## Examining the Formation of Entrepreneurial Activities through Cognitive Approach\*

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#### Abstract

There have been questions how entrepreneurs think, act and why individuals become entrepreneurs. The trait-based explanation of entrepreneurial activities has been main stream. However, the trait-based theory has been criticized because it assumes that entrepreneurial traits are inherited, stable and enduring over time. This research accepts the cognitive theory to see how entrepreneurs learn or accept others' values, how entrepreneurial perceptions of opportunity impact entrepreneurial actions and how individuals acquire the social legitimation of the formation of entrepreneurial activities.

In order to capture the attitudes, activities and motivations of people who are involved in entrepreneurial activities, the author uses the GEM Korea 2016 data. The data from the Global Entrepreneurship Monitor(GEM) has been well known for the data to capture individuals early-stage entrepreneurial activities. This paper used the sample from the APS(Adult Population Survey) of the GEM which was completed by a representative sample of two thousand adults in Korea by the qualified survey vendor, with strict procedures and oversight by the GEM central data team. The hypotheses are tested with logit regression analysis to estimate the probability of the influence of perceptual variables such as individual perception in social learning, the opportunity recognition in the environment, and social legitimation in the entrepreneurial activities. Based on the results, individuals tend to have high entrepreneurial activities if individuals have high self-efficacy. Also, the existence of role models around the entrepreneuris encourages the individuals involve in entrepreneurial activities. The media exposure of successful entrepreneurs is more important than others' perception of entrepreneurs on the desirable career option or respect from communities.

This paper can contribute to the cognitive processes, particular perception about oneself, as well as perception which is impacted by a community or a society.

Keywords: Entrepreneurs, Cognition Theory, The Formation of Entrepreneurial Activities, Self-Efficacy, Role Models,

#### |. Introduction

Entrepreneurship research focused on the description of personality traits of entrepreneurs at the early stage of entrepreneurship research to explain the relationship between the entrepreneur and new venture formation. Even if this approach makes its contributions, but the trait-based explanation has been criticized, because it assumes that entrepreneurial traits are inherited, stable and enduring over time(Cope, 2005; Palich & Bagby, 1995). This criticism led the entrepreneurship research stream to a cognitive perspective which is focused on the explanation of how entrepreneurs think and act(Mitchell et al.,

2002) and why individuals become entrepreneurs and others do not.

Entrepreneurial cognition is defined as "the knowledge structures that people use to make assessments, judgements or decisions involving opportunity evaluation and value creation and growth"(Mitchell et al., 2002, p. 97). Researchers using a cognitive theory have tried to identify the critical cognitive and behavioral aspects of entrepreneurial activity(Corbett, 2007).

Also, this cognitive perspective ranges from their beliefs to their values, cognitive styles and mental processes. These perspectives have improved an understanding of what has driven people's perception and behavioral change(Krueger et al., 2000;

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Krueger, 2003). The relevance of cognitive perspective in shaping the behavioral of individual's in entrepreneurial decisions and action has been confirmed by a number of various studies(Mitchell et al., 2002; Baron, 2004). One stream of cognitive studies is to identify the knowledge structures that entrepreneurs use to make assessments, judgements or decisions, in evaluating opportunities, and in the creation and growth of businesses(Gaglio & Katz, 2001; Mitchell et al., 2000). Another stream of cognitive research is based on the idea that whatever the individual thinks, says or does is influenced by the cognitive processes through which individuals acquire, use and process 1999). information(Baron & Markman, This perspective contributes on how people learn to see opportunities and make decisions along the entrepreneurial process.

However, less attention has been paid to individual perceptions which are formed or influenced by others even if entrepreneur's perceptions are influenced by others through the observation or acceptance of others' perspectives in a social context(Bandura, 1977). Even if there is an important finding by Bandura(1977) that individuals are learned and accepted in a social context through the observation of others and who perform well in an area, less attention has been paid in this area. In the other hand, few attempts have been made to integrate insights from theories to examine the opportunity recognition in environment and entrepreneurial perception, and entrepreneurial actions.

This paper focuses on how entrepreneurs learn or accept others' values, how entrepreneurial perceptions of opportunity impact on entrepreneurial actions and how individuals acquire the social legitimation in the formation of entrepreneurial activities. This research builds and tests hypotheses based on data from entrepreneurs participating in the 2016 Global Entrepreneurship Monitor (GEM) survey in Korea. Using the variables related to the formation of entrepreneurial activities, this paper can contribute on the role of perceptions in driving an early-stage entrepreneur's behavior in the start-up process.

