THE IMPACT OF ENTREPRENEURIAL COMPETENCIES ON ENTREPRENEURSHIP INTENTION: THE CASE AMONG BUSINESS STUDENTS IN DANANG

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ABSTRACT

Many previous studies evaluated factors influencing entrepreneurial intention including psychological factors, social economic factors, family circumstance, etc. In contrast, there are very few studies examine the relationship between entrepreneurial competencies and entrepreneurial intention. Thus, this paper aim to identify the list of competencies that impact entrepreneurial intention among Southeast Asian students who influenced by Confucianism. The conceptual model was established based on the list of previous studies in this field with a sample size of 1000 students who study in University of Economics – The University of Danang. The main finding indicated that (i) from eleven independent variables listed from previous studies, only six independent variables remain; (ii) there are no evidences to prove that risk management and tenacity/ perseverance were associated with entrepreneurship intention. These results have important values in developing entrepreneurship training programs to promote students' entrepreneurial intention among Southeast Asian Countries.

Keywords: entrepreneurial competencies, entrepreneurial intention, Confucianism, EFA, SEM.

1. Introduction

Vietnam is facing the fouth Covid-19 wave since the outbreak of the pandemic in the beginning of 2020. The negative impacts caused by this wave to the Vietnamese economy is really dire. Currently, Vietnam's GDP is expected to growth about 4.8 percent in 2021, which is 2.0 percent lower than the prediction made by the World Bank Group in December 2020 (World Bank, 2021). Also, retail sales in July fell by 19.8 percent compared to the same period last year (World Bank, 2021). Especially, economic regions in southern Vietnam recorded heavy losses in industrial production including Ben Tre province, which decreased by 60.1%; Dong Thap decreased by 59.1%; HCMC decreased by 49.2%; Vinh Long decreased by 41.5%; Tay Ninh decreased by 36.9, etc (Nguyen Nga, 2021). The Covid-19 pandemic has had a lot of impacts on the economy and entrepreneurs also absorb the hardships during this epidemic period. However, there are startups that find opportunities in times of upheaval. In the past, big companies had the advantage of scale, so they were very strong but during the pandemic, any company that is able to be lean and thrifty will has a competitive advantage (Pham Huu, 2021). Besides, the Covid-19 epidemic has partly changed consumer habits as they use more online services and pay more without cash (Pham Huu, 2021). These are common opportunities for entrepreneurs to develop creative business ideas. Indeed, entrepreneurship plays an important role in economic development and job creation for the workforce as well as affects many macroeconomic indicators such as gross domestic product (GDP), per capita income (PCI), unemployment rate, etc (Moica et al., 2012). Before the pandemic, the number of Vietnamese enterprises operating across the country has reached 714,755 enterprises and the contribution of new enterprises, especially small and medium enterprises (SMEs) accounts for nearly 50% of GDP and attracts nearly 90% of the new labor force in Vietnam (Le Quang, 2018; GSO, 2019). Thus, promoting entrepreneurial activities is a good solution to create jobs, increase the dynamism of the economy and reduce the unemployment rate.

One of the most important prerequisites for this success is an entrepreneurial spirit. Therefore, developing an entrepreneurial spirit as well as acknowledging the contributions of entrepreneurs is essential. Due to its essential, many previous studies focus on factors influencing entrepreneurial intention. Although entrepreneurial intention is not a completely new topic, it has been continuously a hot topic in social and research communities around the world since the 1990s (Gibb, 1987). Previous studies have done empirical

research on factors influencing entrepreneurial intention focusing on different topics such as perceived desirability (Krueger et al., 2000), attitude towards entrepreneurship (Ajzen, 1991; Krueger et al., 2000), family circumstances (Prodan and Drnovsek, 2010); demographic factors (Gibb, 1987; Krueger and Carsrud, 1993; Almeida et al., 2019). However, these studies still address the limited role and degree of the impact of entrepreneurial competencies on entrepreneurial intention, especially Southeast Asian students. Indeed, Vietnam, a Southeast Asia country, is still influenced by Confucian ideology in many aspects of Vietnamese life and activities, especially Vietnam's education system (Nguyen Hien Luong, 2015), so waking the entrepreneurial spirit among Vietnamese students has not really been noticed. In recent years, the Government of Vietnam has been constantly interested in building an entrepreneurial ecosystem in Vietnam and especially interested in the entrepreneurial movement among students, the future generation. Specifically, in October 2017, the Prime Minister issued Decision No. 1665/QĐ-TTg approving the project "approving the Scheme for Supporting Students' Start-ups to 2025". Which entrepreneurial competencies would have an impact on student's entrepreneurial intention? Entrepreneurial competencies are a set of knowledge, abilities, and skills that an individual should have in order to be a successful and competitive entrepreneur (Zahra, 1993). These competencies are similar to entrepreneurship characteristics and can be learned or gained through training and practice (Volery et al., 2015). Previous studies proposed several definitions and classification of entrepreneurial competencies in promoting the entrepreneurial process (Chell, 2013; Tehseen and Ramayah, 2015; Okolie et al., 2021). However, these classifications are inconsistent and not concurrence among researchers in the field. Therefore, this study aims to find list of entrepreneurial competencies affecting entrepreneurial intention among Southeast Asian students who studying in the business programs.

2. Literature review

2.1. Entrepreneurship Intention

Entrepreneurship intention (EI) can be defined as an individual's intention to start a business following by a chain of activities that an individual commits to find, pursue business opportunities, and build a potential business plan from these opportunities, as well as gather the necessary resources and stakeholders to create his/her own business (Miranda et al., 2017). Understanding entrepreneurship intention is the key that help researchers having better understand the business creation process (Krueger and Carsrud, 1993; Krueger et al., 2000; Kolvereid, 2016). In psychological studies, an individual behavior, which is somtime difficult to observe, can be predicted by his or her intention (Krueger et al., 2000). Indeed, EI is a closest predictor in showing an individual's decision to become an entrepreneur or an individual's level of preparation (Bird, 1988). In the case that an individual may have all the resources to start a business, if he or she lacks of EI, that person would not progress toward converting these resources into a business venture (Krueger et al., 2000).

