The mediating effect of learning competence between the entrepreneurship and export performance of international new ventures in global trade environment*

국제 통상환경에서 국제신벤처기업의 기업가정신, 수출성과 관계와 학습역량의 매개효과

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Contents

Abstract

This study examined the relationship between entrepreneurship, learning competence and the export performance of international new ventures that enterprises entering foreign markets immediately after starting their business in Korea, and the mediating effect of learning competence. A research framework was developed with two entrepreneurship factors(risk taking and innovativeness), learning competence factors, and export performance. Six hypotheses were proposed and tested on 115 samples using LISREL. Research findings suggest that the two entrepreneurship factors positively influenced learning competence. However, export performance was affected by only innovativeness. Also, the learning competence positively affected export performance. Learning competence was found to mediate between entrepreneurship and export performance.

Key Words : International New Ventures, Entrepreneurship, Learning competence, Export performance

Ⅰ. Introduction

As transportation and communication technology improve and since China has joined the WTO, international trade has increased steadily. In addition, the demand for trade facilitation is being increased worldwide. This environment is causing the rapid globalization of exporting enterprises. Oviatt and McDougall(1997) defined those enterprises entering foreign markets immediately after starting their business as international new ventures (INVs), which are also referred to as "born global(Knight and Cavusgil, 2004)" businesses.

Even though many analyses of INVs newly appeared after the 1980s, no appropriate theory has been discussed(Coviello and Jones, 2004). Accordingly, studies have been mostly limited to discovering the features of INVs, with such studies being categorized into two types: one is to examine the characteristics of such enterprises on the basis of CEO factors(Oviatt and McDougall, 1997), and the other is to examine their retained resources and capabilities as they correspond to business factors(Knight and Cavusgil, 2004).

CEO factors have been examined in terms of entrepreneurship in the field of international management(Acs et al., 2003). A variety of studies on entrepreneurship have focused in particular on INVs(Dimitrators et al., 2004), emphasizing the correlations between entrepreneurship and startups' rapid expansion into foreign markets. In addition, they have pointed out the importance of entrepreneurship in the progress of globalization. The characteristics of entrepreneurship were found to be innovativeness and risk taking(McDougall and Oviatt, 2000).

Studies analyzing the characteristics of retaining capability have particularly pointed out the importance of learning competence(Autio et al., 2000). Limits on resources and an unfamiliar market environment constitute hardships for INVs. These kinds of hardships can be overcome by quick adaptation to the local markets, but diverse types of knowledge are required in such situations concerning the changes in local markets. Accordingly, INVs need to create a continuous competitive advantage through reinforcement of learning competence(Kuemmerle, 2002).

A continuous competitive advantage requires a kind of steady innovation in products supplied to markets, for going through the process of innovation means a continual acceptance of the changing desires of local consumers. Consequently, the starting point of innovation is to understand the specialized preferences and desires of local consumers. Thus, if more information is

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needed about relationships with consumers, learning competence is an important feature of INVs(Rasmussen et al., 2001). Despite numerous analyses of these characteristics, there are not many empirical studies related to a learning competence to export performance(Yiu et al., 2007).

As this discussion has shown, therefore, previous studies of INVs mainly point out the characteristics of relevant enterprises and the background of their appearance. Currently, the INVs field empirical analysis with focusing on the learning competencies is needed. Thus this study will analyze the influence of entrepreneurship factors on learning competence. This analysis will be also carried out for a better understanding of the mediating effect of learning competence between entrepreneurship and performance. Furthermore, this study will go further in exploring the determinants of export performance by targeting INVs. This study and previous studies have differentiated because focusing on the analysis of learning competency in the INVs. Therefore, the purpose of this study will be to comprehensively review the role of learning competence through an analysis of the determinant factors governing INVs performance.

Ⅱ. Theories and Hypotheses

1. INVs and Entrepreneurship

Entrepreneurship that copes creatively with any risk in foreign markets has a positive effect on overcoming a lack of resources and experience in INVs and in targeting foreign markets(Oviatt and McDougall, 1997). Conquering a fear of unfamiliar environments and continuous innovation can positively influence an organizational culture and the performance of INVs, enabling the entire organization to focus on how to explore new opportunities. Existing studies on INVs, by way of example, have shown that the performance of an enterprise is determined by the personal character and capability of its entrepreneurs(Acs et al., 2003). Moreover, the entrepreneurship of the CEO is especially focused on creating a sustainable competitive advantage in the process of securing internal capabilities.

