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THE COMPARATIVE STUDY OF ATTITUDES TOWARD ENTREPRENEURIAL INTENTION BETWEEN ASEAN AND EUROPE: AN ANALYSIS USING GEM DATA

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Abstract: *This paper uses data from the Global Entrepreneurship Monitor (GEM) to investigate the difference of attitudes towards entrepreneurial intention (EI). EI is generally assumed to be the single most relevant predictor of entrepreneurial behavior. The aim of this paper is to examine a range of attitudes effect on individual's intent to start a new venture. A cross-cultural comparison between Asia and Europe is used to further investigate the possible differences between potential entrepreneurs from these distinct national contexts. The empirical analysis includes a GEM data set of 10 countries (n = 10,306) which was collected in 2013. Logistic regression is used to investigate the effect of individual's attitudes on EI. Independent variables include individual's perceived capabilities, the ability to recognize business opportunities, entrepreneurial network, risk perceptions as well as a range of socio-cultural attitudes. Moreover, a cross-cultural comparison of the model is conducted including six ASEAN countries (Malaysia, Indonesia, Philippines, Singapore, Vietnam and Thailand) and four European countries (Spain, Sweden, Germany, and the United Kingdom).*

The findings support the relationship between individual's attitudes and their entrepreneurial intention. Individual's capability, opportunity recognition, networks and a range of socio cultural perceptions all influence EI significantly. The impact of media attention on entrepreneurship and was found to influence EI in ASEAN, but not in Europe. On the one hand, Fear of failure was found to influence EI in Europe, but not in ASEAN.

The paper empirically tests attitudes toward Entrepreneurial Intention between ASEAN and Europe. Interestingly, fear of failure was found to have no significant effect in ASEAN, and the impact of media attention on entrepreneurship and was found to influence EI in Europe. Moreover, the resistance of ASEAN entrepreneurs to the otherwise high rates of fear of failure and high impact of media attention are proposed as independent variables to explain the relatively high rates of entrepreneurial activity in ASEAN as reported by GEM.

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The paper utilizes a sample of 10,306 individuals in 10 countries. A range of attitudes was found to significantly influence entrepreneurial intention. Many of these perceptions, such as the impact of media attention on entrepreneurship can be manipulated by government policy. The paper also suggests strategies by which Asian economies can benefit from their apparent high impact of media attention on entrepreneurship.

Keywords: *Entrepreneurial intention, Attitude, GEM*

INTRODUCTION

EI is commonly believed to be the single most relevant predictor of entrepreneurial behavior. Empirical researches show that becoming an entrepreneur is a risky decision since they need to cope with an uncertainty. Moreover, more risk averse persons are less likely to become entrepreneurs. However, risk perception is not an only one psychological variable influencing the decision to become an entrepreneur. Gifford (2003) claimed that risk perception differ from person to person, and risk perception connected with certain decisions is lower when people have more experience, higher capabilities or more knowledge in their self employment field. Based on the theory of planned behavior (TPB), individual behavior is driven by behavioral intentions where behavioral intentions are a function of an individual's attitude toward the behavior, subjective norms surrounding the performance of the behavior, and individual's perceived behavioral control (Ajzen, 1991). Krueger & Carsrud (1993) applied the Theory of Planned Behavior (TPB) developed by Ajzen in 1991 to explain entrepreneurial intention. Krueger & Carsrud (1993) stated that entrepreneurial intention is influenced by three perception factors; namely, personal attraction to entrepreneurial activity, Perceived subjective norms, and Perceived behavioral control or self-efficacy.

According to Reynolds et al. (2005), Global Entrepreneurship Monitor (GEM) includes some cognitive perception items which are able to be used to analyze entrepreneurial intention (EI). The purpose of this paper is to investigate the influence of perceptions toward entrepreneurial intention through a comparative study between European and ASEAN countries.

LITERATURE REVIEW

Entrepreneurial Intention

The previous researches concerning with the entrepreneurial intention have focused on the psychological and social factor influencing and driving people to become entrepreneurs. There have been the previous studies to show the evidences of reasons people choosing to become entrepreneurs rather than employees such as desires of freedom, self controlling, and potential affluent (Jennings & Zeithaml, 1983 cited in Fernandez et al., 2009). Intention is the precedent variable

of behavior (Bagozzi et al., 1989 cited in Chuttur, 2009). In entrepreneurship field, Entrepreneurial Intention defined as the search for information that can be used to help fulfil the goal of venture creation (Krueger et al., 2000). Guerrero et. al. (2008) defined entrepreneurial intention as a state of mind that people wish to create a new firm or a new value driver inside existing organizations. Starting a new business is a process with a planning rather than impulsive decision making. Krueger et al. (2000) also stated that a person who have a potential to start a new business, or sees a good business opportunity may choose not to start his business if he lack of an entrepreneurial intention. Entrepreneurial intention is influenced by three perception factors; namely, personal attraction to entrepreneurial activity, Perceived subjective norms, and Perceived behavioral control or self-efficacy (Krueger & Carsrud, 1993).