2.2. Entrepreneurial competencies

Entrepreneurial competencies (EC) are a set of knowledge, abilities, and skills that an individual should have in order to be a successful and competitive entrepreneur (Zahra, 1993). These competencies are similar to entrepreneurship characteristics and can be learned or gained through training and practice (Volery et al., 2015). According to previous studies, EC can be divided into eleven difference competencies including opportunity recognition, exploitation of opportunities, opportunity assessment, risk management, tenacity/perseverance, strategic competencies, value creation through innovation, management competencies, previous knowledge and experience, human resources management, and social competencies (Priyanto and Sandjojo, 2005; Man et al., 2008; Morris et al., 2013). These competencies and authors' hypotheses will be described in the following section.

2.2.1. Opportunity recognition and exploitation of opportunities

Opportunity recognition (OR) is an individual ability to recognize new market potential, have a vision for a new venture, and develop effective strategies transforming that vision to real business activities (Shane and Eckhardt, 2003; Santos and Eisenhardt, 2005). While, exploitation of opportunities is an individual ability to generate business ideas and implement business strategies (Silveyra et al., 2021). In addition, OR can be discovered or created through six activities including being alert, searching, gathering information,

communicating, problem-solving, and evaluating (Kirzner, 1997; Alvarez and Barney, 2007; Kuckertz et al., 2017; Wei et al., 2019). For most business programs, these abilities are core outcomes that students need to have to analyze and identify market demand (Okolie et al., 2021). Therefore, the authors expect positive correlations between entrepreneurship intention and both opportunity recognition as well as exploitation of opportunities competence.

Hypothesis 1: Opportunity recognition competence has a positive relationship toward entrepreneurship intention;

Hypothesis 2: Exploitation of opportunities competence has a positive relationship toward entrepreneurship intention.

2.2.2. Opportunity assessment and risk management

Opportunity assessment (OA) is a process of decision making where an entrepreneur determines whether or not continuing to pursue a business opportunity (Smith et al., 2010). OA focuses on assessing the opportunity to make an accurate decision of whether accept or forgo the process of business creation (Okolie et al., 2021). In detail, this competence helps entrepreneurs assess the outcome economy from the value of the resource input (Ardichvili et al., 2003). This competence is important for entrepreneurs because it helps them distinguish between business ideas and business opportunities as well as evaluate wherether or not those opportunities are worth developing (Smith et al., 2010). In addition, understanding risk is important to entrepreneurs as it can help in reducing business failures (Okolie et al., 2021). Previous studies refer risk as the probability of loss time the amount of loss to a business (Mitchell, 1995). Indeed, entrepreneurs who have compentence to manage risk can improve the probability of running a successful business (Mamai and Yinghua, 2017). In addition, an individual who can recognize business opportunities are often optimistics about the his or her willingness to take on those business risks (Okolie et al., 2021). Therefore, the authors expect a positive correlation between entrepreneurship intention and both opportunity assessment as well as risk management competence.

Hypothesis 3: Opportunity assessment competence has a positive relationship toward entrepreneurship intention;

Hypothesis 4: Risk management competence has a positive relationship toward entrepreneurship intention.

2.2.3. Tenacity/Perseverance

Tenacity/perseverance (TP) refers to a personal characteristic that involves constant actions even facing with challenges (Baum and Locke, 2004). This competence can help entrepreneurs continuously faced with obstacles when establishing their business (Scotter and Garg, 2019). An individual who has higher tenacity tend to take higher risks than their mates. This competence also can show the level of readiness of an individual who want to challenge himself and get higher reward in the return (Tadajewski and Jones, 2017; Scotter and Garg, 2019; Zeng and Ouyang, 2020). Therefore, the authors expect a positive correlation between entrepreneurship intention and tenacity/perseverance competence.

Hypothesis 5: Tenacity/perseverance competence has a positive relationship toward entrepreneurship intention.

2.2.4. Value creation through innovation

An innovation could be “an implementation of a new product or process (good or service) or its significantly improved version, a new marketing method, or a new organizational method in business practices, workplace organization or external relations” (Santos et al., 2019, p.930). This competence is a key in creating business competitiveness and an individual can perceived business ideas and opportunities through this competence (Trott, 2005; Santos et al., 2019). Along these lines, the authors expect that value creation through innovation competence can impact entrepreneurship intention.

Hypothesis 6: Value creation through innovation competence has a positive relationship toward entrepreneurship intention.

2.2.5. Management and business competencies

Management and business competencies reflect the capacity of an entrepreneur in developing a strategic vision to run a successful company (Ahmad et al., 2010; Bamiatzi et al., 20015). These competencies are individuals' abilities in developing effective management systems that are needed to operate his or her business in the long run (Ahmad et al., 2010; Mitchelmore and Rowley , 2013). Previous studies state that management and business competencies constructed from three main competencies including strategic competencies, management competencies, previous knowledge and experience (Winterton, 2001; Onstenk, 2003; Man and Lau, 2005; Wu, 2009; Ahmad et al., 2010; Mitchelmore and Rowley, 2010). Therefore, the authors expect a positive relationship between entrepreneurship intention and management and business competences.

Hypothesis 7: Strategic competence has a positive relationship toward entrepreneurship intention;

Hypothesis 8: Management competence has a positive relationship toward entrepreneurship intention;

Hypothesis 9: Previous knowledge and experience competence has a positive relationship toward entrepreneurship intention.

2.2.6. Human resources and social competencies

Human resource competencies refer to individual's abilities to work, understand, and motivate his or her colleague (Chandler and Jansen, 1992). These competencies are based on managing the interrelationship between individual or individual-group, and focus on human resourse skills including motivation, recruitment, leadership, etc (Mitchelmore and Rowley, 2010; Silveyra et al., 2021). Beside, social competencies refer to an individual's social experiences and skills associated to the effective communication with other including those that allow an efficient interaction between individual or individual-group (Rathna and Vijaya, 2009). By improving these skills, the authors expect an increasing in entrepreneurship intention.

Hypothesis 10: Human resources management has a positive relationship toward entrepreneurship intention;

Hypothesis 11: Social competencies has a positive relationship toward entrepreneurship intention.