Studies on the nature of entrepreneurship have also pointed out risk taking and innovativeness as key characteristics(Jaworski and Kohli, 1993; Dimitratos et al., 2004). Risk taking means that a

person does not view uneasiness in an unfamiliar environment as a limit. That is, risk taking entrepreneurs are not likely to be very conscious of the risk of failure that accompanies any new challenge. Accordingly, CEOs with a propensity for risk taking feel relatively less the burden imposed by seeking new markets and opportunities, which, in particular, has a positive effect on INVs that expand to foreign markets shortly after startup(McNaughton, 2003).

Because new learning also needs resources, the decision to emphasize learning is also a risk for new enterprises. Accordingly, the decision to take risks at an early stage of new investment reveals the character of the developing organizational culture that chooses to emphasize learning-oriented activities. This kind of character focuses on confirming and satisfying consumers' potential desires and aims to cope actively with continuous change(Slater and Narver. 1995).

As a result, entrepreneurs' risk taking will minimize any fear of failure in the markets and will mean, instead, that they choose to focus on activities to overcome failure. Therefore, they will focus on the activity to remove the instability factors and solidify their position(Rasmussen et al., 2001; Moen, 2002). On the grounds of this discussion, the following hypothesis can be framed concerning the risk taking of entrepreneurs and learning competence of INVs.

Hypothesis 1: Risk taking of entrepreneurs will have a positive (+) effect on learning competence of INVs.

Risk taking can be manifested in various ways, depending on enterprises' environments. One meaning of risk taking involves a decision to invest even in an utterly unfamiliar situation; that is, peoples who have propensity of risk taking are willing to achieve their goals by borrowing financial resources, and they tend also to invest most of their retained resources in goal-directed activities(Dimitratos et al., 2004). Thus, risk taking can be said to be a tendency to drive the company's immersion in resources, even when entrepreneurs are aware of the diverse risks that enterprises may face in foreign markets. A propensity for risk taking in seeking for opportunity and profit enables entrepreneurs to cope aggressively with the two burdens of borrowing external resources and focusing on retaining existing resources. Some studies have pointed out that entrepreneurs with a high risk taking tendency have a good command of aggressive investment in order to achieve any goal they have set, even when they are anticipating a crisis from loss(Knight

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and Cavusgil, 2004). Considering the above argument, we can see that the propensity for risk taking has a positive effect on the performance of INVs when entering foreign markets because activities that tend toward utilizing internal resources to seek for new business opportunities and to construct the new organization have a positive effect on performance.

Risk taking is very meaningful in terms of resource commitment. Concerns inside an organization and the uncertainty of the external environment can cause difficulties in distributing limited resources. Since all enterprises have resource limits, it is strategically very important to distribute resources effectively in a timely fashion because in their early stages, enterprises that miss their chances are unlikely to have the opportunity to seize them again.

INVs also have their own resource limits; therefore, they experience similar problems. When INVs are expanding into foreign markets, they have difficulties in decision making about resource input because they need confidence that they are using their short supply of resources efficiently. However, sometimes taking the risk of aggressive resource input can create new profits(Dimitratos et al., 2004). On the basis of this argument, the following hypothesis is established for the risk taking and export performance of INVs.

Hypothesis 2: Risk taking of entrepreneurs will have a positive (+) effect on the export performance
of INVs.

Innovativeness, a key feature of entrepreneurship, refers to the continuous propensity to seek for a new perspective on markets and consumers. In other words, it means a conscious aspiration to reject a customary attitude and to seek for activities that will develop a new business or market. Innovative entrepreneurs reason that novelty offers opportunities(Cavusgil and Zou, 1994; Lumpkin and Dess, 2001), and innovation represents the will to exchange present security for future opportunity. Therefore, the stronger their innovative inclination, the more sensitive the reaction of the entrepreneurs to the market, which will, in turn, lead to an understanding of the necessity for competence in learning about the relationship between the characteristics of consumers and the essential meaning of innovativeness(Zhou et al., 2007).

By emphasizing learning competence through innovativeness, CEOs will acquire a better understanding of local consumers, which will be reflected in their products and services in terms

of a high degree of differentiation for greater competitiveness(Phan, 2004; Zhou et al., 2007). Otherwise, it is very difficult for them to make local consumers, who can be very capricious, aware of the differences in products. Accordingly, CEOs of INVs wish to react sensitively to consumers' desires in order to actualize any new opportunities; thus, they stress this kind of intention to their entire organization(Moen, 2002). Therefore, it can be assumed that CEOs' innovativeness will enhance learning competence as they seek better performance. At the same time, INVs need to stabilize themselves in local markets very quickly in order to avoid failure as foreign enterprises. Thus, it is essential that the characteristics of local consumers be understood very quickly. According to these arguments, we see that innovativeness is likely to enhance learning competence, which makes it possible to forecast the probability of change among consumers, and we can establish the following hypothesis.

