## A Comparison Study of Individual Entrepreneurial Orientation: Among Korean, Chinese and Japanese University Students\*

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#### Abstract

This exploratory study focuses on ascertaining the cross-cultural differences in the perception of entrepreneurial orientation among university students in Korea, China, and Japan. Total 670 university students from the three culturally diverse environments were administered questionnaires designed to determine the differences in individual entrepreneurship orientation(IEO). Data was analyzed using IBM SPSS Statistics 23 version. ANOVA was used to test the established hypotheses. Statistically significant differences were found among the three groups of university students in IEO. China displayed the highest level of IEO followed by Korea and then Japan. Japan is less likely to be committed to entrepreneurial activity than Korea and China. The finding implies the sociocultural effect may come into play when young people forms positive attitude on entrepreneurship, that is identical to the arguments of prior studies. This study, however, has contributed to the literature by adding empirical evidence first time on different perceptions of IEO sub-scales by Korean, Chinese and Japanese university students. Theoretical and practical implication have been presented, where the importance of nurturing pro-activeness was stressed for Korean university students, most of all.

Keyword: Individual Entrepreneurial Orientation, Innovativeness, Pro-activeness, Risk-taking, Korean university students, Chinese university students, Japanese university students

#### 1. Introduction

Understanding of what drive people to become an entrepreneur is crucial when developing new entrepreneurs, as entrepreneurship is a complicated process in which entrepreneurial cognition and action take place together(Hisrich et al., 2013). In this regard, the role of university is demanded higher than ever towards fostering entrepreneurship of students. Entrepreneurship education helps students promote entrepreneurial skills as well as develop entrepreneurial competencies such as innovativeness and risk-taking(Ferreira et al., 2012). Meanwhile, personal value, attitude and belief are considered as the key elements which influence entrepreneurial behavior(Krueger & Brazeal, 1994). In Particular, belief is influenced by both national culture and social context.

Cultural beliefs about entrepreneurship influence entrepreneurial activity of a society(Shapero & Sokol, 1982). By the same token, entrepreneurial activity varies from society to society due to cultural values(Scully, 1988; Wittman, 1989). Cultural values are regarded as a post-hoc explanation in validating how cultures worked differently for the outcome(Lee & Rogan, 1991). Living in different places of the world, university students have grown up in different socio-cultural, political and economic, and technological circumstances. University students around the globe in modern age, however, get more inter-connected and more closer to foreign cultures and trends than ever, thanks to rapid growth of information and communication technology. At the same time, trade increase, economic development, and technological advances in communication become a major driver of cultural change(Hofstede et al, 2005).

Several studies have focused on how circumstances influence entrepreneurial disposition and interest of university students(Louw et al., 2003), and how important entrepreneurship education is(Aronsson, 2004). However, understanding students' issues across cultures is same important as other factors affecting entrepreneurship of university students(Pruett et al., 2009).

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Arenius & Minniti(2005) also argued that further study is needed, although the microeconomic and cultural environment of certain countries tend to courage entrepreneurial activity, whereas others discourage it. However, few studies have attempted to understand how cross-cultural characteristics influence the university students' perception about entrepreneurship that can predispose them to take entrepreneurial career pathway(Gasse & Tremblay, 2011). Among other factors, the concept of individual entrepreneurial orientation(IEO) of university students are not fully scrutinized(Koe, 2016). The purpose of this study is to investigate entrepreneurial orientation of Korean, Chinese and Japanese university students, and then compare the level of entrepreneurial orientation one another. Not only does this study enable us to identify entrepreneurial orientation profile of university students of each country, it also allows us to highlight the cultural dimension including its potential impact on their entrepreneurial activity.