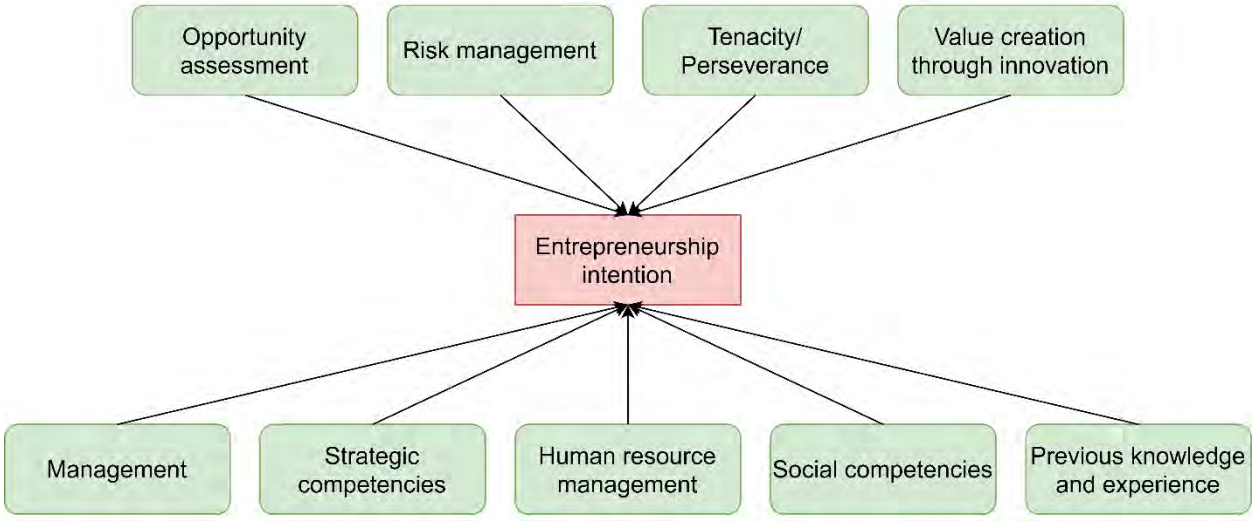

Figure 1. Conceptual model

3. Methodology

The final list of items for latent variable were identified from synthesizing previous studies and shown in Table 1. These items were then used to prepare a survey questionnaire for data collection. The questionnaire consists of an introduction with personal information questions. Next, the respondent was asked to rate 50 statements (Table 1) on a 5-point Likert scale (Likert-1 totally disagree, and Likert-5 totally agree). The survey took place at University of Economics, a member of the University of Danang – one of the top leading business and economics universities in Vietnam. The authors decided to use using the purposive sampling method as students studying in this university meet the requirement of diversity that the students are come from many provinces and cities in Vietnam. This study was conducted among one thousand students, which represent 5%

of total students in University of Economics, in 2nd semester of the academic year 2020-2021. The data would be collected by using Google survey and analyzed using quantitative approaches including exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and structural equation modeling analysis (SEM).

Table 1. Items of entrepreneurial competencies that influencing entrepreneurial intention

Factor	Code	Items	Source
Opportunity Recognition	OR1	I am always alert to business opportunities	Ozgen and Baron, 2007
	OR2	I search systematically for business opportunities	
	OR3	I regularly scan the environment for business opportunities	
	OR4	I accurately perceive unmet consumer needs	Silveyra, 2021
	OR5	One of my greatest strengths is identifying goods and services people want	
Exploitation of opportunities	OE1	I am capable of generating creative business ideas	Bamiatzi et al., 2015
	OE2	I envision taking advantage of opportunities	
	OE3	I am capable of formulating and implementing strategies	
Opportunity Assessment	OS1	I have an extraordinary ability to smell profitable opportunities	Tang et al., 2010
	OS2	I can distinguish between profitable opportunities and not so profitable opportunities	
	OS3	When facing multiple opportunities, I am able to select the good ones	
Risk Management	RM1	I can avoid risks of a business	Okolie, 2021
	RM2	I can identify the possible risks of a business	
	RM3	I can take positive steps to reduce or mitigate risks in a business	
Tenacity/ Perseverance	TE1	Setbacks don't discourage me	Duckworth and Quinn, 2009
	TE2	I am a hard worker	
	TE3	I finish whatever I begin	
Value Creation through Innovation	IN1	New business ideas often come to me when directly observing how people interact with products and services	Dyer et al., 2008
	IN2	By paying attention to everyday experiences, I often get new business ideas	
	IN3	I have a continuous flow of new business ideas that comes through observing the world	
Strategic competencies	STR1	I am able to develop and establish longer term directions for the firm, e.g. on the business scale, objetctives, goals or projects	Silveyra, 2021
	STR2	I am able to determine long-term issues, problems, or opportunities	
	STR3	I am capable of monitoring progress toward strategic goals	
	STR4	I am able to determine strategic actions by weighing costs and benefits	

Management competencies	MA1	Manage marketing and sales	Bamiatzi et al., 2015
	MA2	Manage the financials	
	MA3	Develop operational systems	
	MA4	Ability to use technology	
	MA5	Manage the business	
	MA6	Acquire of appropriate resources	
Previous knowledge and experience	KN1	I have some sort of previous entrepreneurial experiences	Silveyra, 2021
	KN2	I am familiar with a certain industry	
	KN3	I am familiar with the market	
	KN4	I have previous experience managing a business am familiar with the market	
Human resource management	HR1	Employee development	Mitchelmore and Rowley, 2013
	HR2	Managing employee performance	
	HR3	Human relation management skills	
	HR4	Employee relations	
Social competencies	SCO1	I'm really good at negotiating with others	Silveyra, 2021
	SCO2	I'm really good interacting with others	
	SCO3	I'm really good at resolving disputes among others	
	SCO4	I'm really good at understand what others mean by their words and actions	
	SCO5	I'm really good at verbally communicate with others effectively	
	SCO6	I'm really good at developing long-term trusting relationships with others	
Entrepreneurhip intention	EI1	I will make every effort to start and run my own firm	Jena, 2020; Barral et al., 2018
	EI2	My professional goal is to become an entrepreneur	
	EI3	I have the intention to start a firm some day	
	EI4	I am ready to do anything to be an entrepreneur	
	EI5	I am determined to create a firm in the future	
	EI6	I have very seriously thought of starting a firm	

4. Results

The data from 1000 respondents were collected from April 2021 to May 2021. After data cleaning, the authors retained survey data from 877 respondents in the final analysis (Table 2), in which 660 from female students (75.26 percent), followed by 217 male student (24.75 percent). In term of family location, 375 respondents are from urban area (42.76 percent), and 503 respondents are from rual area (57.24 percent). All respondents study in field related to business and finance. Most of respondents have already finished the fundamental business courses such as introduction to business, introduction to marketing, management, etc.