> Hypothesis 3: Innovativeness of entrepreneurs will have a positive (+) effect on learning competence of INVs.

INVs tend to "go global" in a very short time and to retain the capability needed to support such a move(Oviatt and McDougall, 1997) because many INVs exist in niche markets or in knowledge-intensive industries (Autio et al., 2000). These kinds of markets differ from foreign markets because the latter are tied to the past, the culture, and geographical distance, and in such cases, suppliers and consumers come to develop a special relationship. For INVs, this relationship tends to center on new technology or the intensive features of special knowledge rather than on geography or cultural gaps. Consumers and suppliers develop domain-specific familiarity—that is, familiarity with specialized markets(Fan and Phan, 2007). Thus, INVs are affected by the features of these markets, which tend to be the same globally.

In these markets, it is very important to create a competitive advantage through continuous innovation since developing a special familiarity with consumers depends on the ability to offer the products and services consumers want. This familiarity is developed by any special relationship in which consumers come to be aware that INVs are different from their competitors.

Therefore, INVs must react very sensitively to the differentiation of new products and services, and consumers' continuous changes when they market locally. This type of innovative activity

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means that they have a strong will to improve the capability of their organizations. Incessant seeking for market opportunity is also a challenging activity that represents the ability to keep scrupulous track of consumers' inclinations(Autio et al., 2000).

INVs that hurriedly enter foreign markets must use technical skills to be competitive and to understand and satisfy consumers' desires. In addition, continuous innovation is much more important to high-tech industries than to others since demand for their main products experiences great fluctuation(Knight and Cavusgil, 2004). Consumers' desires change rapidly, so the technical skills and products that will be suitable for local markets change rapidly also. At the same time, a weak point of INVs is their practical limit of resources. CEOs of INVs cope with this dilemma by increasing profitability through encouraging innovative thought and activity that understands and responds to consumers' desires(Rialp et al., 2005). According to this argument, the following hypothesis is established.

Hypothesis 4 : Innovativeness of entrepreneurs will have a positive (+) effect on export performance of INVs.

2. The learning competence and export performance of INVs

The arguments concerning learning competence are focused on an appreciation of the essence of learning competence as an abstract concept or as a cultural asset of an organization. Learning is a series of processes for developing a consistent inference through repeated experiences. Therefore, it is the ability to infer present and future results through any past experience.. Furthermore, when any repeated experiences from learning are internalized as knowledge, they become the foundation for interpreting and determining any complex situation(Sinkula et al., 1997; Farrell and Oczkowksi, 2002). Learning in an organization is shown to be a collective activity. So the development of learning competence presupposes continuous repetition of training and investment. The fact that it presupposes the repeat of training means that an atmosphere must be developed where an organizational culture of learning is sustainable.

Learning competence, in particular, has a positive effect on INVs that attempt rapid globalization. For example, Autio et al.(2000) maintained that learning competence is the cause of

outcome creation for two reasons. First, he pointed out that the flexibility of the knowledge developed through learning competence helps to combine it with fixed assets, such as local production factors, even at a low cost. Thus, outcomes are achieved through reducing the burden from using the external resources of INVs, which are limited to their resources as foreign enterprises. Second, he explained that those enterprises that aggressively develop learning competence will have more opportunities to enter local markets than those relying on only their internal fixed assets because the knowledge acquired through learning competence will most likely consist of information on foreign local markets. Moreover, he maintained that this kind of opportunity naturally helps INVs to create a competitive advantage in local markets and to lower the barriers that they face as foreign enterprises.

Thus, we can see that lack of resources for entering foreign markets can be overcome by using local information. Accordingly, INVs will emphasize higher learning competence in order to acquire local information, which will have a positive effect on the performance of those enterprises(Khavul et al., 2010). With this argument, the following hypothesis is established.

Hypothesis 5: Learning competence of INVs will have a positive (+) effect on their export performance.

3. Entrepreneurship, learning competence, and the export performance of INVs

A higher degree of learning competence improves the probability of connecting to available external assets(Farrell and Oczkowksi, 2002). Learning competence is a kind of cultural asset since it influences the flow of business invisibly and is developed in the entire enterprise. If an enterprise is small, however, like an INV, it cannot afford the leeway to examine the relationship between organizational culture and outcome. Nevertheless, entrepreneurs with a strong propensity for innovation will try to enhance learning competence even in this situation, for they are very sensitive to organizational culture as well as to development of new products, both of which have a direct effect on their outcome(Khavul et al., 2010). They are aware that innovation is not achieved only as part of unit inside enterprises(Rasmussen et al., 2001; Luo and Tung, 2007).

