

A Study on the Factors that Affect the Entrepreneurial Intention of Pre-Entrepreneurs: Focusing on the Moderating Effect of Self-Efficacy

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Abstract

Background/Objectives: The present study performed a positive analysis on the factors affecting entrepreneurial intention with a focus on the moderating effect of self-efficacy by pre-entrepreneurs including university students and nascent entrepreneurs. **Methods/Statistical Analysis:** The present used Smart PLS 2.0 to verify the selected model. PLS analysis requires verification of measurement questions and constructs. Moreover the PLS method was used a suitable manner in the early stage of development of a theory that has not been verified. It is because this study has the strong nature of an exploratory study. **Findings:** As a study on the influence on the entrepreneurial intention of pre-entrepreneurs, the present study positively analyzed the relationship between locus of control educational factors and organizational factors, and the mediating role of self-efficacy, by using self-efficacy as a moderating variable. As a result of hypothesis verification, hypothesis 1, which claims that locus of control positively affects entrepreneurial intention, is adopted, along with hypotheses 2 and 3 which claim that educational and organizational factors positively affect entrepreneurial intention. However, the analysis of the moderating effect of self-efficacy against each factor revealed no such effect, so hypotheses was rejected. **Application/Improvements:** In this study, it is expected to systematically develop and apply programs for entrepreneurial candidates in terms of start-up by looking at the underlying reasons for university students to fail o the start-up.

Keywords: Entrepreneurial, Intention, Pre-Entrepreneurial, PLS, Self-Efficacy

1. Introduction

With the opening of the creative economy age, various entrepreneurship support programs, based on technology entrepreneurship, including knowledge-service enterprises (contents, apps, and software convergence among others), one-person creative companies, and researcher enterprises, are being carried out to vitalize entrepreneurship, which is one of the core strategic tasks of this age. In particular, since 2008, positive expected effects have been materialized including a rise in the number of start-ups and an expansion in new job creation, due programs sup-

porting the vitalization of entrepreneurship centering on the Small and Medium Business Administration (SMBA). According to the aims of Government 3.0, the SMBA is attempting to transfer and expand entrepreneurship support programs from a government-based leadership to a private-based leadership by establishing entrepreneurship 3.0 policies¹. However, unlike the past, jobless growth and economic recession propose both employment and entrepreneurship. As if to reflect such an age, the entrepreneurship inclination of Korean university students is 4.9%, with 58.4% stating they are inclined toward entrepreneurship in the future although they are not currently

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in preparation. Their desired entrepreneurial type and business was the highest for the area related to restaurant business including coffee shops and restaurants. What they wanted the most in regards to entrepreneurial support was support of capital (41.7%), followed by expert knowledge education and technological training (20.2%), legal and economic knowledge and information education (11.8%), and management education and consulting (10.4%)^{2,3}.

The size of financial support for ventures and entrepreneurship by the government was 166.1 billion won in⁴ and not one of the 20 teams that received awards at the University Entrepreneurship Competition between the 2009 and 2011 obtained investments. The reason for such a result is the continuous decrease of angel investors who play a big role in supporting nascent entrepreneurship funds.

Also, only twenty businesses per year receive support through the re-entrepreneurship support system for failed enterprisers, and although the financing budget for this project between 2010~2011 was 40 billion won, only 12.9 billion was actually supported^{5,6}. It may seem that much support is given, but the actual amount invested often fails to be effective. Research by the National Statistics Office on start-ups between 2006~2010 discovered that the one year survival rate of start-ups was 61.3%, the two year survival rate was 48.4%, and the five year survival rate was 29.6%. Half of the start-ups from the same year disappear within two years.

The most difficult period for entrepreneurs is up to the three year point, which reveals how hard it is for start-ups to survive more than two years⁷. The fundamental reason that university students fail at entrepreneurship is the lack of systematic and positive studies on university student entrepreneurship in terms of the lack of understanding policies related to entrepreneurship and issues regarding individual ability, management and funds. Therefore, the present study performed a positive analysis on the factors affecting entrepreneurial intention with a focus on the moderating effect of self-efficacy by pre-entrepreneurs including university students and nascent entrepreneurs.

2. Theoretical Backgrounds

2.1 The Definition Entrepreneurship

In⁸ defined entrepreneurship as an innovative act that invests all existing resources, and which has the ability to

newly create wealth^{3,8}. In^{3,9} defined the entrepreneur as an innovator who goes beyond the status quo by new methods of combining and selling resources, through the use of an entrepreneurial process. He distinguishes new business activities and entrepreneurial activities and defines entrepreneurship as a 'creative destruction' that destroys past methods with new ones. Entrepreneurship cannot be expressed solely as acts of innovative activities evaluated that many people regard entrepreneurship as the same thing as small business management and explains in detail the difference between entrepreneurship and small business management^{3,10}. In such a way, entrepreneurship is said to be the acts that lay the foundations of business and create something, and which build the system through the combination of innovation acts and resources^{11,12}.