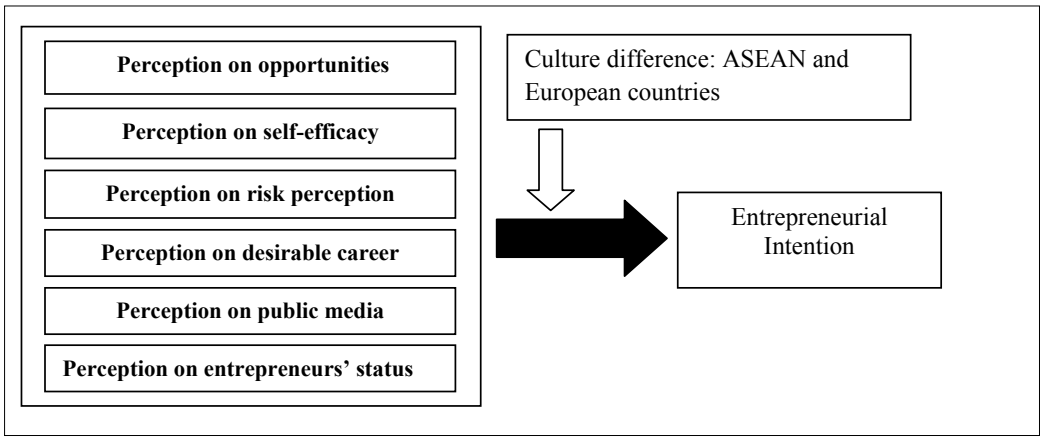
The relationship between entrepreneurship and risk perception has received some attention from researchers who have considered the relationship between entrepreneurial decisions and risk aversion. Risk perception or fear of failure is an important variable to have a negative influence to start a new business. A reduced perception of the likelihood of failure should increase the probability that an individual will start a new business (Arenius & Minniti, 2005). Risk perception is also an important factor influencing entrepreneurial intention (Simon et al., 2000). According to Wagner (2007), there is a direct relationship between risk perception and entrepreneurial intention. Fear of failure is recognized as one of the barriers to pursue entrepreneurship (Luthje & Franke, 2003 cited in Shinnar, Giacomin, & Janssen: 2012). Weber & Milliman (1997) cited in Arenius & Minniti (2005) stated that reducing fear of failure's perception should increase the probability that an individual will start a new business.

Culture and Entrepreneurship

Previous research suggests that cultural context can shape entrepreneurial attitudes and intentions (Shinnar, Giacomin & Janssen, 2012). Culture shapes individual behavior. Thornton, Ribeiro-Soriano & Urbano (2011) cited in Shinnar, Giacomin & Janssen (2012) state that cultural factor is one of factors influencing individual's career choice to be an entrepreneur and create a new business. Liñán & Chen (2009) stated that Cross-cultural studies are needed for the effect of different cultures and values on the entrepreneurial intention to be better understood. According to Hofstede (1980), Hofstede's four dimensions of individualism (IDV), uncertainty avoidance (UA), power distance (PD), and masculinity (MAS) are proposed to cluster Nations based on the difference of culture. Several researchers call for an examination of entrepreneurial intentions across different nations and cultures.

In this study, the author develops the conceptual framework and research questions as the following; (1) whether a range of cognitive perceptions and their respective effect on individual's intent to start a new venture differ in Asian and European countries. The predictors or independent variables in this study are individual's cognitive perceptions; whereas, entrepreneurial intention is criterion variable or dependent variable. The conceptual framework is showed as the figure 1.