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Hence, any entrepreneur with an innovative propensity will try to enhance learning competence in order to control the culture of the entire organization and to use it for a positive effect on performance(Autio et al., 2000). When learning competence plays the role of mediating between the entrepreneur's innovativeness and organizational performance, it will improve performance as part of the organization culture.

Risk taking may play the same role because uncertainty concerning whether or not resources will enhance invisible learning competence should be overcome. Overcoming uncertainty has an effect on any aggressive activity that creates performance, and thus an entrepreneur's risk taking influences both concrete activity and organizational culture. The aggressiveness needed to put resources into activities for enhancing learning competence will eventually determine the meaning of the activities by means of outcomes.

Therefore, learning competence will reflect the aggressiveness of risk taking for an ultimate positive effect on performance. Learning competence is influenced by the entrepreneur's will rather than by the voluntary activities of employees, which enables organizational activity to have a favorable effect on performance. It also will play the role of linking innovativeness and risk taking to performance. With this argument, the following hypothesis can be established.

Hypothesis 6 : Learning competence of INVs will have the positive (+) effect of intermediation between entrepreneurship and export performance.

Ⅲ. Research Method

Existing studies have defined INVs by the time spent for expansion into foreign markets after the startup with the criterion of entering foreign markets within 5 years(Rialp et al., 2005). Another way to define INVs is to use the ratio of sales in foreign countries to total sales. For example, Moen(2002) determined the ratio to be 25%. To define INVs, this study applied both criteria—the period of export activity and the ratio of sales abroad.

Risk taking is determined by the organization's tendency of being driven by entrepreneurs to make decisions that show a willingness to bear adverse consequences from any dangerous

conditions resulting from business abroad(Jaworski and Kohli, 1993; Harveston et al., 2000).

Innovativeness is defined as aggressiveness of activity by the CEO in seeking for new opportunities in foreign markets(McDougall and Oviatt, 2000). This capability is needed for overcoming the changes in a dynamic external environment and achieving good performance in foreign markets.

Learning competence is defined as the level of the learning value of an organization—that is, what respondents regard as an organizational system for assigning learning value to daily organizational activities(Sinkula et al., 1997; Farrell and Oczkowksi, 2002).

This study adopted the subjective response method for measuring export performance and employed mainly items suggested by the studies of Cavusgil and Zou(1994), Knight and Cavusgil(2004). <Table 1> shows the details.

<Table 1> Definition of Measurement Variables

Latent Factor	Measurement Items	Previous Studies
Risk taking	- Taking financial risk for high performance - Resolving initial investment with external borrowings - Giving priority to projects that further high performance - Performing innovative projects with a high failure probability	Jaworski and Kohli(1993); McDougall and Oviatt(2000); Harveston et al.(2000)
Innovativeness	- Emphasizing innovation for the development of new products and services - Seeking organizational innovation with new management methods - Seeking innovation for attacking markets in creative ways - Developing the innovative resources needed to achieve goals	Jaworski and Kohli(1993); McDougall and Oviatt(2000); Harveston et al.(2000);
Learning competence	- Learning new knowledge and technology are considered the resources for competitive advantage. - Employees regard learning as an investment. - Learning is thought to be important for survival of enterprises. - Advancing through learning is thought to be important.	Sinkula et al.(1997); Farrell and Oczkowksi(2002)
Export Performance	- Satisfaction with market share from the past 3 years as more than the expected value - Satisfaction with net sales growth rate from the past 3 years as more than the expected value - Satisfaction with pretax income from the past 3 years as more than the expected value - Satisfaction with sales growth from comparison with that of competitors	Cavusgil and Zou(1994); Lumpkin and Dess(2001); Knight and Cavusgil(2004)

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The samples for empirical analysis in this study were drawn from enterprises involved in exporting in March 2010. The sample enterprises are high-tech and knowledge-intensive industries. A total of 805 enterprises were randomly selected in August 2010 as the sample from a list of 2,131 export enterprises registered with the Korea Chamber of Commerce and Industry as of March 2010. The final sample consisted of 726 export enterprises because 79 were closed, taken over, or had their addresses changed.

With these 726 enterprises for samples, research was conducted by means of direct questioning through e-mail and phone interviews from August 2010 to October 2010. Because some of the questions for this study were directly related to export activity and thus require knowledge of the overall export activity of the relevant enterprises, board members or those directly in charge of exporting, such as supervisors of export duties, were selected as responders. After the research, the number of questionnaires collected was 285(39.3%). A total of 273 sheets(37.6%) remained for a sample, as 12 of the sheets were discarded for lack of comments. After those remaining were checked against the definition of INVs(entering foreign markets within 5 years and the ratio of sales in foreign market to total sales is over than 25%) the final sample was 115(15.8%).