2.2 Internal Locus of Control

In¹⁴ claims that individual locus of control as the individual belief that measures the subject's perception to the degree of influencing one's accomplishments or results in life, and distinguishes the internalizers and externalizers according to the locus of control^{13,14}.

In¹⁵ says that, when the locus of control is internal, it is affected relatively less and the subjects perceives that they can control their lives or destiny, so that they are more passionate about their entrepreneurship. In other words, internalizers believe that then can determine, manage, and control their destiny, whereas externalizers believe that the many results happening to them are created by the external influences of luck, organization, or outsiders, and not by control^{13,15}. Thus, the internal locus of control is important to entrepreneurs. People who believe that the external locus of control is important tend to think that other factors rather than their behavior are greater and that they do not have control, so they become withdrawn and only seek security, which contradict the qualities exemplary for entrepreneurs.

2.3 Educational Factor

In¹⁶ claims that education is able to increase the will for entrepreneurship. Furthermore, he claims that entrepreneurship requires marketing ability for new markets, idea development, financial skills, and the ability to overcome economic uncertainty^{13,16}. In¹⁷ emphasize that educational elements necessary for entrepreneurship are lecture methods or contents, an appropriate subjects^{13,17}. Regardless of personal taste, the change brought about by educational factors may not be able to always have the same value.

However, such educational factors cannot be said to have no affect on the qualifications of the entrepreneur. In¹⁸ released research results that claim entrepreneurship is a difficult process of actively responding to challenges and risks in order to overcome uncertain situations, and that entrepreneurial education, by providing learning opportunities through the technological aspects of entrepreneurship as well as various experiences, can be highly influential^{13,18}.

2.4 Organizational Factor

According to the research school support for entrepreneurship can encourage students to actively respond to entrepreneurship in uncertain situations and help them overcome dangers. They also claim that, when university students recognize support for entrepreneurship, they have higher intellectual focus and increased will and interest toward entrepreneurship, and that entrepreneurship promotion centers and financial support operated by universities play an important role in awakening the intention and passion toward entrepreneurship^{13,19}.

In²⁰ presented research results claiming that organizational factors differ according to policy support by school and government and facilities and personnel related to entrepreneurship^{13,20}. School support has variegated influence depending on organizational affiliation, whether students behave with trust and faith to the organization, and whether the students feels solidarity to the organization, but as a part of university student entrepreneurship, school support is undeniably helpful. It must be recognized as an item that can have influence in various ways including sensitivity to risk, the technological aspect, and the motivation to entrepreneurship, which appears through the provision of learning opportunities and various experiences.

2.5 Self-Efficacy

In²¹ first adopted the concept of self-efficacy to entrepreneurship, and defined it as a belief in regards to the degree of being able to perform entrepreneurial activities by proficiently responding to challenges and risks with the purpose of overcoming situations^{13,21}.

In²² claimed that the assessment of a situation by a person with high self-efficacy provides various opportunities while the assessment of an environment as a coexistence of sacrifice and risk by a person with low self-efficacy reduces opportunity. Even if people perceive the

identical reality on the assumption that they have fallen to difficulty, a person with high self-efficacy feels more confident toward responding to reality than a person with low-efficacy, and this may lead to higher entrepreneurial intention, as suggested by the research results^{13,22}. Self-efficacy is confirmed as the most important element in entrepreneurship. Entrepreneurship depends on the qualifications of the entrepreneur, and the item that controls the qualifications of the entrepreneur is self-efficacy.

In²³ claims that people with high self-efficacy have the belief that they can control and respond actively to the challenges and risks brought about by entrepreneurship, and because they have this strong belief that they can capture opportunity in an environment, that it has the greatest involvement with entrepreneurship. He proposed personal belief of successfully performing the roles and tasks of entrepreneurship as the concept of entrepreneurial self-efficacy²³.

2.6 Entrepreneurial Intention

In^{24,25} claims that will is the conscious thinking that attempts to behave and experience with interest in order to achieve personal goals or careers.

According to²⁶, intention may be usefully used instead of behavior, as a preceding variable of calculated behavior, when it is difficult for action to occur or difficult to observe action, or when prediction includes an impossible figure, and, based on such properties, they presented entrepreneurial intention as an effective method for actually explaining behavior regarding entrepreneurship^{13,26}. Intention regarding entrepreneurship involves the choice of whether to actually carry out entrepreneurship or not, and this includes the possibilities of entrepreneurship.

