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# UNIVERSITY STUDENTS' ASSESSMENT OF ENTREPRENEURIAL ENVIRONMENTS

by

Byungku Lee

#### A THESIS

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UNIVERSITY STUDENTS' ASSESSMENT OF ENTREPRENEURIAL

**ENVIRONMENTS** 

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University of Nebraska, 2010

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Entrepreneurial intention is a primary step to create new venture in the entrepreneurial process. Environmental conditions are one of the main factors that are strengthening or weakening intention of prospective entrepreneur. Therefore, it is important to develop conducive environments for entrepreneurship to promote entrepreneurial intention. Moreover, the promoted entrepreneurial intention will raise the rate of new venture creation.

This paper investigates the relationships between five key environments for entrepreneurship and entrepreneurial intention. The five entrepreneurial environments are: government policies and procedures, socioeconomic conditions, entrepreneurial and business skills, financial assistance, and non-financial assistance, respectively. Conjoint analysis was used to determine the significance of five environmental factors conducive to entrepreneurial intention. In this conjoint experiment, 1370 decisions were made by 137 university students. Significant relationships were found between all of these environmental factors and intention. Comparative importance of environmental factors was also calculated, along with sub-conjoint analyses based on characteristics of the sample.

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#### CHAPTER 1 INTRODUCTION

#### 1.1 The Problem

New venture creation has been receiving greater attention in recent years because of its importance in economic development. The new venture creation contributes not only to the economic development, but also provides new opportunities for prospective entrepreneurs by delivering information and knowledge for the next business creation. In 2007, approximately 495,000 new businesses were created per month in the US, and during 1977 to 2005, new ventures have created more than one-third of newly created jobs in the US (Fairlie, 2009).

For all the importance of new venture creation on the growth of economy, not all countries expect a high start-up rate of business ventures. There might be many reasons for a relatively low creation rate of business ventures in some countries. However, the deficiency of entrepreneurial environments must be one of the main reasons why many countries have failed to promote people to have entrepreneurial intentions and actions. In this sense, developing environmental factors for entrepreneurship is one of the antecedents to facilitate the creation of new business ventures.

New venture creation starts from the intention of a person who attempts to start a business. Accordingly, providing appropriate entrepreneurial environments to raise the intention will also increase the new venture creation rate. Therefore, creating appropriate entrepreneurial environments in which prospective entrepreneurs raise their vision of new venture creation and make a decision to realize the vision is the first step to activate entrepreneurship. However, not all the dimensions of entrepreneurial environments

provide same levels of incentives which stimulate a person's intention to start a certain behavior. For this reason, an analysis of the most conducive environmental factor to the least conducive environmental factor to entrepreneurial intention needs to be done to offer an optimum environmental condition to stimulate entrepreneurship.

#### 1.2 Purpose of the Study

Entrepreneurship researchers have tried to explain the reason why some people start business ventures while others do not (Baron, 1998; Shane & Venkataraman, 2000). For the decision to create a new business, entrepreneurial intention is an initial and critical cognitive process. Entrepreneurs' intentions form the initial strategic basis of new organization development, based on a conscious behavior (Bird & Jelinek, 1988).

In this paper, entrepreneurial environments conducive to entrepreneurial intention will be suggested with the conjoint analysis technique, a tool for decision modeling.

Gnyawali and Fogel's (1994) 'key dimensions of environments for entrepreneurship development' will be used to propose specific relationships between the environment and intention. This research will provide empirical implications to entrepreneurship educators and policy makers.

#### 1.3 Research Question

The main research questions addressed in this paper are:

(1) What are the relationships between the level of favorable government policies and procedures and the entrepreneurial intention?

- (2) What are the relationships between the level of favorable socioeconomic conditions and the entrepreneurial intention?
- (3) What are the relationships between the level of entrepreneurial and business skills and the entrepreneurial intention?
- (4) What are the relationships between the level of availability of financial assistance and the entrepreneurial intention?
- (5) What are the relationships between the level of availability of non-financial assistance and the entrepreneurial intention?
- (6) What would be the relationships of entrepreneurial environments for the entrepreneurial intention?

#### 1.4 Methodology

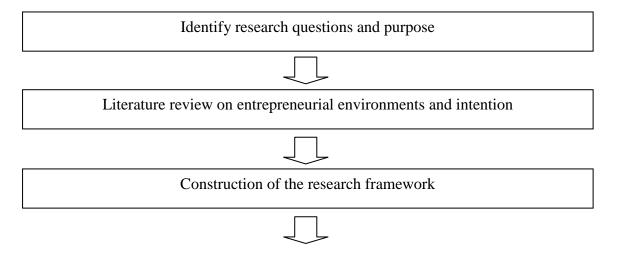
A survey questionnaire for entrepreneurial intention was developed based on literature review to test the research hypotheses proposed in this study. In addition to the survey questionnaire for the intention, five situational scenarios, representing entrepreneurial environments, are also developed based on the literature review. To analyze data, the following statistical techniques were used via two analytical softwares, SPSS 16.0 and HLM 6.0:

- (1) Descriptive statistic analysis
- (2) Reliability and validity test
- (3) Conjoint analysis
- (4) Hierarchical Linear Modeling

#### 1.5 Organization of the Thesis

This paper consists of five chapters. The first chapter has presented the problem, purpose of the study, research questions, methodology, and organization of the thesis. In the second chapter, literature for the theoretical background of this research is reviewed to present the stream of entrepreneurial intention research, entrepreneurial environments research, and the importance of research on interrelationships between subjects. The third chapter proposes a research model and hypotheses in the model, as well as displaying measurement variables. This chapter also shows how the data are collected and describes the characteristics of the sample. In the fourth chapter, hypotheses are tested by analyzing the data and the result is presented. In the fifth chapter, the conclusion along with implications, limitations, and suggestions for the future research are provided. The flow chart of this thesis is shown in figure 1.1.

Figure 1.1 Overview of the thesis



Development of the measurement model				
Collection of survey data				
Data analysis				
Discussion of the results				
Conclusion, implications, limitations, and suggestions				

#### CHAPTER 2 LITERATURE REVIEW

This chapter reviews five favorable entrepreneurial environments and the role of entrepreneurial intention. Then, the interaction between the internal and the external sources of entrepreneurship is also discussed.

#### 2.1 Entrepreneurial Environments

Entrepreneurs do not act in vacuum, but react to entrepreneurial environments surrounding them (Peters & Waterman, 1982). Entrepreneurial environments are defined as factors which are critical in developing entrepreneurship in certain regions (Gnyawali & Fogel, 1994). Entrepreneurial environments research has focused on several frames. For example, the research on the effect of skills and value perception shows a significant effect over the constructs (Liñán, 2008). In a study of the start-up firms in Sweden, Davidsson and Henrekson (2002) found that institutional arrangements have influence on entrepreneurial activity. The interaction between entrepreneurial environments and the development of entrepreneurship was analyzed in Hungary and presented as essential factors to develop entrepreneurship (Fogel, 2001).

Obviously, regardless of regional specialty, people will be encouraged to create new business ventures in environments conducive to entrepreneurship. Those entrepreneurial environments can be grouped into five broad categories: government policies and procedures, socioeconomic conditions, entrepreneurial and business skills,

financial assistance, and non-financial assistance (Gnyawali & Fogel, 1994). Table 2.1 shows the sub-categories of five entrepreneurial environments.