# I. Literature Review andHypothesis Development

## 2.1 Culture and Entrepreneurial Activity in the region

Different cultural backgrounds influence different cognitions of people(Hofstede, 2001). Culture is defined as a set of shared values and beliefs which determine socially acceptable behaviors(Hofstede, 1980). So, there is a high possibility that cultural values would determine the extent to which a society accepts entrepreneurial behaviors to be desirable(Hayton et al., 2002). Pruett et al.(2009) delineated that cultural differences used to be treated as dominant causal agent explaining entrepreneurial behavior, but the causality is not universally accepted. Interestingly, Swierczek & Quang(2004) pointed East Asian cultural cluster have a low entrepreneurial culture.

Korea, China and Japan belong to typical east Asian countries which embrace higher cultural values in interpersonal harmony, traditional conservatism, and relational hierarchy than the rest of the world(Xu, 1998). However, although Korea and China are usually located within the same cultural cluster, each country has its own cultural nuances(Hofstede, 2001). Likewise, the culture in China and Japan are different from that of the United States and other Western world(Hofstede et al., 2005). Korea, China and Japan somewhat differ from one another in terms of economic development and socio-cultural history. So, there are possible differences in entrepreneurial context among these countries (Kawakami et al., 2012). GEM(2020) presents the distinct differences in entrepreneurial activities among Korea, China and Japan. For instance, more than 6 out of 10 Chinese adults responded they knew someone who has started a business in the past two year, while Korea and Japan appeared to be less than 4 and 2 each in the same survey item. Also, it shows that more than 70% of Chinese and 40% of Korean perceived 'there are good opportunities to start a new business in my area (% of adults), while only 10% of Japanese perceived the opportunities. Another point of GEM report is Korea has less fear of venture failure than Japan and China(Korea 7%, China 45%, Japan 44%). 'Total Early Stage of Entrepreneurship'(TEA) displays also the advancement of Korea, compared to both China and Japan(Korea 15%, China 8%, Japan 5.5%). GEM(2020) displays distinct level of entrepreneurial activity among Korea, China and Japan, ss depicted above.

Adopting entrepreneurship as a key driver of economy development and an effective way to lower unemployment pressure of university students, Korean and the Chinese government has made great efforts to support entrepreneurial behaviors of university students(Wu & Wu, 2008; Yang, 2019). In Japan, however, despite of Government's effort to support fostering entrepreneurship, entrepreneurial activity among young people is still quite low(Futagami & Helms, 2017). In the similar vein, Moon & Yang(2018) found that entrepreneurship of Japanese university students is far retarded, compared to the mainstream of global trend.

#### 2.2 Individual Entrepreneurial Orientation

Entrepreneurial orientation(EO) has emerged as a major construct in entrepreneurship literature and holds a central place in the research area of entrepreneurship(Morris & Kuratko, 2002). EO is regarded as a cultural construct(Knight, 2003), which influences the performances of entrepreneurial firm such as profitability, growth and product innovation(Avlonitis & Salavou, 2007; Gupta & Gupta, 2015; Koe, 2013). Miller(1983) suggested EO first time which comprised of three dimensions such as innovativeness, pro-activeness and risk-taking. George & Marino(2011) stressed that these dimensions represent the concept of EO best. Likewise, Covin & Slevin(1989) used the same dimensions to explain entrepreneurial strategic posture. Later, Lumpkin & Dess(1996) introduced a new concept of EO that consisted of five dimensions by adding two more dimensions; autonomy and competitive aggressiveness. This notion was supported by Pearce et al(2010) who suggested that EO is conceptualized as a set of different but related behaviors like innovativeness, risk-taking, pro-activeness, competitive aggressiveness, and autonomy. Meanwhile, risk-taking, innovativeness, and pro-activeness are widely researched in psychology (Palmer et al., 2019).