Table 2. Descriptive statistics

Gender		**Family location**		**Major**		**Year**	
Male	217	Urban	374	Business administration	523	Freshman	21
				International business	13	Sophomore	404
Female	660	Rural	503	E Commerce	52	Junior	168
				Finance	246	Senior	256
				Other	43	Graduate	28
Total	**877**	**Total**	**877**	**Total**	**877**	**Total**	**877**

In the beginning of the analysis process, the authors conducted factor and reliability analyses with Cronbach's alpha test to check the internal consistency for both dependent variable (EI) and independent variables (OR, OE, OS, RM, TE, IN, STR, MA, KN, HR, SCO). Then, the authors conducted exploratory factor analysis (EFA) with varimax rotation and the results are shown in Table 3. EFA was used to define the factor structure based on the answers which correspond to attributes. The item list including OR4, OR5, OE1, OE2, OS2, OS3, STR1, MA4 were discarded due to the failure to meet the factor loading value's condition. The Kaiser-Meyer-Olkin (KMO) and Bartlett test results show that all structures are eligible for exploratory factor analysis, with their KMO value more than 80 percent. The total explained variance is ranked at a quite high level of more than 60 percent compared to the proposed threshold of 60 percent (Hinkin, 2005). Therefore, the EFA results met the reliability requirements and demonstrated high internal consistency (Hair et al., 2014). The result shows that from eleven independent variables listed in the literature review, the EFA results showed a final of six independent variables including relationship management (combination of HR and SOC), strategic management (combination of MA and STR), previous knowledge and experience, value creation through Innovation (combination of IN and OR), risk Management (received an extra item from OS and OE), and tenacity/ perseverance. Also, the estimated coefficient for the six factors in all six structures was all over 0.70, which is acceptable (Hair et al., 2014).

Table 3. Analysis of competencies factors to explore entrepreneurship intention scale

Kaiser-Meyer-Olkin Measure: 0.958				**Factor loading**						**Cronbach's alpha**	**Factor average**
Factor	**Item**	**Average**	**Extraction**	**1**	**2**	**3**	**4**	**5**	**6**		
Relationship management	SOC2	3.775	0.668	0.760						0.920	3.586
	HR4	3.698	0.686	0.760							
	SOC3	3.585	0.638	0.715							
	SOC1	3.566	0.633	0.696							
	HR3	3.554	0.617	0.694							
	SOC5	3.526	0.585	0.685							
	SOC6	3.774	0.589	0.681							
	SOC4	3.685	0.504	0.645							

	HR 2	3.478	0.581	0.555							
	HR 1	3.219	0.543	0.554							
Strategic management	MA 2	3.441	0.618		0.693					0.908	3.342
	STR4	3.384	0.663		0.687						
	MA 3	3.201	0.675		0.680						
	STR3	3.281	0.628		0.653						
	STR2	3.273	0.637		0.629						
	MA 5	3.446	0.680		0.595						
	MA 6	3.371	0.572		0.546						
	MA 1	3.338	0.583		0.490						
Previous knowledge and experience	KN 1	2.794	0.726			0.792				0.858	2.950
	KN 3	2.974	0.741			0.766					
	KN 4	2.777	0.651			0.757					
	KN 2	3.256	0.684			0.756					
Value Creation through Innovation	OR 2	4.032	0.590				0.704			0.814	3.714
	OR 3	3.787	0.576				0.658				
	IN2	3.645	0.627				0.657				
	OR 1	3.975	0.560				0.650				
	IN1	3.533	0.573				0.572				
	IN3	3.311	0.516				0.493				
Risk Management	RM 1	2.808	0.621					0.738		0.801	3.031
	RM 2	3.111	0.579					0.701			
	OS 1	2.686	0.594					0.681			
	RM 3	3.229	0.601					0.650			

	OE3	3.318	0.490					0.490			
Tenacity/ Perseverance	TE2	4.064	0.744						0.789	0.788	4.017
	TE3	3.941	0.660						0.728		
	TE1	4.047	0.605						0.681		
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.											

The results from EFA were used in CFA analysis to confirm the relationships between observed variables and latent variables as well as to measure unidimensionality and convergent validity ensuring the fitness of the model with data. The results show that all indicators in all six structures have a significant relationship with the factors. Figure 2 shows the final model constructed for entrepreneurial competencies factors influencing entrepreneurship intention. This figure also illustrates the importance and the priority of observed variables by their weight, which is represented by factor loading values. Thus, the results of the goodness-of-fit tests for the proposed model are suited to market data and all items are satisfactory (Figure 2). Also, the correlation coefficients for each pair of concepts with the standard deviations of the scales are statistically significant at a level of 0.0001 (Table 4). From six variables detected in CFA analysis, the final model from SEM analysis only shows four variables that have positive relationship with entrepreneurship intention including (1) relationship management (combination of HR and SOC), (2) strategic management (combination of MA and STR), (3) previous knowledge and experience, and (4) value creation through innovation (combination of IN and OR). The detail discussion about these independent variables and their relationships with entrepreneurship intention will be presented in the next section.