Table 2.1 A framework for entrepreneurial environments (Gnyawali & Fogel, 1994)

	Destrictions on immediate to the			
	Restrictions on imports and exports			
Government Policies and Procedures	Provision of bankruptcy laws			
	Entry barriers			
	Procedural requirements for registration and licensing			
Trocedures	Number of institutions for entrepreneurs to report to			
	Rules and regulations governing entrepreneurial activities			
	Laws to protect proprietary rights			
	Public attitude toward entrepreneurship			
	Presence of experienced entrepreneurs			
	Successful role models			
Socioeconomic	Existence of persons with entrepreneurial characteristics			
Conditions	Recognition of exemplary entrepreneurial performance			
	Proportion of small firms in the population of firms			
	Diversity of economic activities			
	Extent of economic growth			
	Technical and vocational education			
E-4	Business education			
Entrepreneurial and Business Skills	Entrepreneurial training programs			
Business Skills	Technical and vocational training programs			
	Availability of information			
	Venture capital			
	Alternative sources of financing			
	Low-cost loans			
Financial Assistance	Willingness of financial institutions to finance small			
	entrepreneurs			
	Credit guarantee programs for start-up enterprises			
	Competition among financial institutions			
	Counseling and support services			
Non-Financial	Entrepreneurial networks			
Assistance	Incubator facilities			
	Government procurement programs for small businesses			
	1 10			

Government support for research and development
Tax incentives and exemptions
Local and international information networks
Modern transport and communication facilities

#### 2.1.1 Government Policies and Procedures

Government policy can influence the market frame and create entrepreneurshipfriendly culture that promotes people to take risks and start their own businesses
(Gnyawali & Fogel, 1994). However, entrepreneurs will be discouraged from building a
new firm if they have to keep up with excessive numbers of rules and procedures (Fogel,
2001). Further, government is depicted as a barrier to the entrepreneurial activities
(Kouriloff, 2000). In the research of environmental factors affecting entrepreneurial
activities of Maori entrepreneurs of New Zealand, Zapalska, Dabb, and Perry (2003)
showed that government policies and procedures such as restrictions on imports and
exports, entry barriers, and procedural requirements for registration and licensing produce
much more negative effects than positive effects on entrepreneurship.

#### 2.1.2 Socioeconomic Conditions

People's perception on the entrepreneurial intention and action can be affected by attitudes toward entrepreneurs from family, friends, and community around them (Mokry, 1988). One research shows that external pressure and role models for entrepreneurship can not only lead people to start their own businesses but also change the venture creating processes in early and later stages of the new business (Davidsson, Hunter, & Klofsten, 2006). Another research suggests an empirical evidence that a positive personal network

coupled with strong entrepreneurial self-efficacy increases the likelihood of intention and action for entrepreneurship (Sequeira, Mueller, & McGee, 2007). Generally, a positive attitude of the society toward entrepreneurship and a public support program for entrepreneurial action will motivate people to start their own businesses (Gnyawali & Fogel, 1994).

#### 2.1.3 Entrepreneurial and Business Skills

If prospective entrepreneurs are well trained with entrepreneurial and business skills, they may not be discouraged whenever they meet a challenging task in their business start-up process (Gnyawali & Fogel, 1994). Davidsson (1991) revealed that an entrepreneur's ability to start and operate a business is highly correlated with business-related experience and education. Therefore, the training program which delivers entrepreneurial skills is important for an emerging small business and its success (Ladzani & Van Vuuren, 2002). Training programs for prospective entrepreneurs are greatly needed in developing countries with limited sources, non-supportive government policy, and high barriers by dominant large firms (Gnyawali & Fogel, 1994).

#### 2.1.4 Financial Support to Businesses

In general, entrepreneurs need financial support for at least one of three purposes: to diversify the start-up risk, to get start-up capital, and to expand the business (Gnyawali & Fogel, 1994). However, financial support not always foster the most promising start-up firms (Amit, Glosten, & Muller, 1990), and in some cases, new venture creation requires

other activities from investors such as due diligence and post investment participation rather than just financial support (Wiltbank, 2005). Nevertheless, still for most start-up ventures, financing is one of the most critical factors not only for venture creation but also for venture success in later stage. A research also shows that with different cultures and institutional environments between countries, venture capital industries are also shaped in different manners, including different financial support types (Bruton & Ahlstrom, 2003).

#### 2.1.5 Non-financial Support to Businesses

Entrepreneurs need systematic non-financial support along with financial assistance (Gnyawali & Fogel, 1994). One of the non-financial support systems can be an entrepreneurship incubator. The incubator generally provides positive environments to the early-stage ventures by offering rental office space, shared office services, and business counseling assistance at very low costs (Allen & Rahman, 1985). A good incubator has proved to provide a great survival rate, a positive impact on the perception of entrepreneurship, and a structural way to financial markets (Aernoudt, 2004).

#### 2.2 The Role of Entrepreneurial Intention in New Venture Creation

Founding a business is obviously composed with conscious activities. Someone grabs a concept of starting a new business, progresses the plot in a given environment, and embodies the business plan with viable actions (Krueger Jr, Reilly, & Carsrud, 2000). However, the intention to have an entrepreneurial career before actually organizing a

business is the highlight of entrepreneurship because of its importance as a starting point of new venture creation (Bird, 1988; Katz & Gartner, 1988). In this sense, entrepreneurial intention is an important research domain in an attempt to discover the core point in creating new ventures (Bird, 1988).

In general, intentions are followed by behavior and, simultaneously, certain attitudes precede intention. Thus, intentions serve as a clear link from antecedents to behavior (Ajzen, 1987, 1991). Besides, Ajzen and Fishbein (1980) noted that general attitudes and personality traits affect certain behaviors indirectly by influencing factors that are closely related to the behavior. These factors include situational beliefs, perception of available resources, and the perceived consequences of the behavior (Ajzen, 1991). Therefore, the impact of those factors will resulted in behavioral changes. In this sense, entrepreneurial activities also can thrive or extinct by influencing environments for entrepreneurial intention.

#### 2.3 The Importance of Entrepreneurial Environments for New Venture Creation

Researchers have studied entrepreneurs' personalities and traits to distinguish them from that of others. Other researchers have focused on how the environmental factors affect new venture creation rates. Both, so called, "traits and rates" studies are complementary, as each social science approach contributes to the development of entrepreneurial research and combined approach provide more accurate research models (Aldrich, 1990). Accordingly, entrepreneurial intention has to be understood in the context of entrepreneurial environments.

#### 2.3.1 The Inside-Out and the Outside-In Taxonomy of Entrepreneurship

The inside-out approach is the stream of studies that focus on the personal characteristics of entrepreneurs to understand entrepreneurship. On the other hand, the outside-in approach tries to explain entrepreneurship with the contextual environments. The symbiosis of entrepreneurship research has several other dichotomous naming; supply-side prospective and demand-side prospective (Thornton, 1999), and endogenous and exogenous processes (Carroll & Khessina, 2005). The obvious fact is that the creation of a new venture is an intended action by an individual entrepreneur, but also the entrepreneur cannot progress without an infrastructure (Thornton, 1999).

#### 2.3.2 Institutional Ecology

Institutional ecology highlights how legitimacy, social support, and approval from external constituents increase the likelihood that an organization can be successfully created (Meyer & Rowan, 1977). Baum and Oliver (1996) showed that socioeconomic context has an impact on organization creation rates. Aldrich (1990) divided institutional force affecting organization founding into sub-factors: politics and governmental policies, spatial location, culture, and other events specific to certain periods. Some of those factors are short-term and dramatic events, and others are long-term and repetitive events with cumulative power. In this paper, I use five categories for entrepreneurial environments; government policies and procedures, socioeconomic conditions, entrepreneurial and business skills, financial assistance, and non-financial assistance. All of these entrepreneurial environments might be working as ecological contexts to

entrepreneurial intention. Therefore, developing environmental criteria for entrepreneurs will expand systemic means to thrive entrepreneurship in a region.

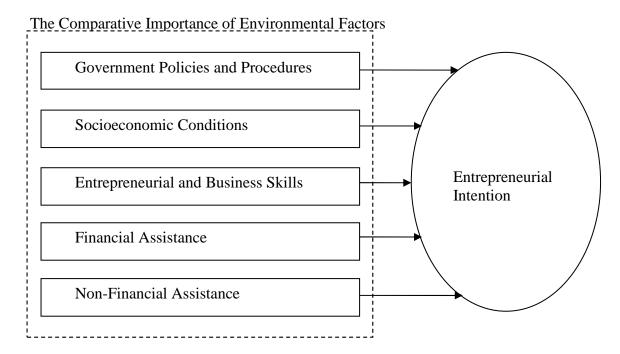
#### CHAPTER 3 RESEARCH MODEL AND METHODOLOGY

In this chapter, the research model and hypotheses are presented. Then a brief introduction to the conjoint analysis is given, followed by measurement variables and experimental design. Finally, the data collecting method and characteristics of sample are described.

