuang yi*", "*chuang hsin*" and "*chuang yeh*" in sequence. Three *chuang's* education has been highly valued in Taiwan. It is increasingly considered that prospective child care givers need to prepare themselves not only for employment but also for entrepreneurship in the field of child care service.

### **Competency, Motivation and Opportunity Contribute to the Success of Entrepreneurship**

The following paragraph in Mencius implies that competency and motivation are two critical success factors of human endeavors, including entrepreneurship:

King Hui of Liang asked Mencius: "Can you clarify the difference between non-effort (i.e., be unwilling to do) and inability (i.e., be unable to do)?" Mencius replied: "If it is the case of taking Mt. T'ai under your arm and leaping over the North Sea with it, and saying: 'I am unable', then this is true inability. If it is the case of snapping a branch off a tree for an elder and you say 'I am unable,' this is non-effort, it is not inability. (Muller, 2003)

Competency and motivation can be linked to the extent of "be unable to do" and "be willing to do", respectively. Competency can be defined as a collection of characteristics (i.e. skills, knowledge, self-concept, traits and motives), which enables individuals to deliver superior performance in a given job, role or situation (Delargy & Leteney, 2005; MIT Career Development Center, 2005). Thus, the potential of career success can be cursorily expressed as "Potential of Career Success = Competency x Motivation x Opportunity." In this expression, competency, motivation and opportunity are three interrelational factors. For example, according to iceberg model of competencies, motivation is one of the underlying and less visible elements which drives more visible competencies such as knowledge, skills, as well as abilities (KSA's) and implies that KSA's are merely a tip of the iceberg in assessing and predicting an individual's potential for successful performance (Bassett Unified School District Personnel Commission, 2007).

### **Child Care Givers Have Many Entrepreneurial Possibilities to Offer Child Care Services**

There are entrepreneurs in every field of career or industry. Child care services range from small home-based operations to large commercial centers. As the number of dual-income households increase, more and more people are relying on child care givers to look after their children as they go about their daily tasks. Table 1 lists out child care business types mentioned in three documents. Apparently, based on the place of service, home care, family care and day-care center are three main types of child care business. In addition, based on the time of service, there are various types of child care business, such as full-time/part-time care, morning time/daytime/evening time/overnight care, weekday/weekend care. Other than the types listed in Table 1, there are some self-operated jobs such as franchisee and consultants (Baron & Shane, 2008). All the above types of child care service are entrepreneurial possibilities for prospective child care givers.

Table 1. Types of child care business

Types of Child Care Business	Author(s), Year		
	Entrepreneur Media, 2010	Haringey Council, 2010	SCORE, ud
Full-time care during traditional weekday hours	V	V	V
Before- and after-school care	V	V	V
Nontraditional hours (very early mornings, evenings, overnight care, weekdays and/or weekends)	V	V	V
Drop-in or on-demand care, either during traditional or nontraditional hours	V	V	V
Part-time care	V	V	V
Parents' night out (weekend evening care)	V	V	V
Age-based care	V		
Transportation	V		

V: mentioned.

There are many documents which argue the importance of a supportive infrastructure for potential entrepreneurs, but “an adequate pool of entrepreneurially oriented individuals must also be available” (Mueller & Thomas, 2000). It is necessary to explore the entrepreneurial potential of prospective child care givers for designing effective entrepreneurship curriculum and instruction for them.

## METHOD AND PROCEDURE

In order to explore the entrepreneurial potential of prospective child care givers, an exploratory survey was conducted as follows.

### Subject

In Taiwan, bachelorette child care givers are mainly prepared in universities/colleges of technology. Thus, a department of child care in a public university/college of technology was selected. This department recruits the following two classes: (1) 2-year program, which recruits students from the graduates of junior college of technology; and (2) 4-year program, which recruits students from the graduates of upper-secondary school. In total, All 83 senior students, including 40 in 2-year programs and 43 in 4-year program, were selected as the survey subject.

### Instrument

Because concerning competency, motivation and opportunity which contribute to

the success of entrepreneurship, the Entrepreneur Self Test developed by the Rural Entrepreneurship Initiative, the predecessor of the Center for Rural Entrepreneurship (2003) was selected. This test consists of the following three sections: (1) Motivation, including 13 questions, (2) Capacity, including 5 questions, and (3) Support, including 15 questions. Score on a 1-10 scale where 10 indicates strong agreement with the statement and 1 indicates little or no agreement with the statement. Not all questions carry the same value and weight. The weight factor of the first two questions under Motivation is 1 and the weight factor of others is .25. Thus, the maximum score of the test is 95 and the following three levels of entrepreneurial potential are prescribed by the test developer (Center for Rural Entrepreneurship, 2003):

Some Potential 26-50 Score

Moderate Potential 51-75 Score

High Potential 76+ Score

The authors got a written permission from the test developer to translate and modify the test into a Chinese version. Two independent forward translations of the original questionnaire were made by the two authors to assure translation accuracy.