The LISREL Structural Equation Modeling was used for empirical analysis. LISREL's analysis structure uses covariance-based estimation(Jöreskog and Sörbom, 1996). It may also be regarded as a pattern that combines regression analysis and factor analysis for examining causal relationships. If the existing regression analysis deals with only the direct relationship between independent variables and dependent variables, the covariance structure model has the advantage of measuring the indirect effect through parameters. In addition, because of the analysis based on covariance, it is very sensitive to errors in the path-coefficient with regard to the regression coefficient—that is, structural equation modeling. As a result, the overall model fit becomes very important.

The merit of a LISREL analysis is that the overfitting effect becomes smaller as the number of samples increases. Accordingly, even though the number of samples may increase, analysis results are still quite strictly drawn. In addition, since the various indices of model fit are offered, it is very easy to confirm the fit of the overall theoretical model(Jöreskog and Sörbom, 1996). Since this study verifies the theoretical model according to existing studies, LISREL analysis, which strictly discriminates model fit and verifies the path-coefficient, is desirable.

IV. Empirical Analysis

1. Reliability and validity

The LISREL analysis process is divided into the verification of the measurement model and the structural model. The former is possible through confirmatory factor analysis (CFA), and the latter can be confirmed by path analysis. A sample of more than 200 is recommended for the analysis, and there should normally be more than 3, but at least 2, measuring questions for the latent factors(Jöreskog and Sörbom, 1996). As the model for this study satisfies these conditions, the analysis proceeded in the order already mentioned.

The analysis of reliability and validity is largely divided into two parts. First, the discriminant validity is analyzed after the analysis of reliability and convergent validity. For reliability, the value of Cronbach's α is reviewed to verify the internal consistency method, and then the value of composite reliability showing internal consistency is reviewed to verify the construct reliability of the measuring tools when the recommended threshold is more than 0.7.

After the verification of reliability, convergent validity is reviewed. Hair et al.(1998) suggest that, for the analysis of convergent validity, factor loading, t-value, construct reliability, and average variance extracted should be identified. This study also based its analysis on these when for the recommended thresholds, factor loading, t-value, construct reliability and average variance extracted were more than 0.5, 1.965, 0.80 and 0.50 respectively(Fornell and Larcker, 1981). Table 2 shows the result of analyzing the reliability and convergent validity suggested by the results of the confirmatory factor analysis with criteria already presented.

When the reliability of the CFA model is reviewed, the model fit of the LISREL study-model is generally confirmed with the root mean square error of approximation (RMSEA) < 0.80, goodness of fit index (GFI) > 0.90, adjusted goodness of fit index (AGFI) > 0.80, non-normed fit index (NNFI) > 0.90, comparative fit index (CFI) > 0.90, and standard root mean square residual (SRMSR) < 0.10 (Baumgartner and Homburg, 1996). The recommended thresholds are specified in <Table 2>.

Since the result of the model fit for the CFA in this study satisfied the recommended thresholds as seen in <Table 2>, the model fit for the confirmatory factor analysis is secured.

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〈Table 2〉 Result of the Confirmatory Factor Analysis

Path	β	S.E	t-value	B	AVE	CR	Cronbach's α
RkT1- > RkT	1.007	0.091	11.110	0.878			
RkT2- > RkT	0.987	0.102	9.662	0.802	0.670	0.841	0.937
RkT3- > RkT	0.984	0.110	8.917	0.759			
RkT4- > RkT	1.026	0.100	10.239	0.832			
InV1- > InV	1.075	0.087	12.334	0.924			
InV2- > InV	1.086	0.082	13.179	0.959	0.777	0.913	0.858
InV3- > InV	1.009	0.097	10.395	0.833			
InV4- > InV	0.879	0.090	9.775	0.800			
LrC1- > LrC	1.066	0.094	11.343	0.878			
LrC2- > LrC	1.086	0.093	11.621	0.892	0.813	0.921	0.853
LrC3- > LrC	1.146	0.093	12.314	0.920			
LrC4- > LrC	1.108	0.091	12.179	0.917			
ExP1- > ExP	1.076	0.089	12.051	0.911			
ExP2- > ExP	1.272	0.105	12.134	0.915	0.838	0.927	0.716
ExP3- > ExP	1.163	0.096	12.073	0.912			
ExP4- > ExP	1.157	0.094	12.312	0.923			