Table 4. SEM results

			Estimate	**S.E.**	**C.R.**	**P**				**Estimate**	**S.E.**	**C.R.**	**P**
EI	<---	RE	0.195	0.086	2.276	0.023	EI3	<---	EI	1			
EI	<---	SM	0.291	0.134	2.174	0.030	EI4	<---	EI	1.027	0.033	31.518	***
EI	<---	KN	0.199	0.051	3.866	***	EI2	<---	EI	0.846	0.033	25.944	***
EI	<---	RM	-0.046	0.081	-0.565	0.572	EI1	<---	EI	0.924	0.031	29.696	***
EI	<---	OIN	0.373	0.085	4.415	***	EI5	<---	EI	0.815	0.037	21.787	***
EI	<---	TE	0.036	0.063	0.567	0.571	EI6	<---	EI	0.834	0.035	23.929	***
HR4	<---	RE	1				KN1	<---	KN	1			
SOC2	<---	RE	0.921	0.037	25.133	***	KN3	<---	KN	1.197	0.052	22.891	***
SOC3	<---	RE	1.009	0.043	23.425	***	KN2	<---	KN	1.087	0.051	21.494	***
HR3	<---	RE	0.957	0.038	25.125	***	KN4	<---	KN	1.034	0.045	23.017	***
SOC1	<---	RE	1.023	0.043	23.899	***	RM1	<---	RM	1			
SOC6	<---	RE	0.957	0.044	21.727	***	RM2	<---	RM	0.947	0.060	15.690	***
SOC5	<---	RE	0.943	0.043	22.064	***	OS1	<---	RM	1.033	0.061	16.937	***
SOC4	<---	RE	0.863	0.044	19.519	***	RM3	<---	RM	0.994	0.059	16.994	***
HR1	<---	RE	0.941	0.046	20.251	***	OE3	<---	RM	1.003	0.064	15.645	***
HR2	<---	RE	0.941	0.043	21.727	***	IN2	<---	OIN	1			
MA2	<---	SM	1				OR3	<---	OIN	0.839	0.049	17.194	***

STR4	<---	SM	1.053	0.054	19.616	***	IN1	<---	OIN	0.958	0.045	21.331	***
MA3	<---	SM	1.117	0.050	22.467	***	OR2	<---	OIN	0.703	0.047	14.966	***
STR3	<---	SM	1.063	0.055	19.333	***	OR1	<---	OIN	0.672	0.048	14.015	***
STR2	<---	SM	1.088	0.056	19.341	***	IN3	<---	OIN	0.967	0.050	19.340	***
MA5	<---	SM	1.169	0.057	20.592	***	TE2	<---	TE	1			
MA6	<---	SM	1.092	0.057	19.273	***	TE3	<---	TE	0.970	0.049	19.928	***
MA1	<---	SM	1.130	0.057	19.715	***	TE1	<---	TE	0.997	0.052	19.149	***

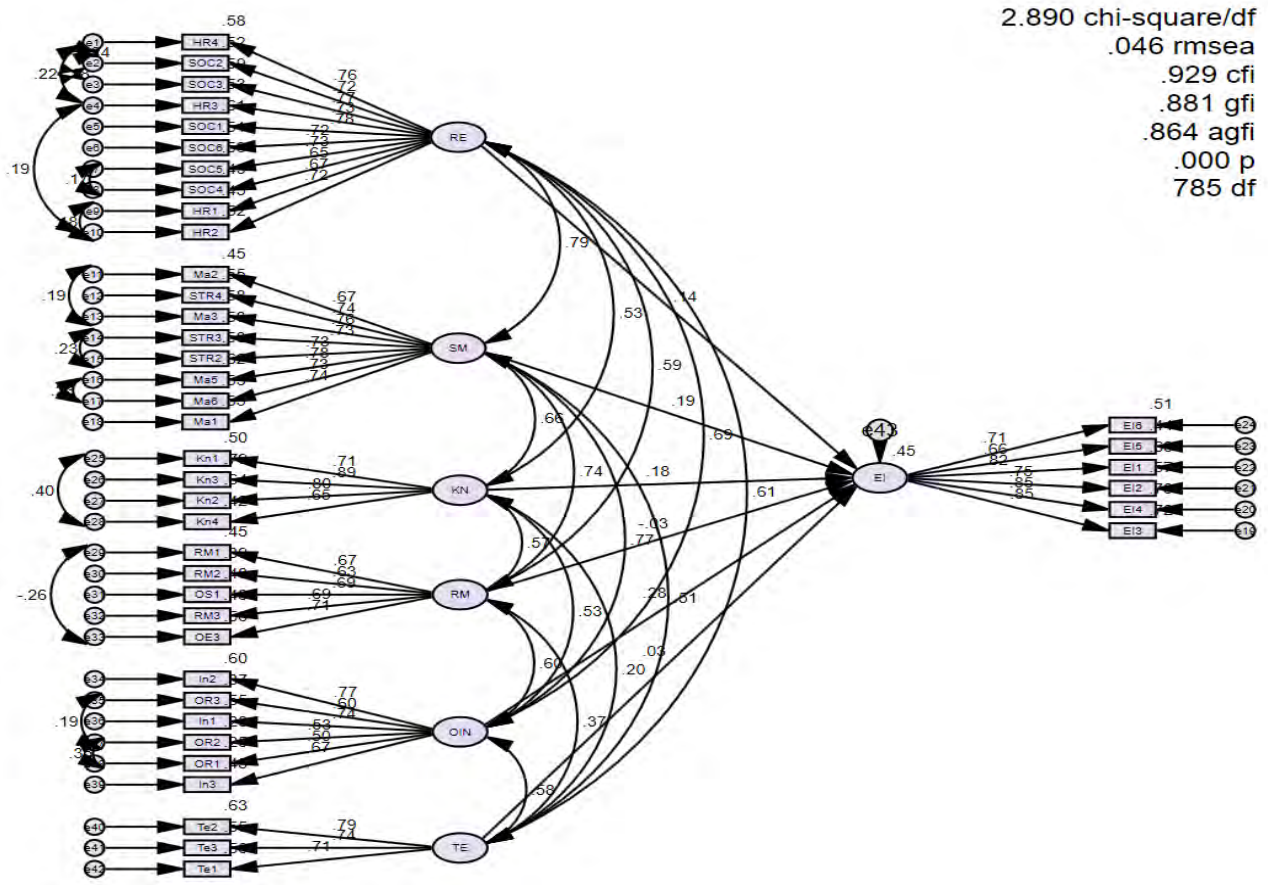

Figure 2. SEM mode

5. Discussion and conclusion

The study's findings show that from eleven independent variables listed in the literature review, the EFA and SEM results showed a final of six independent variables including (1) relationship management (combination of HR and SOC), (2) strategic management (combination of MA and STR), (3) previous knowledge and experience, (4) value creation through innovation (combination of IN and OR), (5) risk management, and (6) tenacity/ perseverance. With these results, the study contributes to scientific results demonstrating the list of entrepreneurial competencies that impacts on EI among Southeast Asian student. The results show that among the final six competencies, the authors found no evidences that risk management and tenacity/ perseverance were associated with entrepreneurship intention. A possible explanation of this results could be a cultural and social boundary. In Vietnam, there was an occupation classification used during a long period under the feudal regime. This occupation classification was influenced by Confucianism and was a kind of social ranking in its order (Vuong and Tran, 2009). This occupation classification including "Sĩ – Nông – Công – Thương" which can be translated in order as "gentry scholars - peasant farmers - artisans and craftsmen - merchants and traders". According to this occupation classification, merchants and traders have been ranked