In²⁷ claim that entrepreneurial intention differs in terms of perception toward entrepreneurial possibility and employment possibility^{13,27}. In²⁸ defined the entrepreneurial intention of university students as the psychological condition connected to personal interest and behavior toward entrepreneurship, in opposition to the concept of employment, and simultaneously as the personal effort for performing entrepreneurial behavior.

3. Establishing a Research Model and Hypotheses

A research model for verifying the effect of self-efficacy on entrepreneurial intention and a summary of new

hypotheses along with the variegated characteristics of theoretical backgrounds argued as past studies have been draw up as follows.

3.1 Research Model

The present study confirms what kind of influence internal locus of control, educational factors, organizational factors, and entrepreneurial intention exert with a focus on pre-entrepreneurs and verifies what moderating effect self-efficacy has on entrepreneurial intention (Figure 1).

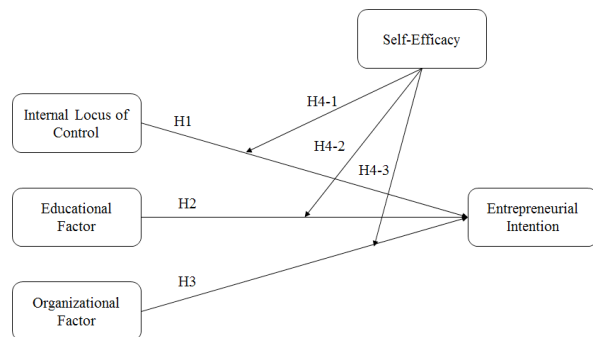


Figure 1. Research model.

3.2 Establishing Hypotheses

As an innovative act that invests all existing resources, entrepreneurship is a task that involves the ability to newly create wealth. In¹⁵ claims that when, the locus of control is internal, environmental effect is relatively low, and from the inference that the subject is in control, and that the internal locus of control has a positive influence on entrepreneurial intention. In¹⁸ presented research results that entrepreneurial education, by providing the technological aspects of entrepreneurship as well as learning opportunities through various experiences, has great influence, and in²⁰ proposed that organizational factors differ according to the policy support school and government, and by entrepreneurial facilities and personnel. The consideration of these aspects enabled the establishment of the following hypotheses.

H1. An internal locus of control will positively affect entrepreneurial intention.

H2. Educational factors will positively affect entrepreneurial intention.

H3. Organizational factors will positively affect entrepreneurial intention.

In²³ claims that self-efficacy is most relevant to entrepreneurship because people with high self-efficacy have the belief that they can actively respond and control challenges and risks brought about by entrepreneurship

and take hold of opportunity, and in²⁹ proposed that self-efficacy is the believe of one's ability to organize and implement the behavior necessary to materialize goals into results²⁹. The consideration of such aspects allows the assertion that self-efficacy is an article with great influence on other factors more so than any other area among the articles relevant to entrepreneurship, which enables the establishment of the following hypotheses.

H4-1. Internal locus of control, in its relationship to entrepreneurial intention, will be affected by self-efficacy

H4-2. The educational factors, in their relationship to entrepreneurial intention, will be affected by self-efficacy

H4-3. The organizational factors, in their relationship to entrepreneurial intention, will be affected by self-efficacy.

4. Characteristics of the Sample and the Method of Analysis

4.1 Sample Extraction and Data Collection

The present used Smart PLS 2.0 to verify the selected model. The present study carried out research with pre-entrepreneurs as subjects, distributing 160 surveys between November 10 and December 10 2015, and selected 120 surveys for the final analysis, excluding surveys that were problematic among those retrieved.

4.2 Validity Analysis of Measurement Factors

PLS analysis requires verification of measurement questions and constructs (Table 1). Composite reliability was over the standard value of 0.7 as claimed and the reliability verification of Cronbach's alpha exceeded the standard value of 0.7³⁰. Alpha AVE was over the standard value of 0.7 as claimed by^{31,32}, and the factor loads of constructs were all over 0.7^{31,32}, which is the standard value of verification.

Analysis of assessment validity revealed the lowest value of the square root of AVE was higher than the greatest correlation coefficient (0.634), show that Table 2.

4.3 Results of Hypotheses Verification

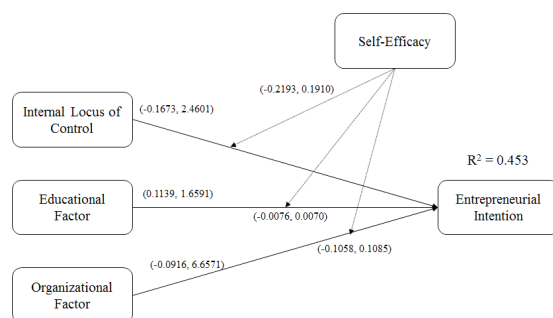
The hypothesis verification results are indicated in Figure 2 and Table 3. Analysis of R² shows that the effect on entrepreneurial intention is 45.3%.