Figure 1: The conceptual framework of the study



Model Development

This study tries to identify significant variables that assist estimate the probability of an individual expressing intention to start a business within three years (entrepreneurial intention). The specific variables used to measure concepts developed in the theory section are the following

- **Dependent variable:** Entrepreneurial intention: In GEM questionnaire in Adult Population Survey (APS) section, the question "Whether they intend to start a business within 3 years? (0=No, 1=Yes)" is used to represent the entrepreneurial intention construct in the conceptual model.
- **Independent variables**
  - *Perception on opportunities in doing new business:* The question "Would be good opportunities to start a firm in the area where you live in the six months? (0=No, 1=Yes)" is used to measure the perception on opportunities construct.

- *Perception on self efficacy (Independent variable):* The question "Do you believe you have the required skill and knowledge to start a business? (0=No, 1=Yes)" is used to measure the perception on self efficacy.
- *Perception on fear of failure:* The question "Whether fear of failure would prevent you from setting up a business or not? (0=No, 1=Yes)" is used to measure the perception on fear of failure.
- *Entrepreneurial network:* The question "Whether you personally knew someone who had started a business in the last two years? (0=No, 1=Yes)" is used to measure the entrepreneurial network.

Control Variables

Age and gender are two control variables in order to clarify the relationship between entrepreneurial intention and a range of cognitive perceptions.

The binary logistic regression model is a logistic regression that applies to dichotomous. Binary logistic regression is used to predict and model binary problems in many fields. The reason logistic regression is preferred by many researchers is that it allows one to see the effect every variable has on the model. The binary logistic regression model estimates the probability that an individual belongs to a certain group (dependent=1), or not (independent=0). It also identifies the most important variables explaining the differences in both groups. Additionally, the models do not make assumptions about the statistical distribution of the variables (Greene, 2003). In this study, the use of the binary logistic regression model would be reasonable on three conditions; namely, the dependent and independent variables are dichotomous, and the effect of a certain level of the independent variables on the probability that the studied event is present can be measured.

Research Methodology

The sample in this study was obtained from the Global Entrepreneurship Monitor database. According to Reynolds et al. (2005), GEM questionnaires consist of some cognitive items that may allow analyzing entrepreneurial intentions. The paper utilizes a sample of 10,306 individuals in 10 countries, six ASEAN (Malaysia, Indonesia, Philippines, Singapore, Vietnam and Thailand) and four European countries (Spain, Sweden, Germany, and the United Kingdom). The data was collected in 2013.

Results

Entrepreneurial intention is measured by the question of intention to start a business within 3 years (Yes/No) and the sample distribution by region. (Table 1).

Table 1
Sample Distribution by Region

	Entrepreneurial intent		
	NO	*YES*	*TOTAL*
Europe	4,070	953	5,023
ASEAN	4,601	682	5,283
Total	**8,671**	**1,635**	**10,306**

For testing the influence of a range of cognitive perceptions and their respective effect on individual's intent to start a new venture, we examine a multicollinearity problem. The Variance Inflation Factor (VIF) is used to measure the impact of multicollinearity among variables in a logistic regression model. According to Allison (1999), the value of VIF less than 2.5 is regarded as indicating no multicollinearitry in the model. The VIF of the variables range from 1.023 to 1.075. Therefore, there is no multicollinearity problem and the data is suitable for further analysis.

Table 2 represents the series of the binary logistic regression analysis in both European and ASEAN countries. Starting by includes only control variables in Model 1, Model 2 includes three more variables: opportunity recognition, entrepreneurs' capabilities, and entrepreneurial network. Model 3 adds up the risk perception. Model 4 contains three more variables; desirable career, public media and respect.

Table 2
Logistic Regression on Entrepreneurial Intention

	Model 1		*Model 2*		*Model 3*		*Model 4*	
	B	*EXP(B)*	*B*	*EXP(B)*	*B*	*EXP(B)*	*B*	*EXP(B)*
Constant	.298***	1.323	-.695***	.458	-.657***	.496	-1.017***	.362
Gender	-.358***	.674	-.229***	.778	-.219***	.778	-.229***	.761
Age	-.034***	.965	-.031***	.952	-.029***	.945	-.032***	.954
Opportunity Recognition			.521***	1.658	.575***	1.721	.535***	1.707
Capabilities			.949***	2.514	.919***	2.414	.916***	2.498
Network			.453***	1.621	.487***	1.592	.481***	1.618
Risk Perception					-.089*	.903	-.091**	.906
Desirable Career							.385***	1.412
Public Media							.276***	1.345
Status							-.126**	.856

Significance levels based on Wald statistics: *** significant level p less than 0.001; ** significant level p less than 0.01; * significant level p less than 0.05.