# II. Literature Review and Hypothesis

## 2.1 Individual Perceptions in Social Learning towards Entrepreneurial Activities

Self-efficacy refers to a person's belief in his/her capability to perform a given task(Bandura, 1977). This self-efficacy plays an important role in the development of entrepreneurial intentions and behaviors. Many researches show that self-efficacy lead towards entrepreneurial behavior(Boyd & Vozikis, 1994; Chen et al., 1998). Especially the self-efficacy construct has been closely linked to important entrepreneurial outcomes such as start-up intentions and new venture growth, as well as personal success of entrepreneurs(Krueger et al., 2000; Shane et al., 2003).

In Bandura's research in 2001, self-efficacy doesn't simply equate to objective abilities, but to how people perceive themselves. It reflects their beliefs that particular actions they take can produce the intended effects. For example, potential entrepreneurs that believe they are capable of starting a business are likely to do this, regardless of whether they objectively have the capabilities required(Arora et al., 2013). People will choose activities and situations in which they feel they can effectively function(Wood & Bandura, 1989). On the other hand, if they have self-doubts about their abilities relative to a particular context, they have little incentive to act or to persist amidst difficulties(Bandura, 2001).

In addition to self-efficacy, individuals learn in a social context through the observation of others with who they can identify and how perform well in an area in which they, themselves, also wish to be involved or in which they want to excel, i.e. learning by example or modeling. Role theory argues that role behavior is learned through socialization(Biddle & Thomas, 1966). Socialization is concerned with the learning of behavior at various stages of the life cycle. Role models serve as someone whose life and activities contribute to learning role behavior (Basow & Howe, 1980). Researchers have argued that role models provide an observational learning experience for the individual(Scott & Twomey, 1988; Scherer et al, 1989(a); Lent et al., 1994). There were many evidences that individuals got influenced by parents and relatives who have been running the businesses as entrepreneurs(Lee & Baek, 2012; Arenius & Minniti, 2005). Scherer et al.(1989a) reported that 35-65% of entrepreneurs had one or more entrepreneurial parents. Scott & Twomey(1988) proposed that parental role models and experience led to the perception of oneself as an entrepreneur. This self-perception from others can be a triggering actor of starting a business and take an entrepreneurial career path. Krueger et al. (2000) asserted that role models could affect entrepreneurial intentions and actions if they changed attitudes and beliefs about a person's perceived ability to be successful in a new venture. Also, many researchers using social learning theory investigated that the link between role model and the development of a preference for an entrepreneurial career(Scherer et al., 1989(a); Scherer et al., 1989(b)). According to Van Auken et al.,(2006), role models many enhance the desire to become an entrepreneur and the entrepreneurial self-efficacy of individuals. This may

positively influence entrepreneurial activity(Krueger et al., 2000). Therefore, this leads to the following hypothesis:

- H 1. Individuals who have higher level of self-efficacy toward entrepreneurship will be positively associated with entrepreneurial activities.
- H 2. Individual who has strong image of role model will be positively associated with entrepreneurial activities.

## 2.2 Perceptions of Economic Opportunities towards Entrepreneurial Activities

The perception of environment play an important role of the formation of entrepreneurial activities(Mitchell et al., 2002; Edelman & Yli-Renko, 2010). People will act based on certain beliefs about whether an effort is feasible and can be accomplished with relative ease(Carsrud & Brannback, 2011). Especially the perception of economic opportunity and risk-aversion propensity depends on an individual's prior knowledge, the required cognitive capabilities and experiences (Shane, 2000; Edelman & Yli-Renko, 2010). Edelman & Yli-Renko(2010) found that new business starts were influenced by an entrepreneur's perceptions and interpretations of factors in the environment, rather than objective representations of these factors. According to Ahmad & Xavier(2012), the entrepreneurial economic conditions in a nation may influence the formation of new ventures. Lee & Kelley(2012) also concluded that the perception of environmental opportunities about market newness, competitive uniqueness could impact on the entrepreneurial aspiration.

Edelman & Yli-Renko(2010) found that entrepreneurs with more positive perceptions of the environment for an opportunity will more actively pursue entrepreneurial activities. When individuals see the opportunities in the market with some reasons such as disequilibrium of environment, individuals feel that they can profit from entrepreneurial activity before a competitive response(Kirzner, 1973). Once entrepreneur may perceive economic opportunities in a cognition perspective, they are more likely to be active in the formation of entrepreneurial activities.

This suggests that entrepreneurs are drawn into action by the economic opportunities.

H 3. Individuals who perceived higher level of economic opportunities will be positively associated with entrepreneurial activities

### 2.3 Perceived Social Legitimation and Entrepreneurial Activity

While people play a central role in cognition theory, cultural or sociological context can influence people's decisions and actions as well as individual's perception. Hofstede(2005) defines cultures as "the collective programming of the mind which distinguishes the members of one human group from another" (Hofstede & Hofstede, 2005). Hofstede(1980) also emphasized that culture shapes people's cognitive schemes, programming behavioral patterns which are constituent with the cultural context.