### **Procedure**

The survey questionnaire was distributed to the senior students who attended the classes in a morning at the beginning of April 2010. In total, 68 students (or about 82% all senior students) filled and returned the questionnaire. Statistical analyses including mean (M), standard deviation (SD) and t-test were employed to describe and examine the data collected.

## **FINDING AND DISCUSSION**

Based on the data presented in Table 2, main findings of this study are as follows:

1. Prospective child care givers have moderate entrepreneurial potential.

Table 2 shows that the test score of the prospective child care givers surveyed is 60.36. It indicates that the prospective child care givers have moderate entrepreneurial potential.

2. There is no significant difference in entrepreneurial potential between 2-year-program and 4-year-program students

As a result of a t-test, there is no significant difference on entrepreneurial potential between 2-year-program and 4-year-program students.

3. "Collaborative" under Motivation, "be comfortable with partnerships" under Capacity and "family and friends are supportive" under Support are the top three entrepreneurial skills

Table 2 shows that “collaborative” under Motivation, “be comfortable with partnerships” under Capacity and “family and friends are supportive” under Support are the top three skills of the prospective child care givers surveyed.

4. “Innovative” under Motivation, “have two or more partnerships” under Capacity and “community is actively helpful” under Support are the bottom three skills

Table 2 shows that “innovative” under Motivation, “have two or more partnerships” under Capacity and “community is actively helpful” under Support are the bottom three skills of the prospective child care givers surveyed.

Table 2. The results of questionnaire survey

	2-yr (N=32 )		4-yr (N=36 )		t	Total (N=68 )	
	M	SD	M	SD		M	SD
<b>MOTIVATION</b>							
1. Perceive Opportunities	5.59	2.63	6.47	2.24	0.15	6.06	2.47
2. Growth Oriented	6	3.06	6.89	2.02	0.18	6.47	2.6
3. Creative	5.97	2.23	6.28	2.01	0.50	6.13	2.12
4. Innovative	5.88	2.16	6.06	1.9	0.72	5.97	2.03
5. Resourceful	6.16	2.32	6.25	1.96	0.86	6.21	2.14
6. Dynamic	6.66	1.93	6.78	2.08	0.80	6.72	2.01
7. Hard Working	7.47	1.85	7.08	1.64	0.38	7.26	1.75
8. Flexible	7	2.02	7.11	1.61	0.81	7.06	1.81
9. Risk Tolerant	6.03	1.96	6.17	1.55	0.76	6.1	1.76
10. Open to Learning	6.59	2.12	6.5	1.76	0.85	6.54	1.94
11. Competitive	7.06	2.16	6.86	1.83	0.69	6.96	2
12. Collaborative	7.81	1.67	8.08	1.46	0.49	7.96	1.57
<b>CAPACITY</b>							
<b>Business Skills</b>							
13. Assess market opportunities	5.06	1.82	5.78	1.65	0.10	5.44	1.77
14. Develop products or services	5.63	2.1	6.31	1.65	0.15	5.99	1.91
15. Provide products or services	6.13	2.06	6.44	1.72	0.50	6.29	1.89
16. Conduct marketing and communications	5.22	2.27	6.03	1.76	0.33	5.65	2.06

17. Conduct fiscal management	5.84	2.65	6.42	2.02	0.98	6.15	2.35
18. Acquire financial capital	5.19	2.27	5.42	1.64	0.64	5.31	1.96
19. Conduct personnel or team development and management	6.06	2.08	6.22	2.03	0.75	6.15	2.05
20. Develop and sustain partnerships	7.26	1.7	7.08	1.72	0.68	7.16	1.72
21. Conduct quality control	6.69	2.39	6.86	1.84	0.74	6.78	2.12
<b>Network and Partner with Others</b>							
22. Seek out information from others	7.72	2.08	7.97	1.54	0.58	7.85	1.82
23. Network with others to gain information	6.16	2.53	6.33	1.83	0.75	6.25	2.19
24. Have an extensive resource network	6.16	2.6	6.19	1.96	0.95	6.18	2.28
25. Be comfortable with partnerships	8.16	2.25	8	1.81	0.76	8.07	2.03
26. Have two or more partnerships	4.38	2.52	5.25	2.2	0.14	4.84	2.4
27. Have learned how to deal with the challenges of partnering	5.13	2.41	5.91	2.39	0.19	5.54	2.43
<b>SUPPORT</b>							
28. Be challenged and happy in my work building a business	5.84	2.67	5.97	1.86	0.44	5.91	2.28
29. Have good balance between work and personal life	6.81	2.02	6.89	1.87	0.87	6.85	1.94
30. Family and friends are supportive	7.25	2.32	7.83	2.06	0.29	7.56	2.21
31. Community is supportive	5.09	2.18	6	2.21	0.10	5.57	2.24