Lately, researchers begin to discuss about the applicability of EO as an individual level construct(Covin & Lumpkin, 2011; Frese & Gielnik, 2014; Robinson & Stubberud, 2014). Such discussion allows researchers to study EO from a new perspective. Because understanding individual EO could be valuable to potential entrepreneurs and venture investors who are supposed to assess business proposals and entrepreneur's personal characteristic. Even though EO and attributes have been assessed in several research for university students(Raposo et al., 2008; Levenburg & Schwarz, 2008), there has been no general agreement as to the appraisal as well as the validation on the IEO. It was Bolton & Lane(2012) who attempted to develop an universal scale to measure Individual EO, named IEO, based on the EO construct and dimensions developed by Lumpkin & Dess(1996). Through an empirical study about entrepreneurship of university students, Bolton & Lane(2012) validated new IEO dimensions which are made of risk-taking, pro-activeness and innovativeness. This finding was supported by Koe(2016) who suggested that EO could be measured at individual level with these three IEO dimensions. Thus, this present study adopts the IEO construct with the three dimensions suggested by Bolton & Lane(2012) and Koe(2016). In ealier days, Rauch et al(2009) conceptualized the three dimensions of EO as followings; 'Innovativeness: Predisposition to creativity and experimentation through introduction of new products and services as well as technological leadership via R&D in new processes, Proactiveness: An opportunity-seeking, forward-looking perspective characterized by new products and services ahead of competition and acting in anticipation of future demand, Risk-taking: Taking bold action into the unknown, borrowing significant resources to ventures in uncertain environments'.

To sum up, EO can be treated as a cultural construct(Knight, 2003), and it is also applicable to individual level. Given the fact that entrepreneurship is associated with socio-cultural aspects, and the different level of entrepreneurial activities in Korea, China and Japan(GEM, 2020), it is arguable that IEO of university students in these three countries would be also different one another. Therefore, we establish a hypotheses as follows;

- H1: IEO(innovativeness, pro-activeness and risk-taking) of Korean, Chinese and Japanese university students are different from one another.
- H1-1: Innovativeness of Korean, Chinese and Japanese

university students are different from one another.

- H1-2: Pro-activeness of Korean, Chinese and Japanese university are different from one another.
- H1-3: Risk-taking of Korean, Chinese and Japanese university are different from one another.

#### 2.3 Operational Definition and Measure

This study followed a three-dimension construct of IEO comprised of innovativeness, pro-activeness and risk-taking based on the previous studies(Lumpkin & Dess, 1996; Rauch et al., 2009; Bolton & Lane, 2012; Koe, 2016; Yang, 2020).

Innovativeness: Innovativeness is defined in this study as predisposition to creativity and experimentation through introduction of new products and services as well as technological leadership via R&D in new processes. The measuring scales were developed based on the previous studies that include 'I'm willing to accept change', 'R&D activity can protect a firm even facing recession', 'I tend to be more creative when solving a difficult problem' etc.

Pro-activeness: This construct is known as opportunity- seeking, forward-looking perspective characterized by new products and services ahead of the competition and acting in anticipation of future demand. We define pro-activeness as the process aimed at estimating and acting upon future needs by seeking new opportunities. The measuring items were developed with a little modification of the scales validated in prior studies to fit into the purpose of the study. Some examples are 'I would not take any action without reasonable estimate of future performance', 'I tend to plan in detail before initiation of a projected event gets closer', 'I'm willing to dare adoption of a strategy that competition would not'.

Risk-taking: It usually refers to taking bold action by venturing into the unknown, borrowing resources to risk in uncertain environments. Risk-taking is defined as the degree to which individuals are willing to make large and risky resource commitments under a reasonable chance of costly failures. The items questionnaires were developed based on the previous studies that contain 'I'd pursue new opportunity even though it may result in a certain degree of risk', 'I will pursue growth rather than staying status quo', 'I believe that nothing can achieved without taking a certain risk in this world'.

The operational definition is summarized on <Table 1>.