Table 1. Discripminant validity analysis

	Factor loading	Composite reliability	Cronbach's α	AVE
Internal Locus of Control 1	0.7412	0.8759	0.8033	0.7032
Internal Locus of Control 2	0.8604			
Internal Locus of Control 3	0.9054			
Educational Factor 1	0.8619	0.9313	0.9024	0.7723
Educational Factor 2	0.8362			
Educational Factor 3	0.9169			
Educational Factor 4	0.898			
Entrepreneurial Intention 1	0.8924	0.9149	0.8602	0.7819
Entrepreneurial Intention 2	0.858			
Entrepreneurial Intention 3	0.9018			
Organizational Factor 1	0.7884	0.9299	0.9079	0.7689
Organizational Factor 2	0.8742			
Organizational Factor 3	0.9184			
Organizational Factor 4	0.9198			
Self-Efficacy 1	0.8036	0.8763	0.8114	0.6403
Self-Efficacy 2	0.8593			
Self-Efficacy 3	0.704			
Self-Efficacy 4	0.8256			

Table 2. Correlation between latent variable

Construct	Internal Locus of Control	Educational Factor	Entrepreneurial Intention	Self-Efficacy	Organizational Factor
Internal Locus of Control (ILC)	0.839				
Educational Factor (EF)	0.084	0.879			
Entrepreneurial Intention (EI)	0.072	0.265	0.884		
Self-Efficacy (SE)	0.212	0.634	0.079	0.877	
Organizational Factor (OF)	0.378	0.439	0.466	0.256	0.800


Figure 2. Results of hypotheses.

Furthermore, as a result of hypothesis verification, hypothesis 1, which claims that locus of control positively affects entrepreneurial intention, is adopted, along with hypotheses 2 and 3 which claim that educational and organizational factors positively affect entrepreneurial intention.

However, the analysis of the moderating effect of self-efficacy against each factor revealed no such effect, so hypotheses 4-1, 4-2, and 4-3 were rejected. Self-efficacy, which greatly affects entrepreneurial intention and is

emphasized as important by many scholars, was revealed too have no moderating effect on internal locus of control, educational factors, and organizational factors.

Table 3. Hypotheses testing

Hypothesis		Path coefficient	t-value	Result
H1	ILC → EI	-0.1673	2.4601	Accepted
H2	EF → EI	0.1139	1.6591	Accepted
H3	OF → EI	-0.0916	6.6571	Accepted
H4-1	ILC * SE → EI	-0.2193	0.1910	Rejected
H4-2	EF*SE → EI	-0.0076	0.0070	Rejected
H4-3	OF*SE → EI	-0.1058	0.1085	Rejected

5. Conclusions

As a study on the influence on the entrepreneurial intention of pre-entrepreneurs, the present study positively analyzed the relationship between locus of control educational factors and organizational factors, and the mediating role of self-efficacy, by using self-efficacy as a moderating variable.

The analysis results are follows. First, when the locus of control is internal, the effect of the environment is low and as the subjects perceive as having control over their lives and destiny, it positive affects entrepreneurial intention. It shows that acting according to one's will factors importantly in entrepreneurship. Second, entrepreneurial education has a positive effect on entrepreneurial intention in terms of the research that it exerts influence by providing learning opportunities through various the technological aspect of entrepreneurship as well as various experiences. It shows that active interest and support for entrepreneurial education is desperately needed. Third, school support for entrepreneurship as an organizational factor can encourage students to actively respond to entrepreneurship in uncertain situations and help them overcome dangers. Entrepreneurship promotion centers and entrepreneurial financial support by universities play important roles in arousing the intention and passion for student entrepreneurship, and has a positive effect as indicated in existing studies. However, unlike preceding studies, self-efficacy failed as a moderating effect. The reason for such a result is the low number of samples.

Also, the study targeted pre-entrepreneurs, and considering that most responders were university students, future studies need to expand survey subjects and secure more samples. The limitations of the present study are as follows. The study limits subjects and samples to particular university students and generalizes this. Therefore, future studies need additional surveys for divers age groups, academic ability, and backgrounds in addition to university students and pre-entrepreneurs. Studies will subsequently lead to the relationship between intention and job type in regards to the entrepreneurial intention of university students who are conflicted in such a situation and, as an additional study on direction, to whether people with such intentions actually carry out entrepreneurship.

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