#### 3.1 Research Model

The literature review in Chapter Two showed that venture creation is apparently a conscious process and therefore, the entrepreneurial intention is one of the most critical processes in the beginning stage of new venture creation. Now, favorable entrepreneurial environments are known to facilitate the entrepreneurial intention. Hence, in this paper, the relationships between entrepreneurial environmental factors and intention will be empirically examined and also the comparative importance of environmental factors for entrepreneurial intention will be presented. The five environmental factors are: government policies and procedures, socioeconomic conditions, entrepreneurial and business skills, financial assistance, and non-financial assistance. Figure 3.1 presents the research model of this study.

Figure 3.1 Research model



#### 3.2 Hypotheses development

Based on the literature review in Chapter Two, the following six hypotheses are developed in this paper for subsequent empirical validation. First, all of the five environmental factors will have positive effects on the entrepreneurial intention. From this foundation, the following five hypotheses are offered:

Hypothesis 1: The more favorable Government Policies and Procedures are as a dimension of Entrepreneurial Environment, the greater the likelihood that people will have the Entrepreneurial Intention.

Hypothesis 2: The more favorable Socioeconomic Conditions are as a dimension of Entrepreneurial Environment, the greater the likelihood that people will have the Entrepreneurial Intention.

Hypothesis 3: The higher the Entrepreneurial and Business Skills are as a dimension of Entrepreneurial Environment, the greater the likelihood that people will have the Entrepreneurial Intention.

Hypothesis 4: The greater the availability of Financial Assistance is as a dimension of Entrepreneurial Environment, the greater the likelihood that people will have the Entrepreneurial Intention.

Hypothesis 5: The greater the availability of Non-Financial Assistance is as a dimension of Entrepreneurial Environment, the greater the likelihood that people will have the Entrepreneurial Intention.

Second, with the conjoint analysis, it would be possible to find out the best composition of environmental factors conducive to the entrepreneurial intention. From this foundation, the following hypothesis is offered:

Intention

**H4** 

**H5** 

Hypothesis 6: There is the optimum comparative importance of five dimensions of Entrepreneurial Environments, which is the most conducive to the Entrepreneurial Intention.

Figure 3.2 shows the research model and hypotheses of this study.

The Comparative importance of Environmental Factors H6

Government Policies and Procedures

H1

Socioeconomic Conditions

H2

Entrepreneurial and Business Skills

Entrepreneurial

Figure 3.2 Research model and hypotheses

Financial Assistance

Non-Financial Assistance

## 3.3 Conjoint Analysis

This study uses conjoint analysis, a method that requires respondents to make a series of judgments based on profiles, from which processes of their decisions can be decomposed into the underlying structure. This method provides real-time data on respondents' decisions, avoiding their introspective biases (Fischhoff, 2002; Shepherd &

Zacharakis, 1999). For conducting conjoint analysis, a researcher provides attributes with levels for each of them, and then these attributes are chosen by the participants with compositional methods. After collecting respondents' ratings of each scenario, a researcher can decompose these data to reveal the relative importance of each attribute. With all of this process, a researcher takes an advantage of conjoint analysis by forcing participants to make serial decision making in real time (Lohrke, Holloway, & Woolley, 2010).

In entrepreneurial intention research, conjoint analysis has been estimated to overcome limitations of survey or interview methods that have a potential bias problem because they require respondents to recall their past intention process (Busenitz et al., 2003). However, articles with conjoint analysis methodology in actual entrepreneurship research are scarce. Only 2% of hypotheses from 1976 to 2004 have used conjoint analysis in entrepreneurship research (Dean, Shook, & Payne, 2007).

#### 3.4 Measurement Variables

To measure entrepreneurial intention and other control variables, a portion of Entrepreneurial Intention Questionnaire (EIQ) (Liñán & Chen, 2009) is used in survey questions. EIQ shows high reliability and validity and provides cross-cultural applicability. Profiles in this experimental design consist of five attributes, each of which is varied at two levels. To ensure the external validity of profiles for conjoint analysis, three entrepreneurship related professionals are interviewed to confirm the correctness of

(1) terminology used to describe categories, (2) the effectiveness of descriptions in the profile, and (3) the expected outcomes from each level of attributes.

The survey of this paper was conducted with university students in South Korea. For the right translation of the survey questionnaires from English into Korean, two Korean Ph.D students of business administration re-translated Korean based survey questionnaires into English. These survey questionnaires with different languages are compared with each other and had an appropriate change. All these procedures followed the recommendation of Brislin (1980).

#### 3.5 Experimental Design

The reliability of the assessments of participants in conjoint experiment is computed by replication of profiles and test-retest checks (Shepehrd & Zacharakis, 1997). In this paper, however, test-retest checks are substituted with multiple questionnaires following each profile. With five attributes and two levels of each attribute,  $2^5 = 32$  profiles can be generated for the experiment. However, 32 assessments process for each respondent has strong possibility of the unsuccessfully managed experiment. To keep off from this plausible problem, I used an orthogonal fractional factorial design, allowing me to reduce the total number of profiles to 8 (Hahn & Shapiro, 1966; Louviere, 1988). For this optimal reduction, SPSS16.0 is used to generate fractional design of experimental profiles.

#### 3.6 Data Collection

To make sure an accurate data collection, I made four versions of the experiment based on a two-by-two matrix with two different orders of profiles within the experiment and two different orders of attributes within the profiles. There were no significant differences among versions. Therefore, the order of both profiles and attributes is not affected in the experiment.

To verify the proposed model and hypotheses, a web-based survey was conducted for this study. The study was approved by the Institutional Review Board (IRB) of the University of Nebraska (IRB Approval #: 20100610796 EX) and the ethical guidelines were noted during the data collection process.

#### 3.7 Sample Description

In entrepreneurship research, samples of individuals for the study need to be selected before actual entrepreneurial action occurs (Gartner, 1989). This is because individuals seem to show inconsistent behavior with time and different situations (Mischel, 1968). For this reason, student sampling is preferred in entrepreneurship research because subjects with non-entrepreneurial intention can be included in the research with subjects before an entrepreneurial process occurred (Krueger et al., 2000). In this sense, the sample in this study is composed of 175 students of a Korean university in Seoul, South Korea and 137 valid questionnaires were collected (78.2%). Table 3.1 describes the characteristics of the participants.

Table 3.1 Characteristics of the sample

	N	Mean	SD		
Age	137	22.45	2.44		
Household(s)	137	4.07	0.61		
Gender	99(Male), 38(Female)				
Education	4 (Primary), 5 (middle), 50 (high),				
level(Father)	65 (university), 13 (other)				
Education level	4 (Primary), 7 (middle), 77 (high),				
(Mother)	43 (university), 5 (other)				
Occupation	44 (Private sector employee), 17 (Public sector employee),				
(Father)	54 (self-employed), 2 (retired), 2 (unemployed), 18 (other)				
Occupation	23 (Private sector employee), 8 (Public sector employee),				
(Mother)	26 (self-employed), 2 (retired), 0 (unemployed), 78 (other)				
Total yearly	32 (\$20,000-40,000), 47 (\$40,000-60,000), 31 (\$60,000-80,000),				
income (Family)	13 (\$80,000-100,000), 5 (\$100,000-120,000), 9 (Over \$120,000)				

Ninety nine students (72.26%) were male, while 38 (27.74%) were female. The average age of the participants and the number of family members were 22 years old and 4 households, respectively. The educational level of the participants showed university (47.44%) and high school (56.20%) had the largest proportion of the education level of fathers and mothers. The father's occupation of self-employed (39.42%) was the highest category, while 56.93% of mother's occupation was in the other category. The total family income under \$80,000 was 80.29%.