Variable	Innovativeness	Pro-activeness	Risk-taking
Question item	IN1~IN5	PA1~PA5	RT1~RT5
Source	Lumpkin & Dess(1996), Koe(2016)	Lumpkin & Dess(1996), Rauch et al.(2009)	Bolton & Lane(2012), Koe(2016)

<Table 1> Summary of Operational Definition

The questionnaire used in this study consisted of 22 items adapted from prior studies, including demographic related question. All items were measured by five point Likert scale ranged from 1=strongly disagree to 5=strongly agree, except demographic information section. Pilot test was made before entering real survey to improve the final questionnaire by refining and amending each item. The Korean version of the questionnaire was developed first in accordance with the process as described above. The Japanese and Chinese versions were then arranged following the back-translation procedure(Brislin et al., 1973) and the two parallel-translation method(Douglas & Craig, 1983). Bilingual scholars were involved in the translation process for the two different language versions. For the Japanese, a bilingual Japanese scholar in Doctorial course in Korea translated the Korean version into Japanese. Then, the questionnaire was translated back into Korean by a bilingual professor in Japan. Finally, this Korean version was compared to the original questionnaire to check for differences. Two items only were paraphrased through double-translation process. The same double-translation process was also applied to the Chinese version and three questions were made a bit correction each. Each data from the three countries were integrated into one for analysis based on the cross-cultural study of Abbey(2002).

The data was analyzed with IBM SPSS Statistics 23 version. First, frequency analysis was carried out to capture demographic characteristics of the sample. Next, factor analysis was performed to test validity and reliability of the data. Finally, ANOVA was used to investigate the differences of EO among the three countries.

#### III. Methodology

#### 3.1 Research Model

Based on the literature review, the conceptual model for this research is presented in <Figure 1>.



<Figure 1> Research Model

#### 3.2 Sample and Data Collection

The purpose of this study was to examine whether differences exist or not among IEO of Korean, Chinese and Japanese university students. The sample of this study comprised of full-time undergraduate students from three different universities in each country during 2018 academic year. Regarding data collection, a survey was conducted by using self-administered questionnaire. The universities of each country are located in major cities of each country(e.g. Korea: Seoul, Gyeonggi, Iksan; China: Beijing, Shanghai and Guangzhou; Japan: Tokyo, Saitama and Shizuoka).

With the helps of faculty members from each university across the country, the questionnaires were distributed to the students at the commencement of class. It took 10 to 15 minutes roughly to get the answered surveys back. The data collection process lasted for three months from April 01 to June 31, 2018.

<Table 2> Demographic Characteristics

		Korea (n=224)		China (n=216)		Japan (n=230)	
		Freq.	(%)	Frq.	(%)	Frq.	(%)
Nationality		224	33.4	216	32.3	230	34.3
Condor	Male	149	66.5	78	36.1	127	55.2
Gender	Female	75	33.5	138	63.9	103	44.8
	Freshman	38	17.0	60	27.8	42	18.3
Year	Sophomore	103	46.0	48	22.2	106	46.1
	Junior	42	18.8	28	13.0	55	23.9
	Senior	41	18.3	80	37.0	27	11.7
	Social Science	174	77.7	168	77.8	224	97.4
Major	Natur. & Enig.	36	16.1	29	13.4	6	02.6
	Art and Phy.	14	6.3	19	8.8	0	0
Doronto	Self-employed	108	51.8	72	33.3	67	29.1
Parents	Employee	116	48.2	144	66.7	163	70.9

<Table 2> shows characteristics of the sample. The sample presents a few notable differences depending on the country of study. Out of the 670 respondents, 224 came from Korea, 216

from China, and 230 from Japan. Male and female students represented 52.8% and 47.2% respectively of the sample. The proportion of male students in China(36.1%) was much lower than that of Korea(66.5%) and Japan(55.2%). The respondents' school year of Korea and Japan showed similar range in both freshman(Korea=17%, Japan=18.3%) and sophomore (Korea=46%, Japan=46.1%), being contrasted with China where freshman and sophomore occupied 27.8% and 22.2% each. The proportion of respondents' major in social science was almost same between Korea(77.7%) and China(77.8%), but Japan showed 97.4%. Regarding Parents job, 33.3% of China and 29.1% of Japan were self-employed versus 51.8% of Korea, that was another contrast among the countries.