Fit Index : df = 94, x2=143.984(P=0.00),RMSEA=0.061, NFI=0.975, NNFI=0.989, CFI=0.991, SRMR=0.038, GFI=0.864, AGFI=0.803

The results of the analysis in <Table 2> show that all the values of factor loadings, average variance extracted, and constructive reliability are more than the recommended thresholds. It was confirmed that the internal consistency coefficient posed no problem because it was more than 0.8. Accordingly, the reliability and convergent validity of the measurement questions were secured for this study. After confirmation of the reliability and convergent validity, discriminant validity was analyzed. The analysis of discriminant validity, which was suggested by Fornell and Larcker(1981), is to compare average variance extracted with correlation coefficient squares among latent factors, and discriminant validity is said to be secured only if the value of the average variance extracted is bigger than the correlation coefficient square of each latent factor.

The analysis showed that the AVE of the four latent factors used for this study was bigger than the correlation coefficient square. The result is shown in <Table 3>.

〈Table 3〉 Result of the Discriminant Validity Analysis

	RkT	InV	LrC	ExP
RkT	0.670			
InV	0.646	0.777		
LrC	0.640	0.619	0.813	
ExP	0.586	0.692	0.704	0.838

2. Empirical Findings

For hypothesis testing, a path analysis was carried out according to the structural equation model. The LISREL path analysis suggests using path coefficient value, standard error, and t-value for hypothesis testing. Before examining the result of path analysis for hypothesis testing, the model fit should be reviewed. The fit index used for this is the same as that applied to the confirmatory factor analysis. The model for this study is the analysis of the relationship among all of the 4 latent factors; 16 variables were used, and 6 hypotheses were established. The fit index is shown in <Table 4>. All the values of model fit index satisfy the recommended standard.

After the confirmation of model fit, the hypothesis testing continued with an examination of the path analysis result. At hypothesis testing, one should look at whether there is any outlier of standardized coefficients. The standardized path coefficient is the same as the standardized regression coefficient of regression analysis. Thus, when this value is very near to or over 1, it is determined as an outlier. <Table 4> shows the standardized path coefficients in parentheses below the path coefficients. Unless there is a problem with the standardized coefficient, the t-value from the path coefficient divided by error is to be confirmed. The t-value for securing statistical significance is that it be more than 1.96 ($p < 0.5$). <Table 5> shows the result of hypothesis testing based on the results of the path analysis in these processes.

〈Table 4〉 Path Analysis

H	LV	LrC			ExP			Support
		β	S.E	t-value	β	S.E	t-value	
H1	RkT	0.669 (0.664)	0.136	4.911***				Yes
H2	RkT				0.046 (0.046)	0.136	0.338	No
H3	InV	0.252 (0.250)	0.126	1.991**				Yes
H4	InV				0.344 (0.346)	0.099	3.477***	Yes
H5	LrC				0.560 (0.568)	0.128	4.382**	Yes

Fit Index : df=94, x^2=141.620 (P=0.00), RMSEA=0.069, NFI=0.973, NNFI=0.986, CFI=0.989, SRMSR=0.030, GFI=0.855, AGFI=0.801, Standardization path coefficient are described in the parenthesis, **p<0.05, ***p<0.01

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The results of the path analysis showed that risk taking had the path coefficient as 0.669(t=4.911, p<0.01) for learning competence. Since the standardized coefficient is an outlier, there is no problem with statistical significance. Accordingly, hypothesis 1 was adopted: risk taking has a positive effect on the learning competence of INVs. However, since the path coefficient in the correlation between risk taking and export performance is 0.046(t=0.338, p>0.05), it is not statistically significant. Therefore, hypothesis 2—that risk taking will have the effect of improving the learning competence of INVs—was dismissed.

Hypothesis 3 on entrepreneurs' innovativeness and learning competence was found to have a path coefficient of 0.252(t=1.991, p<0.05). Because the result is statistically significant, hypothesis 3 was adopted. Hypothesis 4 on innovativeness and export performance had a path coefficient of 0.344(t=3.477, p<0.10). There is no problem with the standardized coefficient; therefore, the path is statistically significant, and hypothesis 4 was adopted.

Next, the relation between learning competence and export performance had a path coefficient of 0.560(t=4.382, p<0.01), so it is statistically significant. Therefore, hypothesis 5 was adopted: learning competence will have a positive effect on the export performance of INVs.

One purpose of this study was to analyze the mediating effect of learning competence on the path between entrepreneurship in INVs and export performance. Thus, with learning competence set as a variable on the path, the mediating effect was analyzed. The method of verifying the mediating effect is based on the significant relationship among antecedents, mediating factors, and dependent factors.