Entrepreneurship studies have shown that the cultural and sociological factors could influence on opportunity recognition and entrepreneurial intention through cognitive mechanisms (Ahmad et al., 2014). According to Davidsson(1995), there are two views regarding the relationship between cultural values and entrepreneurial behavior. The first one is a culture's effects on the social legitimization of entrepreneurship. The second view involves the suitability of the aggregate psychological traits of a nation in supporting entrepreneurship. In Mueller et al.(2002)'s research. low power distance cultures would favor entrepreneurship and noted wide variance in entrepreneurial activity across cultures and concluded that cultural values influence entrepreneurial behavior. There have been studies that the social perception and social norms about entrepreneurs impact the entrepreneurial activities and intention. Lee & Baek(2012) finds that perception of entrepreneurs or image of successful entrepreneurs impact on entrepreneurial intention. They did survey with high school students who are participated in entrepreneurship education. As a result, if they got influenced by parents or relatives' successful stories as entrepreneurs.

Nystrom(2012) also shows that media has a strong influence on entrepreneurial activities. Even media exposure about successful entrepreneurs will stimuli to employees' entrepreneurial activities in the established companies(Nystrom, 2012). However, there is a research that there is a negative correlation between the perception of good career choice and involvement in entrepreneurial employee activities(Bosma, et. al., 2012) but it was conducted in the context of corporate entrepreneurship.

GEM measures variables of attitudes of entrepreneurship such as perceived opportunities and capabilities, fear of failure, entrepreneurs as a good career choice, high status to successful entrepreneurs, media attention for entrepreneurship and entrepreneurial intentions. GEM explains that social norms such as positive perception of entrepreneurs in the society encourage the entrepreneurial intentions and activities. Young & Welsch(1993) conducted the research about the importance of social networks and social context. They conclude that how people perceive the image of entrepreneur matters to launch a new business.

Therefore, this leads to the following hypothesis:

H 4. Entrepreneurs who has strong perception of social legitimation will be positively associated with entrepreneurial activities.

#### III. Methodology and Results

#### 3.1 Methodology

This empirical analysis is based on Korea 2016 National GEM (Global Entrepreneurship Monitor) data. The GEM survey was developed to estimate national entrepreneurial activity. Since 1999, GEM has conducted adult population surveys in over 100 economies. It is the biggest scientific project of researching entrepreneurship worldwide.

Academic teams in each participating economy manage the data collection process administrated by qualified survey vendors, with strict procedures and oversight by the GEM central data team. GEM has two main research parts. Adult population survey (APS) is completed by a representative sample of at least two thousand adults in each country. The purpose of APS is to capture the attitudes, activities and aspirations of people who are involved in entrepreneurial activities. The other part is National Experts Survey(NES) where national experts are consulted on entrepreneurial framework conditions which explain the nature and level of entrepreneurship in the economies: financing, governmental policies, governmental programs, education and training, R&D transfer, commercial infrastructure, internal market openness, physical infrastructure and cultural land social norms.

The Korea GEM team has participated in GEM survey since 2008. As other countries, two thousand adults were surveyed in GEM Korea Survey in 2016.

Over 200 peer-reviewed academic journal articles have used GEM data in empirical investigations and policy makers around the world routinely refer to GEM findings. According to Levie &and Autio(2011, p. 1402), "the careful data collection design produces high-quality data, as shown by numerous reliability checks." Also, GEM has its implications in measuring the level of entrepreneurship that is not limited to registration of start-ups, but it is captured rather in behavioral than in institutional terms. It includes both entrepreneurial activities of potential entrepreneurs and entrepreneurial activities in the early-stage start-ups.

This paper is focused on early stage entrepreneurs to capture their individual perceptions and entrepreneurial activities. Based on GEM, early stage entrepreneurs are those either in the nascent or new phase of business creation. Nascent entrepreneurs are those who have taken material action toward creating a new business but have not paid wages for more than 3 months. New entrepreneurs are owners/managers of new businesses which have paid wages or salaries for more than three months, but less than 42 months. These two groups compose the Total Entrepreneurial Activity (TEA) measure for an economy. Using this criterion, 257 early stage entrepreneurs from 2,000 random samples were identified in 2016 GEM Korea. <Figure 1> illustrates the profile of the sample from 2016 GEM Korea survey. The respondents comprise of a fair number of male (59.1%) and female (40.9%). In terms of age distribution, the sample of age 45-64 was about 70%.