#### IV. Result

#### 4.1 Data Analysis

The measures were all validated, before entering the hypotheses test. Since the data were collected all from the same respondents in a single survey, the common method variance was tested using Harman's one factor test on all variables. The total variance of extraction was 36.50% in one factor which was far less than 50%, the threshold(Tehseen et al., 2017). So, common method variance was not a problem in these data. Principal component factor analysis by Varimax rotation was performed to determine the unidimensionality of constructs and validity of measuring items with the criteria of Eigen values greater than 1. The first run showed that all 15 items were loaded onto three distinct variables. However, one item related to pro-activeness was cross-loaded on innovativeness, that was deleted from the data. The second run yielded three distinctive factors with the factor loadings all higher than .70. The three factors explained 57.57% of the total variance. Kaiser-Meyer-Olkin(KMO) Measure of Sampling Adequacy was .918, and Bartlet's test of Spherecity displayed 3880.1(p<.001).

<table3> Factor</table3>	analysis	result
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ltem	Factor1	Eactor2	Factor2	Eigen	Accumul.	Cronb's
nom	1 00101 1	1 001012	1 00012	Value	variance(%)	a
IN1	.866	.073	.100			
IN3	.802	.202	.204		19.630	
IN4	.790	.278	.163	2.944		.795
IN2	.751	.264	.225			
IN5	.704	.393	.127			
PA3	.186	.783	.130		38.676	
PA1	.259	.755	.127	2 957		910
PA5	.272	.739	.139	2.007		.019
PA2	.317	.731	.292			
RT2	.184	.174	.789	2.835	57.575	.764

Meanwhile, factor analysis helps determine whether the respondents across cultures are likely to answer a question in the same way as they answered similar questions. So, if similar items load on the same factor, then it is more likely that the interpretation of the questions are consistent across cultures(Shane et al., 1991). The reliability of each construct is also high as the lowest Cronbach's alpha was .774(Nunnally, 1978). Thus, the measuring model was concluded to secure sufficient convergent validity, discriminant validity as well as unidimensionality and reliability(Anderson & Gerbing, 1982). <Table 3> presents factor analysis result.

Also, as presented in  $\langle \text{Table } 4 \rangle$ , inter-correlations between the constructs were all significant and positive( $p \langle .001 \rangle$ ; IN was correlated with RT(r=.488) and PR(r=.677). RT was also correlated with PR(r=.532). Multicollinearity problem was not detected in the data, as the correlation coefficient(r) are all below .80(Hair et al., 2010).

<Table 4> Descriptive statistics and correlations

Country	Variable	RM	ESE	E
	IN	1		
Korea	PA	.593***	1	
	RT	.451***	.427***	1
	IN	1		
China	PA	.748***	1	
	RT	.642***	.597***	1
	IN	1		
Japan	PA	.671***	1	
	RT	.470***	.466***	1

\*\*\* p< .01

#### 4.2 Test Results

As the research model was validated, the second phase was entered to test the hypotheses. The model was applied to the integrated data made of three country simultaneously to investigate the differences between countries. For examining the hypotheses, ANOVA mean difference tests(one-way analyses of variance) were carried out between pairs among the three countries. H1-1 predicted that innovativeness of Korean, Chinese and Japanese university students are different one another. The analysis of the cultural group main effect by ANOVA and Post hoc tests indicated that China showed the greatest mean value(M=3.516, S.D.=0.645) among the three countries, followed by Korea(M=3.442, S.D.=0.590), and then Japan(M=3.177, S.D.=0.618)(F=18.664, p < .001). The result presented that there are differences in innovativeness among Korea, China and Japan, and no big differences between Korea and China. But Japan showed far lower level of innovativeness than Korea and China. Thus, H1-1 was supported. H1-2 suggested pro-activeness is different among university students of Korea, China and Japan. ANOVA and Post hoc tests results displayed the highest mean value of China(M=3.564, S.D.=0.629) again, followed by Korea(M=3.339, S.D.=0.577) and Japan(M=2.903, S.D.=0.661) (F=65.082, p < .001).) in a row. This result implied that proactiveness among university students of Korea, China and Japan is likely to be different one another. Furthermore, Japan showed the lowest level in pro-activeness compared to Korea and China. So, H1-2 was also supported.