lowest in terms of dignity in Vietnamese society which is regarded as opposite to the western society where entrepreneurs form a high-ranked stratum in the society (Vuong and Tran, 2009). This ideology has been using in raising Vietnamese children by most Vietnamese parents as they want their children to become gentry scholars and especially become government employee. Although, many Vietnamese would deny this social ranking now a day, most of them understand the 'face-saving' value of Confucianism which is a permanent part of Vietnamese society. These occupations directly imply the ranking of an individual's social status. Therefore, an individual is unlikely to embark on a risky road as becoming an entrepreneur and receive such a low social value. Also, most of Vietnamese students usually have a heavy workload and they spend most of their time preparing for the difficult university entrance exam as well as other classes, which usually are simply fixed traits, which are not in the case of establishing and operating a business.

This study contributes to the existing knowledge in several ways. First, this study examined the EI of Southeast Asian students who influenced by Confucianism. Second, this study examined the impact of entrepreneurial competencies on entrepreneurial intention among Southeast Asian students. The outcome of this study has important value in developing entrepreneurship training programs to promote students' entrepreneurial intention. The implementation of entrepreneurship training programs in higher education institutions would be essential and beneficial for student development. Higher investment in these programs will allow students to explore their entrepreneurial skills and innovative ideas as well as provide other needed knowledge to become entrepreneur. Higher education institutions need to focus on developing new innovative entrepreneurship courses using project-based learning, design thinking approach applying entrepreneurial competencies as an outcome, as well as theoretical applications that would bring more effective outcome. These methods will provide students with the necessary foundation and skills to tackle the challenges facing the startup world. By enrolling in these training programs, students could gain more knowledge about what it means to become an entrepreneur, gain more skills, explore business opportunities and focus on possible career paths in the future; thereby changing their attitude toward entrepreneurship and reduce the fear of failure (Farashah, 2013; Lynch et al., 2019).

Despite the theoretical and practical implications, there are still some cautions due to the study's limitations. First, the literature review conducted from this study is not completed as it still lack study from Asia region. Future study can be improved a lot by providing a narrative literature review on entrepreneurial competencies from around the world to have a complete list of entrepreneurial competencies to test among Vietnamese. Second, this study was conducted during the context of a COVID-19 outbreak when social distancing and isolation were applied in Danang city. Due to the above caution and with limited resources, the survey sample have been limited to single university. Therefore, our future studies can be extended to students in different majors and universities in other provinces to ensure the representativeness of the sample. Third, future studies need to test the impact of COVID-19 pandemic, which is a current a global pandemic with unpredictable consequences, on students' entrepreneurial intentions. Therefore, most parent might encourage their children to take a job in a state-owned company seeking sense of job stability and safety. Finally, the future studies also need to test the impact of family circumstance, which is an important factor in order to become an entrepreneur, on entrepreneurial competencies. Previous studies already indicated that if parents own a small business, those parents would tend to become their children mentors when their children establish and grow the business (Sasu and Sasu, 2015). Indeed, early support from family would has a positive influence on individual's confidence in becoming an entrepreneur (Sasu and Sasu, 2015).

REFERENCES

[1] Ahmad N.H., Halim H.A. et Zainal S.R.M. (2010). Is Entrepreneurial competency the silver bullet for SME success in a developing nation? International Business Management, 4, 2, 67-75. https://doi.org/10.3923/ibm.2010.67.75.

[2] Ajzen, I. (1991). The theory of planned behavior. Organizational behavior and human decision processes, 50, 179-211. https://doi.org/10.1016/0749-5978(91)90020-T.

[3] Almeida, J., Daniel, A.D. et Figueiredo, C. (2019). The future of management education: The role of

entrepreneurship education and junior enterprises. The International Journal of Management Education, 100318. https://doi.org/10.1016/j.ijme.2019.100318.

[4] Alvarez, S. et Barney, J. (2007). Discovery and creation: Alternative theories of entrepreneurial action. Strategic Entrepreneurship Journal, 1, 11–26. https://doi.org/10.1002/sej.4.

[5] Ardichvili, A., Cardozo, R. et Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. Journal of Business Venturing, 18, 1, 105–123. https://doi.org/10.1016/s0883-9026(01)00068-4.

[6] Bamiatzi, V., Jones, S., Mitchelmore, S. et Nikolopoulos, K. (2015). The role of competencies in shaping the leadership style of female entrepreneurs: The case of North West of England, Yorkshire, and North Wales. Journal of Small Business Management, 53, 3, 627–644. https://doi.org/10.1111/jsbm.12173.

[7] Barral, M.R.M., Ribeiro, F.G. et Canever, M.D. (2018). Influence of the university environment in the entrepreneurial intention in public and private universities. RAUSP Management Journal, 53, 1, 122-133. https://doi.org/10.1016/j.rauspm.2017.12.009.

[8] Baum, J. R. et Locke, E. A. (2004). The relationship of entrepreneurial traits. skill, and motivation to subsequent venture growth. Applied Psychology, 89, 587–598. https://doi.org/10.1037/0021-9010.89.4.587.

[9] Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. The Academy of Management Review, 13, 3, 442–453. https://doi.org/10.2307/258091.

[10] Chandler, G. N. et Jansen, E. (1992). The founder's self-assessed competence and venture performance. Journal of Business Venturing, 7, 223–236. https://doi.org/10.1016/0883-9026(92)90028-P.

[11] Chell, E. (2013), Review of skill and the entrepreneurial process. International Journal of Entrepreneurial Behavior & Research, 19, 1, 6-31. https://doi.org/10.1108/13552551311299233.

[12] Duckworth, A. L. et Quinn, P. D. (2009). Development and validation of the short grit scale (Grit-S). Journal of Personality Assessment, 91, 166–174. https://doi.org/10.1080/00223890802634290.