#### **CHAPTER 4 RESULTS**

In this chapter, a series of statistical analyses are used to analyze data and test research hypotheses. It consists of four sections. The first section presents reliability of responses for each individual. Then, the statistical significance of each environmental factor and the comparative importance score of the model is presented. Sub-analyses of the comparative importance are also presented to show the difference between male and female, and between students with employed fathers and students with self-employed fathers.

#### 4.1 Reliability of Responses

Chronbach's Alpha tests of multiple questionnaires following each profile were calculated to test the reliability of responses for each individual. The level of .700 or greater is suggested as an indication of the internal consistency (Nunnally, 1978). In this research, the values ranged from .856 to .928 as shown in Table 4.1. Therefore, the reliability of each profile is high enough to be considered as reliable and these values indicate that the participants of the experiment performed the conjoint analysis consistently.

Table 4.1 Result of reliability tests

Profile No.	Chronbach's Alpha
Profile 1	.844
Profile 2	.919
Profile 3	.910
Profile 4	.880
Profile 5	.898
Profile 6	.912
Profile 7	.908
Profile 8	.908
Profile 9	.912
Profile 10	.923

#### 4.2 Analyses of Five Environmental Factors

The statistical analysis of this research is based on the 10 independent decisions of each of the 137 students, which resulted in 1370 data in total. Here, the 10 decisions of each participant are apt to be intercorrelated because the decision process of each participant is unique and different from that of other individuals (Hambrick & Mason, 1984).

Considering data from the experiment, which does not satisfy the independence condition for standard Ordinary Least Squares regression, Hierarchical Linear Modeling (HLM), which is well suited for nested data, was applied (Hofmann, 1997). In this study,

level 1 refers to the decision level of analysis and level 2 refers to the individual level of analysis. Table 4.2 shows the result of HLM analysis.

Table 4.2 Result of effectiveness of five environmental factors

Factors	Randor		Random effects		Fixed effects	
1 actors	β	SE	T-ratio	β	SE	T-ratio
Government policies and procedures	0.797	0.063	12.587***	0.773	0.052	14.862***
Socioeconomic condition	0.868	0.060	14.533***	0.853	0.052	16.385***
Entrepreneurial and business skills	0.493	0.048	10.341***	0.507	0.052	9.739***
Financial assistance	0.829	0.057	14.524***	0.838	0.052	16.102***
Non-financial assistance	0.441	0.051	8.633***	0.408	0.052	7.833***

Dependent variable: intention

 $***p \le .001$ 

SE: standard error

The result of this study derived two related models; a random coefficients HLM model and a fixed coefficients HLM model. A random coefficients HLM model includes error terms at level 2 to account for all potential heterogeneity between individuals, whereas a fixed coefficients HLM model does not (Raudenbush & Bryk, 2002). This means when we test the direct effects of decision level (Level 1) variables, coefficients and error terms at the individual level (Level 2) should have no significant impact on the results at the decision level (Level 1). This is an advantage of the HLM method, which

estimates separate error terms for level 1 and level 2 (Hofmann, 1997). The coefficients and standard errors of both models show similar values. T-values and p-values also are much the same. Chi-square value shows statistically significant relationship between the fixed model and the random model ( $\chi^2 = 165.477$ , df = 53, p = 0.000). Therefore, all previous values confirm the robustness of the result in this study. The result also shows that all of entrepreneurial environments have significantly positive effects on entrepreneurial intention (H1, H2, H3, H4, and H5 are supported).

#### 4.3 Analysis of Comparative Importance of Five Factors

The comparative importance of attributes is shown in Table 4.3 in the order from more to less; socioeconomic conditions (26%), financial assistance (23%), government policies and procedures (22%), entrepreneurial and business skills (15%), and non-financial assistance (14%) (*H6* is supported). Figure 4.1 shows the comparative importance of entrepreneurial environments as a bar chart.

Table 4.3 Comparative importance score of entrepreneurial environments

Factor	Importance
Government policies and procedures	22.236%
Socioeconomic conditions	25.621%
Entrepreneurial and business skills	15.437%
Financial assistance	23.740%
Non-financial assistance	12.938%

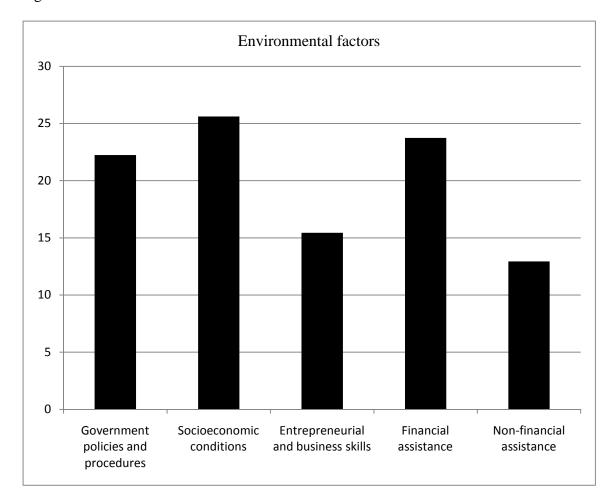


Figure 4.1 Values of environmental factors

## 4.4 Sub-Analyses of Comparative Importance of Five Factors

Table 4.4 shows different trade-offs between male students and female students. Both male and female students weighed most on socioeconomic conditions. While government policies and procedures are the second important factors for male students, financial assistance is considered as the second for female students. Figure 4.2 show the result by bar chart.

Table 4.4 Comparative importance score of environmental factors (Male and female)

Factor	Male (N=99)	Female (N=38)
Government policies and procedures	21.431%	24.410%
Socioeconomic conditions	25.531%	25.855%
Entrepreneurial and business skills	15.766%	14.588%
Financial assistance	23.668%	23.929%
Non-financial assistance	13.604%	11.218%

Figure 4.2 Comparison of values between male and female

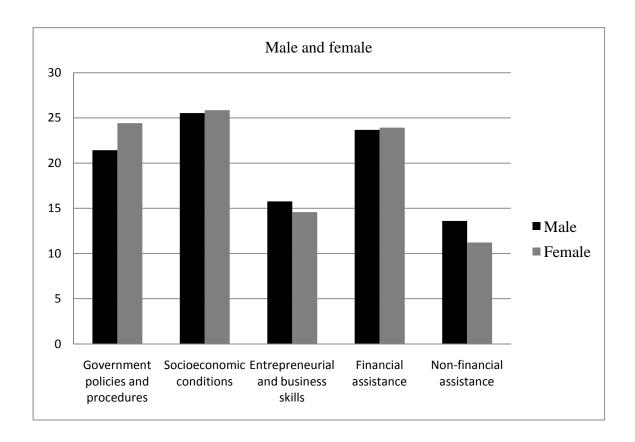


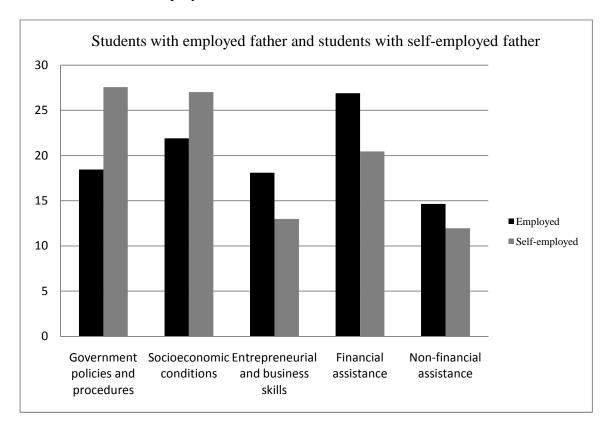
Table 4.5 represents the comparative importance of entrepreneurial environments between students with employed father and students with self-employed father. Financial assistance is the most important factor for students with employed father. However, students with self-employed father put an importance on government policies and procedures slightly more than on socioeconomic conditions. Following figure 4.3 graphically represents the result.