Finally, H1-3 estimated that risk-taking of Korean, Chinese and Japanese university are different one another. The cultural group main effect by ANOVA and Post hoc tests exhibited that China showed the top position in mean value(M=3.383, S.D.=0.719) among the three countries. Korea ranked the middle(M=3.116, S.D.=0.725), and Japan recorded the lowest(M=2.955, S.D.=0.837) (F=17.740, p < .001). Therefore, H3-1 was supported, too. <Table 5> exhibits the summary of ANOVA analysis.

	<table< th=""><th>5&gt;</th><th>ANOVA</th><th>and</th><th>Post</th><th>hoc</th><th>tests</th><th>results</th></table<>	5>	ANOVA	and	Post	hoc	tests	results
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Var.	Desori.	Kor	Chn	Jpn	F-value	Kor vs. Chn	Kor vs. Jpn	Chn vs. Jpn
IN	Mean	3.442	3.516	3.177	18.664***	Kor <	Kor >	Chn >
	S.D.	.590	.645	.618		Chn	Jpn	Jpn
PA	Mean	3.339	3.564	2,903	65.082***	Kor <	Kor >	Chn >
	S.D.	.577	.629	.661		Chn	Jpn	Jpn
RT	Mean	3.116	3.383	2.955	17.740***	Kor <	Kor >	Chn >
	S.D.	.725	.719	.837	10	Chn	Jpn	Jpn

Note 1. \*\*\* p< .01

Note 2. Kor: Korea, Chn: China, Jpn: Japan

Note 3. Post hoc test was conducted by both Scheffe and Bonferroni method of which results were identical

From ANOVA tests results, it became clear that there exist difference on IEO among Korean, Chinese and Japanese university students. Two interesting results are found in this analysis. First, university students in far eastern Asian countries possess IEO(innovativeness, pro-activeness, risk-taking), but the level varies depending on the country. Second, the level of IEO is highest in China, second highest in Korea, and lowest in Japan.

#### 4.3 Cultural Context Differences

On the top of the arguments of Hofstede et al.(2005) and Kawakami et al.(2012) related to the possibility of different entrepreneurial context and cultural dimensions among the eastern Asian countries, the findings of this study manifested how cultural context would influence IEO of university students differently in the region. Zooming on it, first of all, Chinese people are highly dependent upon traditional authority and entrepreneurial culture for direction in life. Even today, business enterprises are still regarded as an extension of the family system in China. This cultural legacy has played a role in shaping management style(Zapalska & Edwards, 2001). However, real entrepreneurial activity in China had stayed minimal level until adoption of a reform and open policy in 1978(Hambrick & Chen, 2008). The Private Company Act enacted in 1998 has added fuel to economic growth in China. It has triggered influx of numerous number of entrepreneurs into privately owned business(Anderson et al., 2003). Therefore, young Chinese university students are likely to be exposed by cultural legacy and new emerging entrepreneurial opportunity as well. Meanwhile, Jiang & Wang(2014) claimed that the desire for entrepreneurial outcomes are affected by cultural background. In this regards, they noted Chinese students, with greater tolerance for uncertainty, are more willing to take entrepreneurial pathway than Korean students, as identified by cultural scores of Hofstede(2001). Likewise, Gupta et al(2014) verified that Chinese perceived institutional environment to be more favorable for entrepreneurial activity than Korean. However, the rate of start-up in Japan has been around 3%, even less than the discontinuance-of-business rate over 20 years(Kamo, 2013). The average age of start-up is over 40 years old, and particularly, the rate of 60-year-old entrepreneurs is increasing as opposed to remarkably low rate of young people including university students(Isada et al., 2015). Futagami & Helms(2017) also depicted that entrepreneurial activity in Japan has been extremely low, in spite of its economic and technological power in the global market. In the same context, Moon & Yang (2018) found that entrepreneurial activity young people in Japan is far retarded compared to global trend. The social and cultural foundations of entrepreneurship of GEM(2020) makes it clear how entrepreneurial activities deploy differently among Korea, China and Japan. For instance, more than 70% of Chinese and 40% of Korean perceived 'there are good opportunities to start a new business in my area(% of adults), while Japan reached merely 10% in their perception on good opportunities.