<Figure 1> Entrepreneurs' Characterization

Respondents	Frequency	Total	%
Gender			
Male	152	257	59.1
Female	105		40.9
Age			
18-24	6	257	2.3
25-34	19		7.4
35-44	51		19.8
45-54	102		39.7
55-64	79		30.7
Income (Unit: 1,000 Won)			
0 – 9,999	11	257	4.3
10,000 - 19,999	17		6.6
20,000 - 29,999	19		7.4
30,000 - 39,999	39		15.2
40,000 - 49,999	35		13.6
50,000 - 59,999	25		9.7
60,000 - 69,999	19		7.4
70,000 - 79,999	19		7.4
More than 80,000	43		16.7
Refused	15		5.8
Don't know	15		5.8

Entrepreneurial activities variable measures the sample's early stage entrepreneurs activities. It is combined nascent entrepreneurs and owner-manager of a new firm which is less than 3.5 years old. To measure self-efficacy, GEM was measured whether they believed they had the knowledge, skill and experience required to start a new business. Responses were coded "1" if respondents indicated they had the knowledge, skill and experience to start a business, zero otherwise. The role model variable assessed the entrepreneurs' perceptions about if respondents knew someone who had started a business in the two years.

Perception on entrepreneurial opportunities was indicated by asking respondents whether they could see the opportunities in the market or not. Responses were coded "1" if they believe that there are opportunities to start a business in the area they live in, zero otherwise.

Perceived social legitimation was measured in terms of perceptions of how people in society perceive the image about entrepreneurs. <Figure 2> is the summary of main variables and measurement.

<Figure 2> Statistic Variables

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Indicators	Description				
Entrepreneurial activities	It was combined nascent entrepreneurs and owner-manager of a new firm (less than 3.5 years old)				
Individual perceptio	n in social learning				
Self-efficacy	Respondents answered if they believe they had the required skills and knowledge to start a business				
Role model	Respondents were asked whether they personally knew someone who had started a business in the two years preceding the survey				
	rtunities towards Entrepreneurial vities				
Perception on entrepreneurial opportunities	Respondents reflect the percentage of individuals who believe there are opportunities to start a business in the area they live in				
Perceived Soc	al Legitimation				
Desirable career choice	Respondents' perception that in their country, most people consider starting a new business a desirable career choice				
Status and respect	Agreement with the statement that in their country, those successful at starting a new business have a high level of status and respect				
Public media	Agreement with the statement that in their country, they will often see stories in the public media about successful new businesses				

This research proposes that the formation of entrepreneurial activities is a function of individual perception in social learning, perception of economic opportunity, and perceived social legitimation. In addition, to reduce specification error, it is included the control variables for age, gender and income level as a household size.

#### 3.2 Common Method Bias

Use of self-report data in a cross-sectional survey, like the one used in this study, is very prevalent in social science research. This paper use entrepreneurs as a single source of data; therefore, spurious associations between some of the variables of interest may emerge due to common method bias(Podsakoff et al., 2003). To solve the issue of common method bias in this research, this study conducted the Harman's single factor analysis, a widely used statistical technique, to address the common method bias problem. If the common method bias problem exists in the dataset, all variables in this study are loaded on a single factor. The results of the un-rotated factor solution of the 6 items resulted in the first factor accounting for only 23.5 % of the variances and a clear indication of multiple factors, which suggests a relative lack of common method bias (Podsakoff et al., 2003).

#### <Figure 3> Common Method Bias Test

	Total Variance Explained											
	Initi	ial Eigenval	ues	Extraction Sums of Square Loadings								
Factor	Total	% of Variance	Cumulativ e %	Total	% of Variance	Cumulativ e %						
1	1.411	23.509	23.509	1.411	23.50	23.509						
2	1.196	19.932	43.441									
3	1.021		60.459									
4	.921		75.817									
5	.810		89.316									
6	.641		100.000									

Extraction Method: Principal Axis Factoring

#### 3.3 Results

<Figure 4> presents the means, standard deviations, and intercorrelations among this study's variables. All variables have a strong correlation (p < .05) with entrepreneurial activities. Correlations among the independent variables, while significant in some cases, were low or moderate.

	Freque ncy	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1. entrepreneurial activities	257	.52	.501	1									
2. self-efficacy	245	.65	.477	.150**	1								
3. role model	254	.67	.473	.270**	.128*	1							
4. perception on entrepreneurial opportunities	242	.66	.474	.192**	.192**	.153**	1						
5. desirable career choice	245	.50	.501	.127*	003	.058	.009	1					
6. status and respect	248	.56	.498	.190**	.097	.133*	.086	.250**	1				
7. public media	249	.69	.461	.174**	.066	.031	.167**	025	.180**	1			
8. age	257	48.49	9.398	318**	.016	076	053	141*	140*	022	1		
9. gender	257	1.41	.493	044	080	026	.045	-0.63	-0.44	028	024	1	
10 .income	227	5.53	2.436	.102	.037	.136*	.178*	001	.076	.054	103	.000	1

<Figure 4> Descriptive Statistics and Correlation Matrix

\*\* significant at 0.01 level; \*significant at 0.05 level

The hypotheses are tested through logit regression analysis. The logit regression model estimates the probability of an individual belonging to a certain group, or not. It also identifies the most important variables explaining the differences between both groups. In this research, the author uses the important grounds of logit regression such as the dichotomy of the dependent variables, and categorical independent variables.