Table 4.5 Comparative importance score of environmental factors

(Students with employed father and students with self-employed father)

	Employed father	Self-employed
Factor	(N=61)	father (N=53)
Government policies and procedures	18.455%	27.569%
9 1 11 1	21.0020/	27.02.60/
Socioeconomic conditions	21.902%	27.026%
Entrepreneurial and business skills	18.098%	12.987%
Financial assistance	26.895%	20.448%
Non-financial assistance	14.651%	11.970%

Figure 4.3 Comparison of values between students with employed father and students with self-employed father



#### CHAPTER 5 CONCLUSIONS AND LIMITATIONS

This chapter presents the conclusion of this study. It contains conclusions, implications, limitations, and suggestions.

### 5.1 Research Conclusions and Implications

In this paper, I tested the effects of five conducive entrepreneurial environments; government policies and procedures, socioeconomic conditions, entrepreneurial and business skills, financial assistance, and non-financial assistance; on the entrepreneurial intention and the comparative importance of these environmental factors. Not surprisingly, because all the environmental factors are proven to be important to entrepreneurship development by researchers (e.g., Gnyawali & Fogel, 1994), all the environmental factors showed significant effects on elevating entrepreneurial intention. Somewhat surprisingly, socioeconomic conditions were the most conducive factor rather than financial assistance in promoting entrepreneurial intention. Maybe this is because Koreans emphasize group culture most of all.

Further, I found that the person with high attractiveness in entrepreneurship, high entrepreneurial self-efficacy, and role model in family for entrepreneurship shows generally strong entrepreneurial intention. Here, I note that socioeconomic factor, which was the most significant among five factors that are conducive to entrepreneurial intention in conjoint analysis, is not statistically significant factor in individual level HLM analysis. Possible reason is that the socioeconomic group in conjoint profile

consists of family members, whereas the society of a country is in individual level survey measurements. In other words, people may weigh more on family members' perception and evaluation on entrepreneurship than societies'. In a similar sense, role models among family, friend, employer or manager, and the other, family is the only group that has a significant relationship with entrepreneurial intention. Entrepreneurial knowledge, the educational level of mother, and family income also show insignificant, but strong relationship with entrepreneurial intention.

These findings make a few important implications and contributions to the field of entrepreneurship. First, the use of conjoint analysis will expand the application of this useful tool in the field of entrepreneurship research. Second, favorable entrepreneurial environments, not in use but for intention to start-up a new venture, will provide a different perspective to policy makers and practitioners, who are willing to make higher venture creation rates. Third, knowing the comparative importance among entrepreneurial environments can offer an insight for policy makers and practitioners with limited resources to make a systematic program for prospective entrepreneurs.

## 5.2 Research Limitations and Suggestions

This study has limitations that direct future research. First, conjoint analysis has its own limitations. Researchers have to rely on hypothetical decision profiles, and it can be resulted in less validity of the study. However, judgments with repeated measures in an experiment show that the hypothetical cases are effective enough to gain a useful practical data (McMullen & Shepherd, 2006). Moreover, although conjoint analysis has a

weak validity as an analyzing tool, it contains a strong methodological advantage when it is used in the study of entrepreneurial decision making, one of the most important subject in entrepreneurship research. For the future entrepreneurship research, conjoint analysis can be increasingly used as a useful research tool and this research may bridge the stream to continue.

Second, university students used in this study as the sample group are practically hard to substitute entrepreneurs in real. In some cases, however, unbiased results can be gained from student samples. In this study, for example, student's intention to create ventures might be purer and more correct than entrepreneurs' intention, which might be produced in distorted way because of retrospective experiment. Nonetheless, it has been recognized among researchers that entrepreneurs with professional experiences provide more reliable responses in entrepreneurship research with survey and experiment. In addition, conjoint analysis is designed to minimize distortion in espoused decision. It would be interesting to investigate the gap on evaluation of entrepreneurial environments between nascent entrepreneurs and entrepreneurs in action.

Third, generalization or diversification of the findings may be an issue of concern in this research. Although some cultural backgrounds were provided when describing results, regional and cultural limitations and biases may be exist in all over the processes and following results in this paper. Drawing the same picture in other countries with different cultural backgrounds will provide a tool for measuring similarities and differences of entrepreneurial environments conducive to entrepreneurial intention among different countries. In addition, it is to be desired that international studies on

entrepreneurial environments also consider different units of influencing culture such as individual, family, society, and country.

#### REFERENCES

- Aernoudt, R. (2004). Incubators: Tool for entrepreneurship?. *Small Business Economics*, 23(2), 127-135.
- Ajzen, I. (1988). *Attitudes, personality, and behavior*. Milton Keynes: Open University Press.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior & Human Decision Processes*, 50(2), 179.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood cliffs, NJ: Prentice-Hall.
- Aldrich, H. (1990). Using an ecological perspective to study organizational founding rates. *Entrepreneurship: Theory & Practice*, 14(3), 7-24
- Allen, D., & Rahman, S. (1985). Small business incubators: A positive environment for entrepreneurship. *Journal of Small Business Management*, 23(3), 12-22.
- Amit, R., Glosten, L., & Muller, E. (1990). Does venture capital foster the most promising entrepreneurial firms?. *California Management Review*, 32(3), 102-111.
- Baron, R. A. (1998). Cognitive mechanisms in entrepreneurship: Why and when. *Journal of Business Venturing*, 13(4), 275.
- Baum, J. A. C., & Oliver, C. (1996). Toward an institutional ecology of organizational founding. *Academy of Management Journal*, 39(5), 1378-1427.
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, 13(3), 442-453.
- Bird, B., & Jelinek, M. (1988). The operation of entrepreneurial intentions. *Entrepreneurship: Theory & Practice*, 13, 21-29.
- Brislin, R. W. (1980). *Translation and content analysis of oral and written materials*. In Triandis, H. C., & Berry, J. W. (Eds.), Handbook of cross-cultural psychology: 389-444. Boston: Allyn & Bacon.
- Bruton, G. D., & Ahlstrom, D. (2003). An institutional view of China's venture capital industry explaining the differences between China and the West. *Journal of Business Venturing*, 18(2), 233-259.

- Busenitz, L., West III, G., Shepherd, D., Nelson, T., Chandler, G., & Zacharakis, A. (2003). Entrepreneurship research in emergence: Past trends and future directions. *Journal of Management*, 29(3), 285-308.
- Carroll, G. R., & Khessina, O. M. (2005). *The ecology of entrepreneurship*. In Alvarez, S. A., Agarwal, R., & Sorenson, O. (Eds.), Handbook of Entrepreneurship Research: Disciplinary Perspectives: 167-200. New York: Springer.
- Davidsson, P. (1991). Continued entrepreneurship: Ability, need, and opportunity as determinants of small firm growth. *Journal of Business Venturing*, 6(6), 405.
- Davidsson, P., & Henrekson, M. (2002). Determinants of the prevalence of start-ups and high-growth firms. *Small Business Economics*, 19(2), 81.
- Davidsson, P., Hunter, E., & Klofsten, M. (2006). Institutional forces: The invisible hand that shapes venture ideas?. *International Small Business Journal*, 24(2), 115-131.
- Davis, S. J., Haltiwanger, J., & Jarmin, R. (2008). *Turmoil and growth: Young businesses, economic churning, and productivity gains*, Kauffman Foundation.
- Dean, M., Shook, C., & Payne, G. (2007). The past, present, and future of entrepreneurship research: Data analytic trends and training. *Entrepreneurship: Theory & Practice*, 31(4), 601-618.
- Fairlie, W. R. (2009). Kauffman index of entrepreneurial activity 1996-2008, Kauffman Foundation.
- Fischhoff, B. (2002). For those condemned to study the past: Heuristics and biases in hindsight. *Foundations of cognitive psychology: Core readings* (pp. 621-636). Cambridge, MA US: MIT Press.
- Fogel, G. (2001). An analysis of entrepreneurial environment and enterprise development in Hungary. *Journal of Small Business Management*, 39(1), 103-109.
- Gartner, W. (1989). Some suggestions for research on entrepreneurial traits and characteristics. *Entrepreneurship: Theory & Practice*, 14(1), 27-37.
- Gnyawali, D., & Fogel, D. (1994). Environments for entrepreneurship development: Key dimensions and research implications. *Entrepreneurship: Theory & Practice*, 18(4), 43-62.