[13] Dyer, J. H., Gregersen, H. B. et Christensen, C. (2008). Entrepreneur behaviors, opportunity recognition, and the origins of innovative ventures. Strategic Entrepreneurship Journal, 2, 4, 317–338. https://doi.org/10.1002/sej.59.

[14] Farashah, A.D. (2013). The process of impact of entrepreneurship education and training on entrepreneurship perception and intention: Study of educational system of Iran. Education + Training, 55, 868-885. https://doi.org/10.1108/ET-04-2013-0053.

[15] General Statistics Office of Viet Nam – GSO. (2019). Press release White paper on Vietnamese enterprises 2019. https://www.gso.gov.vn/Default.aspx?tabid=382&ItemID=19273. Accessed on September 11th, 2021.

[16] Gibb, A.A. (1987). Designing effective programs for encouraging the business start-up process. Journal of European Industrial Training, 11, 4, 24-32.

[17] Hair, J. F., Tomas, Jr. G., Hult, M., Ringle, C. et Sarstedt, M. (2014). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). SAGE Publications.

[18] Hinkin, T.R. (2005). Scale development principles and practices. Berrett-Koehler Publishers. https://dx.doi.org/10.4135/9781446287866.

[19] Jena, R. (2020). Measuring the Impact of Business Management Student's Attitude towards Entrepreneurship Education on Entrepreneurial Intention: A Case Study. Computers in Human Behavior, 107, 2. 106275. https://doi.org/10.1016/j.chb.2020.106275.

[20] Kirzner, I. (1997). Entrepreneurial discovery and the competitive market process: An Austrian approach. Journal of Economic Literature, 35, 60–85.

[21] Kolvereid, L. (2016). Preference for self-employment: Prediction of new business start-up intentions and efforts. The International Journal of Entrepreneurship and Innovation, 17, 100-109. https://doi.org/10.1177/1465750316648576.

[22] Krueger, N. F. et Carsrud, A. L. (1993). Entrepreneurial intention: Applying the theory of planned behaviour. Entrepreneurship & Regional Development, 5, 315-330. https://doi.org/10.1080/08985629300000020.

[23] Krueger JR, N. F., Reilly, M. D. et Carsrud, A. L. (2000). Competing models of entrepreneurial intention. Journal of business venturing, 15, 411-432. https://doi.org/10.1016/S0883-9026(98)00033-0.

[24] Kuckertz, A., Kollmann, T., Krell, P. et Stockmann, C. (2017). Understanding, differentiating, and measuring opportunity recognition and opportunity exploitation. International Journal of Entrepreneurial Behavior & Research, 23, 1, 78–97. https://doi.org/10.1108/IJEBR-12-2015-0290.

[25] Le Quang, (2018). Nghịch lý doanh nghiệp vừa và nhỏ. Vietnam Chamber of Commerce and Industry (VCCI). Accessed on Jun 26th, 2021. https://m.vcci.com.vn/nghi%CC%A3ch-ly%CC%81-voi-doanh-nghie%CC%A3p-vu%CC%80a-va%CC%80-nho%CC%89.

[26] Lynch, M., Kamovich, U., Longva, K.K. et Steinert, M. (2019). Combining technology and entrepreneurial education through design thinking: Students' reflections on the learning process. Technological Forecasting and Social Change, 164, 119689. https://doi.org/10.1016/j.techfore.2019.06.015.

[27] Mamai, M. et Yinghua, S. (2017). Managing risks through mitigation strategies: Evidence from Cameroonian small and medium enterprises. International Journal of Business and Management, 12, 1, 217–227. http://dx.doi.org/10.5539/ijbm.v12n1p219.

[28] Man, T. W. Y. et Lau, T. (2005). The context of entrepreneurship in Hong Kong. Journal of Small Business and Enterprise Development, 12, 4, 464–481. https://doi.org/10.1108/14626000510628162.

[29] Man, T.W.Y., Lau, T. et Snape, E. (2008). Entrepreneurial competencies and the performance of small and medium enterprises: An investigation through a framework of competitiveness. Journal of Small Business and Entrepreneurship, 21, 3, 257–276. https://doi.org/10.1080/08276331.2008.10593424.

[30] Mitchell, V.W. (1995). Organizational risk perception and reduction: A literature review. British Journal of Management, 6, 115–133. https://doi.org/10.1111/j.1467- 8551.1995.tb00089.x.

[31] Mitchelmore, S. et Rowley, J. (2010). Entrepreneurial competencies: A literature review and development agenda. International Journal of Entrepreneurial Behaviour & Research, 16, 2, 92–111. https://doi.org/10.1108/13552551011026995.

[32] Mitchelmore, S. et Rowley, J. (2013). Entrepreneurial competencies of women entrepreneurs pursuing business growth. Journal of Small Business and Enterprise Development, 20, 1, 125–142. https://doi.org/10.1108/14626001311298448.

[33] Miranda, F. J., Chamorro-Mera, A. et Rubio, S. (2017). Academic entrepreneurship in Spanish universities: An analysis of the determinants of entrepreneurial intention. European research on management and business economics, 23, 113-122. https://doi.org/10.1016/j.iedeen.2017.01.001.

[34] Moica, S., Socaciu, T. et Rădulescu, E. (2012). Model innovation system for economical development using entrepreneurship education. Procedia Economics and Finance, 3, 521-526. https://doi.org/10.1016/S2212-5671(12)00190-6.

[35] Morris, M.H., Webb, J.W., Fu, J. et Singhal, S. (2013). A competency-based perspective on entrepreneurship education: Conceptual and empirical insights. Journal of Small Business Management, 51, 3, 352–369. https://doi.org/10.1111/jsbm.12023.

[36] Nguyen Hien Luong. (2015). Tư tưởng Nho giáo về giáo dục ở Việt Nam. Vietnam Social Sciences, 7, 92, 94–100.

[37] Nguyen Nga. (2021). Chỉ số sản xuất tại Tp.HCM lao dốc gần 50 phần trăm. https://thanhnien.vn/tai-chinh-kinh-doanh/chi-so-san-xuat-tai-tphcm-lao-doc-gan-50-1445252.html. Accessed on September 11th, 2021.

[38] Pham Huu. (2021). Cơ hội nào để khởi nghiệp mùa dịch. https://thanhnien.vn/gioi-tre/co-hoi-nao-de-khoi-nghiep-mua-dich-1401275.html. Accessed on September 11th, 2021.