In general, LISREL analysis is reviewed with effect decomposition(Jöreskog and Sörbom, 1996) when it is determined that there is an indirect mediation effect if the relations among antecedents, mediating factors, and dependent factors are significant and if antecedents have a direct effect on dependent factors. On the other hand, if antecedents have no direct effect on dependent factors when there is significance among the three factors, there is considered to be a complete mediation effect(Jöreskog and Sörbom, 1996). Based on these above arguments, <Table 5> demonstrates the results of the effect decomposition in this study model.

The result of the analysis shows that risk taking has a direct effect of 0.046(t=0.338, p>0.05) on learning competence. The indirect effect through learning competence has a path coefficient of 0.375(t=3.325, p<0.01). The sum of the two, the total effect, is 0.420(t=3.480, p<0.01). Whereas

the total effect and indirect effect are statistically significant, the direct effect is not. Therefore, it is demonstrated that learning competence mediates completely between risk taking and export performance.

<Table 5> Results of the Mediated Effect Analysis

H	Path	Total Effect			Direct Effect			Indirect Effect			Effect
		β	S.E	t	β	S.E	t	β	S.E	t	
	RkT -> LrC	0.669 (0.664)	0.136	4.911***	0.669 (0.664)	0.136	4.911***				
H6	RkT -> ExP	0.420 (0.423)	0.121	3.480***	0.046 (0.046)	0.136	0.338	0.375 (0.377)	0.113	3.325***	Full Mediated
	InV -> LrC	0.252 (0.250)	0.126	1.991**	0.252 (0.250)	0.126	1.991**				
H6	InV -> ExP	0.485 (0.487)	0.120	4.027***	0.344 (0.346)	0.099	3.477***	0.141 (0.142)	0.076	1.853	N/A
	LrC -> ExP	0.560 (0.568)	0.128	4.382**	0.560 (0.568)	0.128	4.382**				

Fit Index : df=94, x^2=141.620(P=0.00), RMSEA=0.069, NFI=0.973, NNFI=0.986, CFI=0.989, SRMSR=0.030, GFI=0.855, AGFI=0.801, Standardization path coefficient are described in the parenthesis **p<0.05, ***p<0.01

The mediating effect of an entrepreneur's innovativeness and learning competence for export performance was examined, which indicates that the total effect has a path coefficient of 0.485(t=4.027, p<0.01), which is statistically significant. The direct effect of learning competence on export performance has a path coefficient of 0.344(t=3.477, p<0.10), which is a significant result. However, the indirect effect of learning competence on export performance has a path coefficient of 0.141(t=1.853, p>0.05), which was not statistically significant. As a result, learning competence cannot be considered to mediate between an entrepreneurs' innovativeness and the export performance of INVs. Thus, along with the previous results, hypothesis 6 is partly supported.

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V. Conclusion

This study, using INVs as subjects, examined the relationship between entrepreneurs, learning competence and the businesses' export performance. The purpose of this study was to analyze the determinants for export performance targeting INVs. In this study, learning competence was analyzed as an antecedent for export performance. And the mediating effect of learning competence between entrepreneurship and export performance was also analyzed.

First of all, it was confirmed that in INVs, the innovativeness of an entrepreneur and the learning competence of an organization have a significant positive (+) effect on export performance, but risk taking does not. In the relation between learning competence and entrepreneurship, both risk taking and innovativeness were seen to have a significant positive (+) effect on learning competence. In turn, learning competence was found to have a significant positive (+) mediating effect on both entrepreneurship and export performance. With this result from the analysis, the following can be pointed out.

Entrepreneurship is expressed as a balance between the propensity for risk taking and innovative activity. Entrepreneurs with a strong inclination for these are more agile in recognizing new chances in foreign markets and more aggressive in connecting them to performance(Knight and Cavusgil, 2004). Accordingly, as the results of this study show, they accept the risks caused by the use of resources to construct learning competence. Therefore, this study suggests that CEOs of INVs should enhance their learning competence through their propensity for risk taking. It also implies the necessity of investing resources in learning competence as an aggressive means of overcoming the uncertainty and fear of failure in local markets(Harveston et al., 2000).

The theoretical implications of this study can be seen in the empirical analysis by applying a relationship between learning competence and entrepreneurship to INVs. From the viewpoint of a resource base, such intangible assets as the characteristics of entrepreneurs and learning competence are all determined to be antecedents to performance in many studies. However, studies need to detail the path from entrepreneurship to export performance for examination. This study makes it clear that the role of entrepreneurship in INVs also has an effect on learning competence, which offers hints in relation to existing studies that have attempted to apply the relationship between entrepreneurship and learning competence to INVs.