- Hahn, G., & Shapiro, S. (1966). A catalogue and computer program for the design and analysis of orthogonal symmetric and asymmetric fractional factorial designs. NY: General Electric Corporation.
- Hambrick, D., & Mason, P. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9(2), 193-206.
- Hofmann, D. (1997). An overview of the logic and rationale of hierarchical linear models. *Journal of Management*, 23(6), 723.
- Katz, J., & Gartner, W. (1988). Properties of emerging organizations. *Academy of Management Review*, 13(3), 429-441.
- Kouriloff, M. (2000). Exploring perceptions of a priori barriers to entrepreneurship: A multidisciplinary approach. *Entrepreneurship: Theory & Practice*, 25(2), 59-79.
- Krueger Jr, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5/6), 411.
- Ladzani, W., & Van Vuuren, J. (2002). Entrepreneurship training for emerging SMEs in South Africa. *Journal of Small Business Management*, 40(2), 154-161.
- Liñán, F. (2008). Skill and value perceptions: How do they affect entrepreneurial intentions?. *International Entrepreneurship and Management Journal*, 4(3), 257-272.
- Liñán, F., & Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship: Theory & Practice*, 33(3), 593-617.
- Lohrke, F., Holloway, B., & Woolley, T. (2010). Conjoint analysis in entrepreneurship research. *Organizational Research Methods*, *13*(1), 16-30.
- Louviere, J. J. (1988). Analyzing decision making: Metric conjoint analysis. Newbury Park, CA: Sage.
- McMullen, J., & Shepherd, D. (2006). Encouraging consensus-challenging research in universities. *Journal of Management Studies*, 43(8), 1643-1669.
- Meyer, J. W., & Rowan, B. (1977). Institutional organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83, 929-984.
- Mischel, W. (1968). *Personality and assessment*. Hoboken, NJ US: John Wiley & Sons Inc.

- Mokry, B. W. (1988). *Entrepreneurship and public policy: Can government stimulate Start-ups?*. New York: Harper and Row.
- Nunnally, J. C. (1978). *Psychometric theory* (2<sup>nd</sup> ed.). New York: McGraw-Hill.
- Peters, T.J., & Waterman, R.H. (1982). *In search of excellence*. New York: Harper & Row.
- Raudenbush, S. W. & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Sequeira, J., Mueller, S., & McGee, J. (2007). The influence of social ties and self-efficacy in forming entrepreneurial intentions and motivating nascent behavior. *Journal of Developmental Entrepreneurship*, 12(3), 275-293.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25, 217-226.
- Shepherd, D., & Zacharakis, A. (1997). Conjoint analysis: A window of opportunity for entrepreneurship research. In J Katz (Ed.), *Advances in entrepreneurship, firm emergence and growth* (Vol. 3, pp. 203-248). Greenwich, CT: JAI Press.
- Shepherd, D., & Zacharakis, A. (1999). Conjoint analysis: A new methodological approach for researching the decision policies of venture capitalists. *Venture Capital*, *I*(3), 197-217.
- Thornton, P. (1999). The sociology of entrepreneurship. *Annual Review of Sociology*, 25(1), 19.
- Wiltbank, R. (2005). Investment practices and outcomes of informal venture investors. *Venture Capital*, 7(4), 343-357.
- Zapalska, A., Dabb, H., & Perry, G. (2003). Environmental factors affecting entrepreneurial activities: Indigenous Maori entrepreneurs of New Zealand. *Asia Pacific Business Review*, 10(2), 160-177.

Appendix A: The Survey Questionnaire

Dear survey participants:

This questionnaire is designed in order to identify comparative importance of entrepreneurial environments conducive to entrepreneurial intention. The purpose of this study is to raise the 'rates' of new venture creation by presenting the relationships between environmental factors and intention. This survey is consisted of two parts:

- 1. Survey on Entrepreneurship
- 2. Experiment to Measure Entrepreneurial Intentions on Environmental Changes Participation in this study will take approximately 15-20 minutes. By participating in this survey, you will be informed about favorable environments for entrepreneurship and realized about your familiarity to entrepreneurship. All the information from this survey will be confidentially used only for research purpose. Participating in this survey is totally voluntary, but it will be very helpful to receive your response. There are no known risks involved in participating in this research. If you give your consent to conducting this survey, please start the survey now, or if you do not consent to conducting this survey, please do not start this survey. You can also withdraw from answering this survey at any time without harming your relationship with the researchers or the University of Nebraska-Lincoln.

03.10

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Dear participants:

Thank you very much for your participation in this study.

You are encouraged to engage in this important study on entrepreneurship. Byungku Lee's research has full support from the department of management, CBA, University of Nebraska - Lincoln. Please do not hesitate to contact us if you have any questions.

Byungku Lee Prof. Sang M. Lee

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If you have any questions or concerns about your rights, please contact the University of Nebraska – Lincoln Institutional Review Board at (402) 472 – 6965 or email irb@unl.edu.

## 1. Survey on Entrepreneurship

A. Indicate your level of agreement with the following statements about the **Entrepreneurial Activity.** 

(1: total disagreement, 4: neutral, 7: total agreement)

			_		_		_	
		1	2	3	4	5	6	7
A01	I am ready to do anything to be an entrepreneur							
A02	I will make every effort to start and run my own business							
A03	I am determined to create a business venture in the future							
A04	My professional goal is to be an entrepreneur							

B. Considering all advantages and disadvantages (economic, personal, social recognition, job stability, etc.), indicate your level of **attraction towards** each of **the following work options.** 

(1: minimum attraction, 4: neutral, 7: maximum attraction)

		1	2	3	4	5	6	7
B01	Employee							
B02	Entrepreneur							

C. Indicate your level of agreement with the following sentences about the **values society put on entrepreneurship.** 

(1: total disagreement, 4: neutral, 7: total agreement)

\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				$\boldsymbol{\mathcal{C}}$			- /
	1	2	3	4	5	6	7
My immediate family values entrepreneurial activity above							
other activities and careers							
The culture in my country is highly favorable towards							
entrepreneurial activity							
The entrepreneur's role in the economy is generally							
undervalued in my country							
My friends value entrepreneurial activity above other							
activities and careers							
Most people in my country consider it <b>unacceptable</b> to be an							
entrepreneur							
In my country, entrepreneurial activity is considered to be							
worthwhile, despite the risks							
My colleagues value entrepreneurial activity above other							
activities and careers							
It is commonly thought in my country that entrepreneurs							
take advantage of others							
	other activities and careers  The culture in my country is highly favorable towards entrepreneurial activity  The entrepreneur's role in the economy is generally undervalued in my country  My friends value entrepreneurial activity above other activities and careers  Most people in my country consider it unacceptable to be an entrepreneur  In my country, entrepreneurial activity is considered to be worthwhile, despite the risks  My colleagues value entrepreneurial activity above other activities and careers  It is commonly thought in my country that entrepreneurs	other activities and careers  The culture in my country is highly favorable towards entrepreneurial activity  The entrepreneur's role in the economy is generally undervalued in my country  My friends value entrepreneurial activity above other activities and careers  Most people in my country consider it unacceptable to be an entrepreneur  In my country, entrepreneurial activity is considered to be worthwhile, despite the risks  My colleagues value entrepreneurial activity above other activities and careers  It is commonly thought in my country that entrepreneurs	My immediate family values entrepreneurial activity above other activities and careers  The culture in my country is highly favorable towards entrepreneurial activity  The entrepreneur's role in the economy is generally undervalued in my country  My friends value entrepreneurial activity above other activities and careers  Most people in my country consider it unacceptable to be an entrepreneur  In my country, entrepreneurial activity is considered to be worthwhile, despite the risks  My colleagues value entrepreneurial activity above other activities and careers  It is commonly thought in my country that entrepreneurs	My immediate family values entrepreneurial activity above other activities and careers  The culture in my country is highly favorable towards entrepreneurial activity  The entrepreneur's role in the economy is generally undervalued in my country  My friends value entrepreneurial activity above other activities and careers  Most people in my country consider it unacceptable to be an entrepreneur  In my country, entrepreneurial activity is considered to be worthwhile, despite the risks  My colleagues value entrepreneurial activity above other activities and careers  It is commonly thought in my country that entrepreneurs	My immediate family values entrepreneurial activity above other activities and careers  The culture in my country is highly favorable towards entrepreneurial activity  The entrepreneur's role in the economy is generally undervalued in my country  My friends value entrepreneurial activity above other activities and careers  Most people in my country consider it unacceptable to be an entrepreneur  In my country, entrepreneurial activity is considered to be worthwhile, despite the risks  My colleagues value entrepreneurial activity above other activities and careers  It is commonly thought in my country that entrepreneurs	My immediate family values entrepreneurial activity above other activities and careers  The culture in my country is highly favorable towards entrepreneurial activity  The entrepreneur's role in the economy is generally undervalued in my country  My friends value entrepreneurial activity above other activities and careers  Most people in my country consider it unacceptable to be an entrepreneur  In my country, entrepreneurial activity is considered to be worthwhile, despite the risks  My colleagues value entrepreneurial activity above other activities and careers  It is commonly thought in my country that entrepreneurs	My immediate family values entrepreneurial activity above other activities and careers  The culture in my country is highly favorable towards entrepreneurial activity  The entrepreneur's role in the economy is generally undervalued in my country  My friends value entrepreneurial activity above other activities and careers  Most people in my country consider it unacceptable to be an entrepreneur  In my country, entrepreneurial activity is considered to be worthwhile, despite the risks  My colleagues value entrepreneurial activity above other activities and careers  It is commonly thought in my country that entrepreneurs