Four hypotheses are derived regarding the influence of perceptual variables in the entrepreneurial activities of the adult population. They are tested by introducing each group of variables into a subsequent logit model. Four binary logistic regressions have been performed, as shown in <Figure 5>. The first one includes only control variables as independent variables. Model 2 includes individual perception variables in social learning. Model 3 includes the variable to explain the opportunity recognition in the environment. Model 4 shows the variables which are related to social legitimation.

Among socio-economic characteristics, the only one variable, age matters to the entrepreneurial activities. With the GEM Korea 2016, Korea shows that older people (40's and 50's) are engaged in the entrepreneurial activities than younger people compared to other innovation-driven economies. There could be lots of explanations that why young Korean (18-29) has a lower tendency to participate into entrepreneurial activities. Compared to other countries, young male Koreans have to serve the military service for one and half years so the timing of participating can be delayed compared to other people in developed countries. However, GEM Korea research team

explains that average retirement age is 49 years old averagely in Korea so it could impact on the active participations of older people to find an opportunity to build up the new career or survive.

The model 2 shows to identify the impact of individual perception on entrepreneurial activities. As you see the result table, if individual has high self-efficacy, the level of entrepreneurial activity is high. As we see the definition of self-efficacy in many studies, self-efficacy is a person's belief in his/her capability to perform a given task(Bandura, 1977). So once they have a higher self-efficacy could be the factor to trigger entrepreneurial activities such as launching a new business or finding a new opportunities(Krueger & Brazeal, 1994).

When individuals have a role model of entrepreneurs around them, they show the higher involvement in entrepreneurial activities. In Van Auken et al.(2006)'s study, they found out that role models could enhance the desire to become an entrepreneur. As the author mentioned ealier, Lee & Baek(2012) show a positive correlation of role model and entrepreneurial intentions with Korean students data. Entrepreneurial individuals may have a strong confidence as an entrepreneurial based on their self-efficacy and role models.

To explain the finding of opportunity recognition in environment, the results illustrates that the perception of opportunity in the environment is not that strongly associated with entrepreneurial activities. With this result, the opportunities in the environment don't matter for individuals to do entrepreneurial activities. There was same result from the GEM Korea 2015 and 2016 report. Koreans have a tendency to take risks even if there are not many opportunities in the market. That is related to the fear of failure of Koreans. The GEM Korea 2015 and 2016 shows that the fear of failure of individuals in Korea is very low compared to other innovation driven countries. It could be related to the success rate of start-ups if they take too much risks to get into the market without opportunities.

In additions, there is very low opportunities for people to learn entrepreneurship in Korea based on the result of GEM Korea 2016 and 2016. Without opportunities and lack of entrepreneurship education, the entrepreneurship ecosystem might not work well. So that could be the attention part of entrepreneurship policy.

The model 4 in the result table explains that entrepreneurs' social legitimation is partially significant with entrepreneurial activities. Even if successful entrepreneurs are recognized as a good career option generally in the society, it doesn't impact the entrepreneurial activities. Also, even if lots of successful entrepreneurial activities of entrepreneurs. They perceive that media exposure of successful entrepreneurial actions. To promote entrepreneurial activities, the media policy could be considered to show the successful stories of entrepreneurs.

<figure 5=""></figure>	Logit	Regressions	on	Entrepreneurial	Activities
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	Model 1				Model 2		Model 3			Model 4		
	В	Wald	Exp(B)	В	Wald	Exp(B)	В	Wald	Exp(B)	В	Wald	Exp(B)
Demograph	nic and so	ocio-ecor	nomic char	acteristics								
Age	076	22.981	.926***	075	19.649	.928***	072	19.649	19.649	071	14.235	.932***
Gender (1)	.189	.490	1.208	.104	.129	1.110	.125	.129	.129	.207	.397	1.230
Household size	037	.114	.964	071	.388	.931	058	.388	.388	076	.356	.927
ndividual F	Perceptior	n in Soci	al Learning	g								
Self-efficacy				665	4.817	.514**	652	4.817	4.817	684	3.951	.505*
Role model				-1.145	13.524	.318***	-1.154	13.524	13.524	-1.319	13.982	.268***
Opportunity and Entrep				1		1	1					
Opportunity Perception							628			625	3.390	.535
Social Legi	timation i	n Entrep	reneurial A	Activities								
Career										300	.817	.741
Respect										330	.948	.719
Media										889	6.143	.411*
Constant	3.843	17.967	46.673***	4.514	20.853	91.296***	4.489	19.213	88.993	5.061	20.220	157.717
Model Chi-Square	27.562***			44.900***			47.732***			57.541***		
-2 Log	324.163			287.661			271.046			236.278		
Likelihood										1		