32. Community is actively helpful	4.5	1.95	5.28	1.99	0.11	4.91	2.01
<b>Total</b>	6.2	2.43	6.52	2.02	---	6.37	2.23
<b>Score</b>	58.3		---	62.2		60.36	

## CONCLUSION AND IMPLICATION

In the field of child care, the greater the entrepreneurial potential among the prospective child care givers, the greater the stock of potential entrepreneurs and the higher the rate of new venture formation (Mueller & Thomas, 2000). Based on this logic, an exploratory survey was conducted to explore the entrepreneurial potential of prospective child care givers. As a result, the following interlocking conclusions and implications are made:

1. Prospective child care givers need to increase their entrepreneurial potential

Because the prospective child care givers surveyed only have moderate entrepreneurial potential, it suggests that prospective child care givers need to increase their entrepreneurial potential.

2. Multi-skills have to be addressed to increase prospective child care givers' entrepreneurial potential

In order to increase prospective child care givers' entrepreneurial potential, all question items in the test (see Table 2 and Appendix) should be addressed and the following multi-skills that prospective child care givers lack should be noted: understanding how businesses operate, creativity and critical thinking, opportunity recognition, and marshaling resources effectively (ARC, ud).

3. More subjects and aspects should be surveyed to increase the generaliability and validity

The subject of the exploratory survey employed in this study was limited in a public university/college of technology. It is suggested to expend the number of subject to increase the generaliability and to expand the aspects of subject to include their faculty and others to increase the validity of survey results.

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## **Appendix: A complete list of questionnaire questions\***

### **MOTIVATION**

1. Perceive Opportunities - I am constantly seeing business opportunities or ideas that have potential commercial value.
2. Growth Oriented - I like growing or building business, or taking ideas and make something of them.
3. Creative - I am creative and I am regularly coming up with new ideas on how to do things better or more efficiently.
4. Innovative - I am innovative and I am able to find solutions to challenges and problems.
5. Resourceful - I am resourceful and I am able to find solutions to challenges and problems.
6. Dynamic - I am a dynamic person providing vision, hope and energy to those I am working and partnering with.
7. Hard Working - I am a hard working person and I do what it takes to succeed.
8. Flexible - I am flexible and I am able to adapt to changes and surprises quickly and successfully.
9. Risk Tolerant - I am risk tolerant and I am able to successfully manage risk associated with creating and growing a business.
10. Open to Learning - I thrive on learning and I am constantly seeking out new information that can help me with my business.
11. Competitive - I am motivated by success and driven to do well.
12. Collaborative - I believe in working with others who can help me make my dream a reality.

### **CAPACITY**

#### **Business Skills**

13. My ability to assess market opportunities.
14. My ability to develop products or services.
15. My ability to provide products or services.
16. My marketing and communications capacity.
17. My fiscal management capacity.
18. My ability to acquire financial capital.
19. My personnel or team development and management capacity.
20. My ability to develop and sustain partnerships.
21. My quality control capacity.

#### **Network and Partner with Others**

22. I am comfortable seeking out information from others.
23. I regularly network with others to gain information for my business.

24. I have an extensive resource network that I am constantly building.
25. I am comfortable with partnerships.
26. I have two or more partnerships associated with my business.
27. I have learned how to deal with the challenges of partnering with others.

**SUPPORT**

28. I am challenged and happy in my work building a business.
29. I believe there is good balance between my work and my personal life.
30. My family and friends are supportive of my work and encouraging to me.
31. My community is supportive of me and my business undertakings.
32. My community is actively helping me build my business.

\*Source: Center for Rural Entrepreneurship. 2003. The entrepreneur self-test. *Tools for Energizing Entrepreneurship*, 5. [http://www.tvaed.com/pdf/entrepreneur\\_self\\_test.pdf](http://www.tvaed.com/pdf/entrepreneur_self_test.pdf).