[39] Priyanto, S. H. et Sandjojo, I. (2005). Relationship between entrepreneurial learning, entrepreneurial

competencies and venture success: Empirical study on SMEs. International Journal of Entrepreneurship and Innovation Management, 5, 5/6, 454–468. https://doi.org/10.1504/IJEIM.2005.006999.

[40] Okolie, U.C., Igwe, P.A., Ayoola, A.A., Nwosu, H.E., Kanu, C. et Mong, I.K. (2021). Entrepreneurial competencies of undergraduate students: The case of universities in Nigeria. The International Journal of Management Education, 19, 1, 100452. https://doi.org/10.1016/j.ijme.2021.100452.

[41] Onstenk, J. (2003). Entrepreneurship and vocational education. European Educational Research Journal, 2, 74–89. https://doi.org/10.2304/eerj.2003.2.1.12.

[42] Ozgen, E. et Baron, R. A. (2007). Social sources of information in opportunity recognition: Effects of mentors, industry networks, and professional forums. Journal of Business Venturing, 22, 174–192. https://doi.org/10.1016/j.jbusvent.2005.12.001.

[43] Prodan, I. et Drnovsek, M. (2010). Conceptualizing academic-entrepreneurial intentions: An empirical test. Technovation, 30(5–6), 332–347. https://doi.org/10.1016/j.technovation.2010.02.002.

[44] Rathna, K. G. et Vijaya, T. G. (2009). Competencies of entrepreneurs and intrapreneurs: A comparative study. South Asia Journal of Management, 16, 2, 28–60.

[45] Santos, F.M. et Eisenhardt, K.M. (2005). Organizational boundaries and theories of organization. Organization Science, 16, 5, 491–508. https://doi.org/10.1287/orsc.1050.0152.

[46] Santos, G., Gomes, S., Braga, V., Braga, A., Lima, V., Teixeira, P. et Sa, J.C. (2019). Value creation through quality and innovation – a case study on Portugal. The TQM Journal, 31, 6, 928–947. https://doi.org/10.1108/TQM-12-2018-0223.

[47] Sasu, C. et Sasu, L. (2015). Demographic determinant of the entrepreneurship intentions. The case of Romania. Procedia Economics and Finance, 2, (232, 580–585. https://doi.org/10.1016/S2212-5671(15)00111-2.

[48] Scotter, J. R. et Garg, S. (2019). Entrepreneurial tenacity and self-efficacy effects on persisting across industry contexts. Contemporary Management Research, 15, 3, 147–173. https://doi.org/10.7903/cmr.19501.

[49] Shane, S. et Eckhardt, J.T. (2003). The individual-opportunity nexus. In Z. Acs (Ed.), Handbook of entrepreneurship research, 161–191. Great Britain, England: Kluwer Academic Publishers. https://doi.org/10.1007/0-387-24519-7_8.

[50] Silveyram, G., Herrero, A. et P´erez, A. (2021). Model of Teachable Entrepreneurship Competencies (M-TEC): Scale development. The International Journal of Management Education, 19, 1, 100392. https://doi.org/10.1016/j.ijme.2020.100392.

[51] Smith, B. R., Kickul, J. R. et Wilson, F. (2010). Entrepreneurial opportunity evaluation: A discrete choice analysis of financial and social entrepreneurial opportunity attributes. In K. Hockerts, J. Mair, & J. Robinson (Eds.), Values and opportunities in social entrepreneurship. London: Palgrave Macmillan. https://doi.org/10.1057/9780230298026_7.

[52] Tadajewski, M. et Jones, B. (2017). Autobiographical reflections part II: Risk, tenacity and philosophies of research. Journal History Resource Marketing, 9, 210–216. https://doi.org/10.1108/jhrm-06-2017-0020.

[53] Tang, J., Kacmar, K. M. et Busenitz, L. (2010). Entrepreneurial alertness in the pursuit of new opportunities. Journal of Business Venturing, 27, 77–94. https://doi.org/10.1016/j.jbusvent.2010.07.001.

[54] Tehseen, S. et Ramayah, T. (2015). Entrepreneurial competencies and smes business success: The contingent role of external integration. Mediterranean Journal of Social Sciences, 6, 1, 50-61. https://doi.org/10.5901/mjss.2015.v6n1p50.

[55] Trott, P. (2005). Innovation management and new product development. London: Prentice Hall.

[56] Volery, V., Mueller, S. et von Siemens, V. (2015). Entrepreneur ambidexterity: A study of entrepreneur behaviours and competencies in growth-oriented small and medium-sized enterprises. International Small Business Journal, 33, 2. https://doi.org/10.1177/0266242613484777.

[57] Vuong, Q. H., & Tran, T. D. (2009). The Cultural Dimensions of the Vietnamese Private Entrepreneurship. The IUP Journal of Entrepreneurship Development, 3&4, 54-78. https://doi.org/10.2139/ssrn.1442384.

[58] Wei, X., Liu, X. et Sha, J. (2019). How does the entrepreneurship education influence the students' innovation? Testing on the multiple mediation model. Frontiers in Psychology, 10, 1557. https://doi.org/10.3389/fpsyg.2019.01557.

[59] Winterton, J. (2001). Entrepreneurship: Towards a competence framework for developing SME managers. In United States association for Small business and entrepreneurship conference proceedings, 1–9.

[60] World Bank. (2021). Vietnam's economy is forecast to grow by about 4.8 percent in 2021: WB. https://www.worldbank.org/en/news/press-release/2021/08/24/vietnam-s-economy-is-forecast-to-grow-by-about-4-8-percent-in-2021. Accessed on September 11th, 2021.

[61] Wu, W.W. (2009). A competency-based model for the success of an entrepreneurial start-up. WSEAS Transactions on Business and Economics, 6, 6, 279–291.

[62] Zahra, S.A. (1993). Environment, corporate entrepreneurship and financial performance: A taxonomic approach. Journal of Business Venturing, 6, 4, 259–285. https://doi.org/10.1016/0883-9026(93)90003-N.

[63] Zeng, X. et Ouyang, Y. (2020). Entrepreneurship: Tenacity, future self-continuity, and inter-temporal risky choice. Frontiers in Psychology, 11, 1647. https://doi.org/10.3389/fpsyg.2020.01647.