In table 3, the Nagelkerke pseudo R squared indicates how well the dependent variable can be explained by independent variables in the model. Nagelkerke pseudo R squared improves when the variables are added to the model, and the percentage of correct prediction ranges from 79.7 to 84.3.

Table 3
Goodness-of-it statistics

	Model 1	*Model 2*	*Model 3*	*Model 4*
Omnibus Tests of Model Coefficients (Significance level)	0.000	0.000	0.000	0.000
Cox and Snell pseudo R-squared	0.041	0.089	0.093	0.104
Nagelkerke pseudo R squared	0.051	0.148	0.149	0.188
Percentage correct	81.4	81.9	82.1	82.5

* A cut-off value of 0.05

Model 1 is the basic model including control variables (gender and age). The result shows that age and gender significantly contribute to explain EI. According to the odd-ratios, females are 32.6% less likely to males to show the entrepreneurial intention. Moreover, age is associated with lower entrepreneurial intentions since every additional year of age of respondents is associated with decreasing probability to show entrepreneurial intention.

Model 2 includes three cognitive variables; opportunity recognition, perceived capabilities, and entrepreneurial network. Model 3 includes fear of failure into the model. Opportunity recognition, capabilities and entrepreneurial network are significantly associated with higher entrepreneurial intentions with odd ratio 1.658, 2.514, and 1.621, respectively. People who have fear of failure doing business are 9.7%. They are less likely to have an intention to become entrepreneurs.

Finally, three socio-cultural perceptions variables are added to Model 4. The result represents that those desirable career, public media, and good status are significantly affect entrepreneurial intentions.

Table 4
Regional Logistic Regression on Entrepreneurial Intent

	Europe		*ASEAN*	
	B	*EXP(B)*	*B*	*EXP(B)*
Constant	-.301*	.731	-1.596***	.196
Gender	-.295***	.752	-.175***	.829

Age	-.048***	.941	-.018***	.978
Opportunity Recognition	.511***	1.728	.559***	1.776
Capabilities	1.231***	3.125	.837***	2.308
Network	.552***	1.747	.381***	1.477
Risk Perception	-.289***	.732	-.021	.989
DesirableCareer	.287***	1.321	.419***	1.515
Public Media	.011	1.015	.342***	1.412
Status	-.182*	.831	-.074	.925

*** significant level p less than 0.001; ** significant level p less than 0.01; * significant level p less than 0.05

Table 5
Goodness-of-it statistics

	Europe	*ASEAN*
Omnibus Tests of Model Coefficients (Significance level)	0.000	0.000
Cox and Snell pseudo R-squared	0.134	0.095
Nagelkerke pseudo R squared	0.209	0.178
Percentage correct	81.5	86.2

*A cut-off value of 0.05

The logistic regression was performed to test for the existence of significant differences between European and ASEAN countries. Overall, the model is significant, according to the Omnibus test and the predicted correct percentages are 81.5% in European and 86.2% in ASEAN, respectively (Table 5). According to the results of logistic regression, risk perception significantly affects entrepreneurial intention only European counties but not significant in ASEAN countries. For the socio-cultural perceptions, public media is a significant factor for only European countries. Entrepreneurial status is a significant factor for only ASEAN countries.

CONCLUSION

The findings support the relationship between individual's attitudes and their entrepreneurial intention. Individual's capability, opportunity recognition, networks and a range of socio cultural perceptions all influence EI significantly. The impact of media attention on entrepreneurship and was found to influence EI

in ASEAN, but not in Europe. Fear of failure was found to influence EI in Europe, but not in ASEAN.

According to the result of this study, in order to enhance entrepreneurial activities in ASEAN countries, more public media about successful entrepreneurs or entrepreneurial and business management programmes can influence people to become more entrepreneurs. Therefore, Policy makers can push more effort on media as the other strategy to enhance entrepreneurial activity in their countries. On the one hand, fear of failure is not significantly effect on entrepreneurial intention in ASEAN. It can be inferred that because in ASEAN, the number of necessity driven entrepreneurs is greater than opportunity driven entrepreneurs. ASEAN people have no choice to work other jobs such as employees in corporate firms as a result of lacking formal education and professional degrees. Therefore, policy makers should provide more knowledge about business start up and Management skills in order to turn necessity driven to be opportunity driven entrepreneurs.

In order to enhance entrepreneurial societies, Integrated Marketing Communication (IMC) and Public Media should be considered as the one of important tools to enhance entrepreneurial intention.

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