<Table 6> displays the distinct entrepreneurial activities among

Korea, China and Japan(GEM, 2020).

	Knowing someone started biz	Being good opportunities	Easy to start in business	Knowledge , skills, experience	Fear of failure
Kor	37	43	32	52	8
Chn	76	75	36	67	45
Jpn	17	10	25	14	44

<Table 6> Entrepreneurial Activities(% of Adults)

Note. The data represent ball park figure as GEM scale was set in 10% interval

#### V. Conclusion

Entrepreneurship is stimulated by individual attitudes and perceptions. The influence of environment on these dimensions is obvious. While the role of environment and context is known to be critical, entrepreneurship is also known as a common concept across cultures. This study enable us not only to depict entrepreneurial orientation profile of university students of Korea, China and Japan but to highlight cultural dimension including its potential impact on their entrepreneurial activity. The results indicate that countries have differences to a certain extent in the perception of IEO; innovativeness, pro-activeness and risk-taking.

This paper has theoretical and practical implications. First, theoretically, it highlighted IEO as a key variable of entrepreneurship, and supported the claims that IEO can be measured and studied at the individual level as well. Accordingly, this study presents the important role of IEO of university students in terms of fostering prospective entrepreneurs in the future. Second, the result of this study verified the role of cultural and contextual background influence entrepreneurship of young people that supports the arguments of previous studies (Shapero & Sokol, 1982; Scully, 1988; Wittman, 1989; Lee & Rogan, 1991).

Cultural factors come into play obviously in perceiving and forming entrepreneurship in different way in line with previous discussion in 'Cultural Context Differences'. For example, Chinese university students displayed the greatest level in all three IEO dimensions, innovativeness, pro- activeness and risk-taking as opposed to Japanese students who rated the least to all dimensions. Meanwhile, Korean students exhibited all moderate level among the three countries. Thus, this finding implies that Japanese students are less likely to be committed to becoming entrepreneurs than Chinese and Korean students. These typical different entrepreneurial orientation among university students in Korea, China and Japan are exactly in line with the claim of Hofstede(2001).

Besides, this study has its own differentiation from the previous studies by identifying the distinct level of each dimension by country. Specifically, Korea and Japan rated innovativeness highest, while China rated pro-activeness highest. And Korea rated risk-taking least followed by pro-activeness and innovativeness, while China rated risk-taking least followed by innovativeness and pro-activeness. Finally, Japan rated proactiveness least followed by risk-taking and innovativeness. This finding enables us to assume both Korea and Japan value innovativeness high, while China considers pro-activeness higher than innovativeness and risk-taking.

From the practical standpoint, innovativeness is associated with creating novel ideas as well as working on commercializing with the ideas. To be innovative is crucial in this increasing competitive environment. Thus, more innovative opportunities need to be arranged for university students such as hands-on training course within the curriculum and/or participating in national and global competition to share breakthrough ideas and products.