# D. How do you rate yourself on the following entrepreneurial abilities/skill sets?

(1: no aptitude at all, 4: neutral, 7: very high aptitude)

	1	2	3	4	5	6	7
Recognition of opportunity							
Creativity							
Problem solving skills							
Leadership and communication skills							
Development of new products and services							
Networking skills, and making professional contacts							
	Creativity Problem solving skills Leadership and communication skills Development of new products and services	Creativity Problem solving skills Leadership and communication skills Development of new products and services	Creativity Problem solving skills Leadership and communication skills Development of new products and services	Creativity Problem solving skills Leadership and communication skills Development of new products and services	Creativity Problem solving skills Leadership and communication skills Development of new products and services	Recognition of opportunity  Creativity  Problem solving skills  Leadership and communication skills  Development of new products and services	Recognition of opportunity  Creativity  Problem solving skills  Leadership and communication skills  Development of new products and services

E. Do you <b>personally know</b> an entrepreneur or entrepreneurs?	Yes	☐ No
If yes, indicate your relationship to them, and evaluate the following	owing ques	tions.

(1: not at all, 4: neutral, 7: extremely well)

	· · · · · · · · · · · · · · · · · · ·					_		
		1	2	3	4	5	6	7
Family	To what extent do you know about his/her activity as entrepreneur?							
	To what extent may he/she be considered a 'good entrepreneur'?							
Friend	To what extent do you know about his/her activity as entrepreneur?							
	To what extent may he/she be considered a 'good entrepreneur'?							
Employer	To what extent do you know about his/her activity as entrepreneur?							
/ Manager	To what extent may he/she be considered a 'good entrepreneur'?							
Other	To what extent do you know about his/her activity as entrepreneur?							
	To what extent may he/she be considered a 'good entrepreneur'?							

# F. Indicate your level of knowledge about business associations, support bodies and other sources of assistance for entrepreneurs.

(1: no knowledge, 4: neutral, 7: complete knowledge)

		1	2	3	4	5	6	7
F01	Private associations							
F02	Public support bodies							
F03	Specific training for young entrepreneurs							
F04	Loans in specially favorable terms							
F05	Technical aid for business start-ups							
F06	Business centers							

## 2. Experiment to Measure Entrepreneurial Intentions on Environmental Changes

In this experiment, you will be given 10 cases and each case will be shown with the selected five environmental factors for new venture creation (also with degrees: high and low). After the careful reading and evaluation of each case, please answer the following 4 questions each time. Please do not refer back to pages where you have already given an assessment of the project. Each of the case represents independent entrepreneurial environment. Also, answer the questions not based on your personal evaluation of entrepreneurial environments of your region, but rest on the given case. Lastly, assume that you are evaluating the cases under the current economic situation of your country. The table below shows the general descriptions of entrepreneurial environments.

## **Parameter Descriptions for Experiment**

Parameter	Level	Description						
The Quality of	High	The government is employing policies and procedures						
Government Policies	Tilgii	encouraging new venture creation.						
and Procedures	Low	The government is employing a policies and						
and i foccures	LOW	procedures <u>discouraging</u> new venture creation.						
	High	My family and friends are supportive on						
Socioeconomic	Ingn	entrepreneurial activity.						
Conditions	Low	My family and friends are <u>not supportive</u> on						
	Low	entrepreneurial activity.						
	High	It is <u>always accessible</u> to the education programs on						
Entrepreneurial and	Ingn	entrepreneurial information and business skills.						
Business Skills	Low	It is <u>rarely accessible</u> to the education programs on						
	LOW	entrepreneurial information and business skills.						
	High	It is <u>easy to get financial investment</u> from venture						
Financial Assistance	Ingn	capitals.						
Tillaliciai Assistance	Low	It is <u>hard to get financial investment</u> from venture						
	Low	capitals.						
	High	Incubator facilities with new venture support services						
Non-Financial	Ingn	are <u>always available</u> for prospective entrepreneurs.						
Assistance	Low	Incubator facilities with new venture support services						
	LOW	are <u>unavailable</u> for prospective entrepreneurs.						

While you are trying to found a new venture,

- 1) The government is employing a policies and procedures <u>discouraging</u> new venture creation.
- 2) My family and friends are <u>not supportive</u> on entrepreneurial activity.
- 3) It is <u>always accessible</u> to the education programs on entrepreneurial information and business skills.
- 4) It is easy to get financial investment from venture capitals.
- 5) Incubator facilities with new venture support services are <u>unavailable</u> for prospective entrepreneurs.

#### Assessment

1. I am ready to do anything to be an entrepreneur.

	<del>,</del> –			<u> </u>								
Total disagreement	1	2	3	4	5	6	7	Total agreement				
2. I will make every effort to start and run my own business.												
Total disagreement	1	2	3	4	5	6	7	Total agreement				
3. I am determined to create a business venture in the future.												
Total disagreement	1	2	3	4	5	6	7	Total agreement				
4. My professional goal is to be an entrepreneur.												
Total disagreement	1	2	3	4	5	6	7	Total agreement				

#### Case 2

While you are trying to found a new venture,

- 1) The government is employing a policies and procedures <u>encouraging</u> new venture creation.
- 2) My family and friends are <u>supportive</u> on entrepreneurial activity.
- 3) It is <u>rarely accessible</u> to the education programs on entrepreneurial information and business skills.
- 4) It is <u>hard to get financial investment</u> from venture capitals.
- 5) Incubator facilities with new venture support services are <u>unavailable</u> for prospective entrepreneurs.

#### Assessment

Total disagreement	1	2	3	4	5	6	7	Total agreement						
2. I will make every e	2. I will make every effort to start and run my own business.													
Total disagreement 1 2 3 4 5 6 7 Total agreement														
3. I am determined to create a business venture in the future.														
Total disagreement	Total disagreement 1 2 3 4 5 6 7 Total agreement													
4. My professional goal is to be an entrepreneur.														
Total disagreement	1	2	3	4	5	6	7	Total agreement						

While you are trying to found a new venture,

- 1) The government is employing a policies and procedures <u>encouraging</u> new venture creation.
- 2) My family and friends are <u>supportive</u> on entrepreneurial activity.
- 3) It is <u>always accessible</u> to the education programs on entrepreneurial information and business skills.
- 4) It is easy to get financial investment from venture capitals.
- 5) Incubator facilities with new venture support services are <u>always available</u> for prospective entrepreneurs.