#### **IV. Conclusion and Limitations**

There have been lots of efforts to explore the factors which can impact entrepreneurial activities based on cognitive perspective. Most studies were focused on individual perceptions such as belief, values, self-efficacy, experience, and knowledge in this area. This research was trying to see the individual perceptions which were influenced by others or social-cultural factors. It was also a trial to use the general population derived from the widely acknowledged GEM National data. This paper shows that individuals who tried to do entrepreneurial activities are influenced by people who have been involved in start-up activities as their role models. The presence of start-up experienced role model in a community conveys a message to the other potential entrepreneurs. In addition, the high media exposure of successful CEO stories works as a driver of entrepreneurial activities. Even if the government policies do support entrepreneurs and small businesses, it is important for them to find good successful entrepreneurs and develop the stories in public media. Even if Koreans respect successful entrepreneurs or consider CEO as their career option in general, it doesn't impact the decision making for potential entrepreneurs' entrepreneurial actions.

Similar to other research results, self-efficacy turned out a good predictor of entrepreneurial activities. This supports Shane at al.(2003) argument that self-efficacy was probably the "single best predictor in the entire array of variables" to study the formation of entrepreneurial activity(Ahmad et al., 2014). The entrepreneurial opportunities perception from the environment indicates the effect of entrepreneurial activities. Usually, entrepreneurial opportunities are a series of market imperfections. This imperfection, entrepreneurial opportunities impacts on the formation of entrepreneurial activities. Current studies on entrepreneurial intentions and actions have consistent to the result of this study. Once people perceive opportunities in the market, they have a high tendency to try to do something new with the confidence of themselves.

Many papers used the data from undergraduates, graduate students to identify the entrepreneurial intention. It could be a contribution that this paper comprises of the sample from the general population derived from the widely acknowledge GEM National data. In addition, many researchers have been trying to identify the factors of entrepreneurial intention due to the limitation of potential entrepreneurs' tracking, but this research included people who actually have been involved in entrepreneurial activities. However, it is too small of a sample to talk about the general population's entrepreneurial activities. Future research employing an aggregated data from several years of GEM Korea will overcome the current research limitations.

#### REFERENCE

- Ahmad, S. Z., & Xavier, S. R.(2012). Entrepreneurial Environments and Growth: Evidence from Malaysia GEM Data. *Journal of Chinese Entrepreneurship*, 4(1), 50-69.
- Ahmad, S. Z., Xavier, Siri R., & Bakar Abdul R. A.(2014). Examining Entrepreneurial Intention through Cognitive Approach using Malaysia GEM Data. *Journal of Organizational Change Management*, 27(3), 449-464.
- Arenius, P., & Minniti, M.(2005). Perceptual Variables and Nascent Entrepreneurship. *Small Business Economics*, 24(3), 233-247.
- Arora., P., Haynie M. J., & Laurence, G. A.(2013). Counterfactual Thinking and Entrepreneurial Selfefficacy: The Moderating Role of Self-esteem and Dispositional Affect. *Entrepreneurship Theory and Practice*, 37(2), 359-385.

- Bandura, A.(1977). Social Learning Theory. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A.(2001). Social Cognitive Theory: An Agentic Perspective. Annual Review of Psychology, 52, 1-26,
- Baron, R. A.(2004). The Cognitive Perspective: A Valuable Tool for Answering Entrepreneurship's "Why" Questions. *Journal of Business Venturing*, 19(2), 221-239.
- Baron, R. A., & Markman, G. D.(1999). Cognitive Mechanisms: Potential Differences between Entrepreneurs and Non-entrepreneurs, in Reynolds, P.D. and Bygrave, W.D. (Eds). Frontiers of Entrepreneurship Research, Babson College, Wellesley, MA.
- Basow, S. & Howe, K.(1980). Role Model Influence: Effects of Sex and Sex-role Attitude in College students. *Psychology of Women Quarterly*, 4, 558–572.
- Biddle J. B., & Thomas E. J.(1966). Role Theory; Concepts and Research. New York: John Wiley & Sons.
- Bosma, N., Wennekers, S., & Amoros, J. E.(2012). *Global Entrepreneurship Monitor*. 2011 Extended Report: Entrepreneurs and Entrepreneurial Employees across the Globe.
- Boyd, N. G., & Vozikis, G. S.(1994). The Influence of Self-efficacy on the Development of Entrepreneurial Intentions and Actions. *Entrepreneurship Theory and Practice*, 18(4), 63-77.
- Carsrud, A., & Brannback, M.(2011). Entrepreneurial Motivations: What do We Still Need to Know?. *Journal of Small Business Management*, 49(1), 9-26.
- Chen, C. C., Greene, P. G., & Crick, A.(1998). Does Entrepreneurial Self-efficacy Distinguish Entrepreneurs from Managers?. *Journal of Business Venturing*, 13(4), 295-316.
- Cope, J.(2005). Toward a Dynamic Learning Perspective of Entrepreneurship. *Entrepreneurship Theory and Practice*. 29(4), 373–397.
- Corbett, A. C.(2007). Learning Asymmetries and the Discovery of Entrepreneurial Opportunities. *Journal of Business Venturing*, 22(1), 97–118.
- Davidsson, P.(1995). Culture, Structure and Regional Levels of Entrepreneurship. *Entrepreneurship and Regional Development*, 7(1), 41-62.
- Edelman, L., & Yli-Renko, H.(2010). The Impact of Environmental and Entrepreneurial Perceptions on Venture-creation Efforts: Bridging the Discovery and Creation Views of Entrepreneurship. *Entrepreneurship: Theory and Practice*, 34(5), 833–856.
- Gaglio, C. M., & Katz, J. A.(2001). The Psychological Basis of Opportunity Identification: Entrepreneurial Alertness. *Small Business Economics*, 16(2), 95-111.
- Hofstede, G.(1980). Culture's Consequences: International Differences in Work-Related Values. Beverly Hills, CA: Sage.
- Hofstede, G., & Hofstede, G. J.(2005). *Cultures and Organizations, Software of the Mind.* New York, NY: McGraw-Hill.
- Kirzner, I.(1973). *Competition and Entrepreneurship*. Chicago: University of Chicago Press.
- Krueger, N. F.(2003). The Cognitive Psychology of