However, more importantly, Korean university students are required to develop pro-activeness and challenging spirit other than innovativeness. Innovativeness without action is likely to be useless, and would make it difficult to realize entrepreneurship of young people. Because, an individual is more likely to be an entrepreneur, once he or she is able to actively identify and materialize an opportunity. Pro-activeness is an important component for entrepreneurs to seek new business opportunities ahead of others. Students need to be trained to develop this typical abilities for searching and challenging new business opportunity. Finally, entrepreneurship is a dynamic process that requires to assume risk. Thus, without risk-taking, one is hardly to become an entrepreneur. That's why students need to be educated the importance of risk-taking, and so take efforts themselves to grow risk-taking ability when they are at the stage of preparing for the future. Conclusively, we suggest that university should take a central role in nurturing relevant knowledge and competencies of students with well-organized curriculum and qualified faculty members. For example, universities need to develop entrepreneurship enhancement courses consisted of theoretical and hands-on training sections which require breakthrough approaches than traditional way. In addition, policy makers in education need to take into account developing mid and long term programs to grow individual entrepreneurial orientation of young people toward fostering pro-activeness and challenging spirit.

This study has several limitations. First, it attempted to compare the three dimensions of IEO only among Korean,

Chinese and Japanese university students using a simple ANOVA model. The follow-up model needs to employ additional key variables including demographic characteristics in order to capture the distinct entrepreneurial tendencies across cultures in detail. Second, the number of samples from each countries are not big enough to generalize the findings of the study. The bigger sample size, the greater insight can be gained. Finally, this study has another limit of employing 5 point Likert-type scale, despite of cross-cultural study. More precise results could be gained by extending the scale larger.

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### 한국 중국 일본 대학생의 기업가지향성 비교연구\*

양준환\*\*

#### 국 문 요 약

본 연구는 한국, 중국, 일본 등 3개 국가 대학생들을 대상으로 사회문화적 차이에 의한 각국 대학생들의 개인 기업가 지향성의 차이를 탐색 적 수준에서 검증하는 것이다. 구체적으로 기업가정신 문헌에서 핵심 변수로 중요시 기업가 지향성의 세 가지 하위변수인 혁신성, 주도성, 그리 고 위험 감수성에 대한 국가적 차이를 실증비교 분석하고 이론적 실무적 시사점을 제공하고자 하였다.

이와 관련하여 본 연구는 기업가정신 지향성과 관련된 이론 및 선행연구, 그리고 최신 자료들의 면밀한 검토와 확인을 통해 총 3개의 가설을 도출하였다. 본 연구에는 각 국가 별 세 개 대학교의 대학생들로부터 자료를 수집하였고 수집된 자료에 대해 신뢰성과 타당성을 검토하였다. 가 설분석은 ANOVA검증을 통해 실시하였다. 가설검증 결과 각국의 사회문화적 요인은 대학생들의 개인 기업가 지향성의 세 가지 변수인 혁신성, 주도성, 위험 감수성 등 세 가지 수준에서 유의한 차이를 보이는 것으로 나타났다. 특히 세 가지 연구변수 모두 중국, 한국, 일본 순으로 인식수 준의 현격한 차이가 있음을 알 수 있었다. 나아가 본 연구는 기업가정신은 국가의 다양한 사회문화적 환경 요인에 영향을 받는다는 선행연구들 의 주장을 입증했다는 점과 특히 기존 연구에서는 시도해 보지 않았던 동아시아 지역 국가인 한국과 중국, 그리고 일본 대학생들을 대상으로 최 초로 실시한 기업가정신 비교연구라는 점에서 기업가정신의 이론에 기여했다는 의미를 갖는다. 마지막으로 본 연구결과에 따른 이론적 실무적 시사점을 제시하였으며 특히 한국 대학생의 경우 세 가지 변수 중 주도성의 개발 중요성을 실무적 관점에서 강조하였다.

핵심주제어: 기업가지향성, 혁신성, 주도성, 위험 감수성, 한국 대학생, 중국 대학생, 일본 대학생

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저자는 본 논문의 심사과정에서 귀한 의견과 제안을 통해 논문의 완성도에 크게 기여해 주신 익명의 세 분 심사자님들께 감사드립니다.