#### Assessment

1. I am ready to do anything to be an entrepreneur.

	, 0												
Total disagreement	1	2	3	4	5	6	7	Total agreement					
2. I will make every effort to start and run my own business.													
Total disagreement 1 2 3 4 5 6 7 Total agreement													
3. I am determined to create a business venture in the future.													
Total disagreement	Total disagreement 1 2 3 4 5 6 7 Total agreement												
4. My professional goal is to be an entrepreneur.													
Total disagreement	1	2	3	4	5	6	7	Total agreement					

#### Case 4

While you are trying to found a new venture,

- 1) The government is employing a policies and procedures <u>discouraging</u> new venture creation.
- 2) My family and friends are <u>supportive</u> on entrepreneurial activity.
- 3) It is <u>always accessible</u> to the education programs on entrepreneurial information and business skills.
- 4) It is <u>hard to get financial investment</u> from venture capitals.
- 5) Incubator facilities with new venture support services are <u>unavailable</u> for prospective entrepreneurs.

#### Assessment

Total disagreement	1	2	3	4	5	6	7	Total agreement						
2. I will make every e	2. I will make every effort to start and run my own business.													
Total disagreement 1 2 3 4 5 6 7 Total agreement														
3. I am determined to create a business venture in the future.														
Total disagreement	Total disagreement 1 2 3 4 5 6 7 Total agreement													
4. My professional goal is to be an entrepreneur.														
Total disagreement	1	2	3	4	5	6	7	Total agreement						

While you are trying to found a new venture,

- 1) The government is employing a policies and procedures <u>discouraging</u> new venture creation.
- 2) My family and friends are <u>not supportive</u> on entrepreneurial activity.
- 3) It is <u>rarely accessible</u> to the education programs on entrepreneurial information and business skills.
- 4) It is hard to get financial investment from venture capitals.
- 5) Incubator facilities with new venture support services are <u>always available</u> for prospective entrepreneurs.

#### Assessment

1. I am ready to do anything to be an entrepreneur.

	, 0							
Total disagreement	1	2	3	4	5	6	7	Total agreement
2. I will make every e	ffort to	start a	nd run	my owi	n busin	ess.		
Total disagreement	1	2	3	4	5	6	7	Total agreement
3. I am determined to create a business venture in the future.								
Total disagreement	1	2	3	4	5	6	7	Total agreement
4. My professional go	al is to	be an e	entrepre	eneur.				
Total disagreement	1	2	3	4	5	6	7	Total agreement

#### Case 6

While you are trying to found a new venture,

- 1) The government is employing a policies and procedures <u>encouraging</u> new venture creation.
- 2) My family and friends are <u>not supportive</u> on entrepreneurial activity.
- 3) It is <u>always accessible</u> to the education programs on entrepreneurial information and business skills.
- 4) It is <u>hard to get financial investment</u> from venture capitals.
- 5) Incubator facilities with new venture support services are <u>always available</u> for prospective entrepreneurs.

#### Assessment

	•		-	L				
Total disagreement	1	2	3	4	5	6	7	Total agreement
2. I will make every e	effort to	start a	nd run	my owi	n busin	ess.		
Total disagreement	1	2	3	4	5	6	7	Total agreement
3. I am determined to create a business venture in the future.								
Total disagreement	1	2	3	4	5	6	7	Total agreement
4. My professional goal is to be an entrepreneur.								
Total disagreement	1	2	3	4	5	6	7	Total agreement

While you are trying to found a new venture,

- 1) The government is employing a policies and procedures <u>discouraging</u> new venture creation.
- 2) My family and friends are <u>supportive</u> on entrepreneurial activity.
- 3) It is <u>rarely accessible</u> to the education programs on entrepreneurial information and business skills.
- 4) It is easy to get financial investment from venture capitals.
- 5) Incubator facilities with new venture support services are <u>always available</u> for prospective entrepreneurs.

#### Assessment

1. I am ready to do anything to be an entrepreneur.

	<i>J</i>			L				
Total disagreement	1	2	3	4	5	6	7	Total agreement
2. I will make every e	ffort to	start a	nd run	my owi	n busin	ess.		
Total disagreement	1	2	3	4	5	6	7	Total agreement
3. I am determined to create a business venture in the future.								
Total disagreement	1	2	3	4	5	6	7	Total agreement
4. My professional go	al is to	be an e	entrepre	eneur.				
Total disagreement	1	2	3	4	5	6	7	Total agreement

## Case 8

While you are trying to found a new venture,

- 1) The government is employing a policies and procedures <u>encouraging</u> new venture creation.
- 2) My family and friends are <u>not supportive</u> on entrepreneurial activity.
- 3) It is <u>rarely accessible</u> to the education programs on entrepreneurial information and business skills.
- 4) It is easy to get financial investment from venture capitals.
- 5) Incubator facilities with new venture support services are <u>unavailable</u> for prospective entrepreneurs.

#### Assessment

Total disagreement	1	2	3	4	5	6	7	Total agreement
2. I will make every e	effort to	start a	nd run	my owi	n busin	ess.		
Total disagreement	1	2	3	4	5	6	7	Total agreement
3. I am determined to create a business venture in the future.								
Total disagreement	1	2	3	4	5	6	7	Total agreement
4. My professional go	al is to	be an e	entrepre	eneur.				
Total disagreement	1	2	3	4	5	6	7	Total agreement

While you are trying to found a new venture,

- 1) The government is employing a policies and procedures <u>encouraging</u> new venture creation.
- 2) My family and friends are <u>not supportive</u> on entrepreneurial activity.
- 3) It is <u>rarely accessible</u> to the education programs on entrepreneurial information and business skills.
- 4) It is hard to get financial investment from venture capitals.
- 5) Incubator facilities with new venture support services are <u>always available</u> for prospective entrepreneurs.

#### Assessment

1. I am ready to do anything to be an entrepreneur.

	, 0							
Total disagreement	1	2	3	4	5	6	7	Total agreement
2. I will make every e	ffort to	start a	nd run	my owi	n busin	ess.		
Total disagreement	1	2	3	4	5	6	7	Total agreement
3. I am determined to create a business venture in the future.								
Total disagreement	1	2	3	4	5	6	7	Total agreement
4. My professional go	al is to	be an e	entrepre	eneur.				
Total disagreement	1	2	3	4	5	6	7	Total agreement

#### Case 10

While you are trying to found a new venture,

- 1) The government is employing a policies and procedures <u>discouraging</u> new venture creation
- 2) My family and friends are <u>supportive</u> on entrepreneurial activity.
- 3) It is <u>always accessible</u> to the education programs on entrepreneurial information and business skills.
- 4) It is <u>hard to get financial investment</u> from venture capitals.
- 5) Incubator facilities with new venture support services are <u>always available</u> for prospective entrepreneurs.

#### Assessment

Total disagreement	1	2	3	4	5	6	7	Total agreement
2. I will make every e	ffort to	start a	nd run	my owi	n busin	ess.		_
Total disagreement	1	2	3	4	5	6	7	Total agreement
3. I am determined to create a business venture in the future.								
Total disagreement	1	2	3	4	5	6	7	Total agreement
4. My professional go	al is to	be an e	entrepre	eneur.				
Total disagreement	1	2	3	4	5	6	7	Total agreement

# **Personal Data**

1. Age:
2. Gender: Male Female
3. Place of birth: A big city A small city A country
4. What level of education have your parents achieved?  Father: Primary Secondary Vocational training University Other  Mother: Primary Secondary Vocational training University Other
5. What are their present occupations?
Private sector Public sector Self-employed Retired Unemployed Other
employee employee or entrepreneur  Father:
6. How many people are living in your household? (Including yourself)
7. Roughly speaking, what is the <b>total yearly income</b> in your household?
(Adding up all revenues from any person living in the household)  From \$20,000 to \$40,000 From \$40,000 to \$60,000 From \$60,000 to \$80,000
From \$80,000 to \$100,000 From \$100,000 to \$120,000 Over \$120,000

-Thank you-