Entrepreneurship, in Acs, Z.J. and Audretsch, D.B. (Eds), *Handbook of Entrepreneurship Research: An Interdisciplinary Survey and Introduction*. Kluwer, London, 105-140.

- Krueger, N. F., & Brazeal, D. V.(1994). Entrepreneurial Potential and Potential Entrepreneurs. *Entrepreneurship Theory and Practice*, 19(3), 91-104.
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L.(2000). Competing models of Entrepreneurial Intentions. *Journal of Business Venturing*, 15(5/6), 411-432.
- Lee, H. & Baek, M.(2012). Individual Characteristics on Entrepreneurial Intention: Examining the Moderating Role of Subjective Norm. *Journal of Entrepreneurship* and Venture Studies, 15(2), 65-84.
- Lee, H., & Kelley, D. J.(2012). Growth Aspirations as a Function of Entrepreneurial Perceptions of Opportunity and Improvement Motivation. *Asia Pacific Journal of Small Business*, 34(1), 1-15.
- Lent, R. W., Brown, S. D., & Hackett, G.(1994). Toward a Unifying Social Cognitive Theory of Career and Academic Interest, Choice and Performance. *Journal of Vocational Behavior*, 45, 79-122.
- Levie, J., & Autio, E.(2011). Regulatory Burden, Rule of Law, and Entry of Strategic Entrepreneurs: An International Panel Study. *Journal of Management Studies*, 48(6), 1392-1419.
- Mitchell, R. K., Busenitz, L. W., Lant, T., McDougall, P., Morse, E. A., & Smith, J. B.(2002). Toward a Theory of Entrepreneurial Cognition: Rethinking the People Side of Entrepreneurship Research. *Entrepreneurship Theory and Practice*, 27(2), 93–104.
- Mitchell, R., K., Smith, B., Seawright, K., & Morse, E.(2000). Cross-cultural Cognitions and the Venture Creation Decision. Academy of Management Journal, 43(5), 974-993.
- Mueller, S. L., Thomas, A. S., & Jaeger, A. M.(2002). National Entrepreneurial Potential: The Role of Culture, economic Development and Political History, in Hitt, M.A. and Cheng, J.L.C(Eds). Managing Transnational Firms: Resources, market entry and strategic alliances, 14, JAI Press, Amsterdam.
- Nystrom, K.(2012). Entrepreneurial Employees: Are They Different from Independent Entrepreneurs?. Swedish Entrepreneurship Forum.
- Palich, L. E., & Bagby, R.(1995). Using Cognitive Theory to Explain Entrepreneurial Risk-taking: Challenging Conventional Wisdom. *Journal of Business Venturing*, 10(6), 425-438.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. L., & Podsakoff, N. P.(2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88(5), 879-903.
- Scherer, R., Adams, J., & Wiebe, F.(1989a). Developing Entrepreneurial Behaviors: A Social Learning Theory Perspective. *Journal of Organizational Change Management*, 2(3), 16–28.