Some existing studies(McDougall and Oviatt, 2000; Knight and Cavusgil, 2004; Avlonitis and Salavou, 2007) have pointed out that the relation between entrepreneurship and export performance is significant in that the characteristics required for risk taking and innovativeness are helpful for the improvement of performance. However, the result of this study has made it very clear that risk taking does not have any direct effect on improving export performance, demonstrating that risk taking in itself is not an antecedent for performance improvement. A common mistaken belief about entrepreneurship is that aggressive risk taking activity will result in outstanding performance (Bhidé, 2000). The results of this study demonstrate that the CEOs of Korean INVs have to be careful not to show an excessive or unconditional propensity for taking risks.

The difference in entrepreneurship between risk taking and innovativeness shows itself more clearly in the mediating effect of learning competence, as the analysis results show that learning competence has a complete mediating effect on risk taking. In contrast, innovativeness does not influence export performance through learning competence; rather, it has a direct effect on learning competence and export performance, which means that even though risk taking is not an antecedent to improving export performance directly, it can improve performance through learning competence if resources are aggressively invested in organizational learning. These results suggest that on the working level, entrepreneurs need to focus on enhancing the learning competence of an organization that is required for overcoming uncertainty rather than take the risk of continuing with those activities that directly influence export.

The study has a few limitations. First, it could not consider more determinants of performance because it limited the determinant for INV performance to entrepreneurship. Any future studies will need to consider more diverse antecedents.

In addition, this study limited itself to looking at learning competence as the single mediating factor connecting entrepreneurship with export performance. Thus, a limitation is that it was not able to examine a greater number of mediating factors. Any future studies need to establish and analyze diverse mediating factors in addition to learning competence.

For this study, the external environmental factors were not considered. The ability of any domestic enterprise to enter foreign markets is influenced by the probability of potential growth as well as hostile environment and technical change. Any future studies need to consider more diverse environmental variables because the influence of external factors cannot be ignored, even though enterprises' internal factors should be the center of analysis according to resource-based theory.

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국문초록

국제 통상환경에서 국제신벤처기업의 기업가정신, 수출성과 관계와 학습역량의 매개효과

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  본 연구는 글로벌 통상환경에서 빠르게 외국시장에 진출하는 국제신벤처기업의 기업가정신과 수출성과의 관계와 학습역량의 매개효과를 분석하였다. 국제신벤처기업은 국내 시장에서의 경험과 충분한 자원을 보유하지 못했음에도 적극적으로 외국시장을 개척하고 수출활동을 전개하는 기업이다. 기존 연구에서는 해당 기업의 출현 원인으로 창업자나 경영진의 기업가정신 그리고 동 기업이 보유한 특유자원에 주목하였다. 따라서 특유자원을 활용하는 역량관점의 연구들이 있었다. 본 연구는 이 중에서 학습역량의 역할에 주목하였다. 학습역량은 기업의 무형자원으로 기업가정신이라는 심리적 경향성을 조직 문화에 반영할 수 있는 수단이다. 이로써 외국시장에서 필요한 정보를 빠르게 학습하고 조직 안으로 체화하며, 시장에 필요한 대응방안을 만들 수 있다. 이처럼 국제신벤처기업의 활동에 영향을 주는 주요 요인과 수출성과의 관계를 실증분석하려 국내 수출기업 중 국제신벤처기업의 기준을 충족하는 115개 표본을 대상으로 조사를 진행하였다. 학습역량의 매개효과를 포함해서 6개의 가설을 설정하였으며, LISREL을 사용해서 가설검정을 진행하였다. 분석 결과 기업가정신 중 혁신성향은 학습역량과 수출성과에 모두 긍정적 영향을 주었다. 반면 위험감수성향은 학습역량에는 긍정적 영향을 주었지만 수출성과에는 유의한 결과를 보여주지 못했다. 또한, 학습역량은 수출성과에 긍정적 영향을 주는 것으로 나타났다. 매개효과 분석에서는 학습역량이 기업가정신 중 혁신성향과 수출성과 사이에서는 부분매개효과를 위험감수성향과 수출성과 사이에서는 완전매개효과를 보여주었다. 본 결과로 학습역량의 매개효과를 확인하였으며, 앞으로 국제신벤처기업을 대상으로 학습역량의 역할을 탐구하려는 연구에 이론적 시사점을 제시하였다. 위험감수성향과 수출성과의 관계와 학습역량의 매개효과에서는 충분한 학습역량 구축이 위험감수성향의 역할에 선행한다는 실무적 시사점을 제시하였다.

주제어 : 국제신벤처기업, 기업가정신, 학습역량, 수출성과

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