- Scherer, R., Adams, J., Carley, S., & Wiebe, F.(1989b). Role Model Performance Effects on Development of Entrepreneurial Career Preferences. *Entrepreneurship Theory and Practice*, 13(3), 53–71.
- Scott, M., & Twomey, D.(1988). The Long-term Supply of Entrepreneurs: Students' Career Aspirations in Relation to Entrepreneurship. *Journal of Small Business Management*, 26(4), 5–13.
- Shane, S.(2000). The Promise of Entrepreneurship Fild of Research, *Academy of Management Review*, 25(1), 217-226.
- Shane, S., Locke, E. A., & Collins, C. J.(2003). Entrepreneurial Motivation. *Human Resource Management Review*, 13(2), 257-279.
- Van Auken, H., Fry, F. L., & Stephens, P.(2006). The Influence of Role Models on Entrepreneurial Intentions. *Journal of Developmental Entrepreneurship*, 11(2), 157-167.
- Wood, R., & Bandura, A.(1989). Impact of Conceptions of Ability on Self-regulatory Mechanisms and Complex Decision Making. *Journal of Personality and Social Psychology*, 56(3), 407-415.
- Young, E., & Welsch, H.(1993). Major Development Elements in Entrepreneurial Development in Central Mexico. *Journal of Small Business Management*, 31(3), 80–85.

## 기업가적 활동 형성에 미치는 영향요인: 인지론적 접근\*

이 채 원\*\*

#### 국문요약

기업가정신 연구에서 "왜 어떤 사람들은 기업가가 되고, 어떤 사람은 기업가성향을 갖지 않는가?"라는 질문은 매우 중요한 연구주제이다. 그동안 많은 연구들은 기업가의 특성을 바탕으로 기업가적 의도와 행동을 설명하고자 하였으나 일관성 있는 연구결과를 얻어내지 못하였으며, 많은 비판을 받아 왔다. 이러한 비판은 인지론적 접근(Cognition Theory)을 통한 연구를 발전시키게 되었다. 즉, 어떤 사람이 기업가적 행동을 하는지는 어떤 특정한 자질의 문제가 아니라 기업가가 어떻게 인지를 하느냐에 달려 있다는 것이다. 본 연구에서는 2016년 GEM(Global Entrepreneurship Monitor) Korea 조사를 바탕으로 기업가적 행동(초기 기업가적 행동 - 창업을 하고자 준비하는 예비창업 자, 창업을 하여 42개월 미만의 초기 기업가를 대상으로 함)에 영향을 미치는 인지적 요소를 파악하고자 하였다. GEM조사는 크게 성인조 사와 전문가조사로 구분되며, 본 연구의 표본으로 사용한 성인조사는 우리나라 성인 2,000여명을 대상으로 하여 기업가정신에 대한 태도, 인지, 동기, 성장열망 등을 조사한 자료를 사용하였다.

기존의 인지론적 접근방법을 사용한 많은 연구들은 주로 연구 대상을 대학생, 대학원생들의 기업가적 의도 및 창업 의도로 설명하고자 하 였으며, 실제 기업가적 행동을 중심으로 한 연구는 많이 이루어지지 않았다. 또한 기업가적 과정에서 기업가의 인지는 단지 기업가 개인적 수준에서의 인지 즉, 자기 효능감(Self-Efficacy), 가치관, 태도적 특성뿐만이 아니다. 개인 수준에서의 인지요소들과 더불어 사회 문화적 환경으로부터 영향 받아 형성되는 지각(Perception)과 주변 사람들의 영향을 통해서 형성되는 지각 또한 기업가적 행동에 영향을 미치는 중요한 요소이다. 본 연구에서는 GEM 연구의 검증된 조사방법을 통해 선정된 우리나라를 대표하는 일반 성인 샘플을 대상으로 하여 로짓 회귀분석을 통해 기업가적 활동을 파악하고자 하였으며, 그동안 연구의 중요성에 비해 많이 다루어지지 않은 롤 모델에 대한 인식, 비즈니 스 환경에서의 기회에 대한 인식, 사회적으로 얼마나 기업가에 대해 논의가 이루어지는지와 같은 사회적 정당성에 대한 인식이 기업가적 활동에 어떤 영향을 미치는지를 살펴보았다. 사람들은 일반적으로 자기효능감이 높은 경우에 기업가적 활동 참여에 더욱 적극성을 보이며, 주변에 기업가로서의 롤 모델이 있는 경우 더 적극적인 기업가적 활동을 한다는 것이다. 다만 사회적으로 기업가가 좋은 경력의 대안으로 인지된다고 하더라도 개인들의 기업가적 활동에 영향을 미치지는 못하며, 또한 사회적으로 기업가가 존경받는 위치에 있다는 것도 기업가 적 활동을 촉진시키는데 영향을 미치지 못하는 것으로 나타났다. 다만 미디어에서 성공 받는 기업인이 많이 노출 되는 것은 기업가적 활동 을 촉진시키는데 영향을 미치지 못하는 것으로 나타났다.

본 논문은 기업가적 의도가 기업가적 활동으로 연결되기 위해서 사회적으로 어떤 조력이 필요한지 정책적 시사점을 제공할 뿐만 아니라 기업가정신의 인지론적 접근방법에 대한 이론적 발전에도 기여할 것으로 본다.

핵심주제어; 기업가정신, 인지론적 접근방법, 기업가적 의도, 기업가적 행동, 자기효능감, 롤 모델

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