

The Mediating Effect of University Role in Determining the Relationship between Entrepreneurial Orientation, Entrepreneurial Perception and New Venture Creation: A Thai Case Study

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The prime objective of the current study is to examine the mediating effect of university role in determining the relationship between entrepreneurial orientation, entrepreneurial perception and new venture creation among university students in Thailand. It is challenging to merge studies with business engagements, especially for full time students due to the tied learning activities. However, some students allocate time for entrepreneurial involvements based on their timetable. Time utilization for an entrepreneur is very crucial, that is why many scholars view time as a currency needs to be wisely utilized. The notion behind this assumption is to inculcate students' entrepreneurial mindset from the outset, so that after graduation they will at least have acquired basic business venture skills. The present study aims to explain the relationship between independent mediating and dependent variables. Thus, this paper employed PLS-SEM due to its' flexibility, lower sample size requirement, and handling of multiple regressions. Furthermore, PLS-SEM consists of formative and reflective constructs. This study has focused on the relationship between entrepreneurial business venture creation and various

variables that might influence it. This study has explained in detail the relationship between entrepreneurial orientation, entrepreneurship perception, university role, and new venture creation.

Key words: *Entrepreneurial Orientation, Entrepreneurship Perception, University Role, New Venture Creation.*

Introduction

Creating a new business is a stressful task that requires a basic entrepreneurial background. Searching for employment is also a demanding and stressful process due to the changes in the global economy and scarce job opportunities in the labour market. Global economic crises, and economic downturn, negatively affects the labour market, and places graduates in a situation where they are unable to find employment. Nowadays, inadequate job opportunities in the labour market cause other problems in society such as mental illness, loss of confidence, depression, and redundancy among others. The inability to find employment forces individuals to find other alternatives in order to survive, including starting your own venture or business. The individual's ability to adapt to dynamic changes may give them a resilience for starting a new business venture. Exploring and utilizing potential opportunities may result in the creation of new business ventures at an individual and organizational level, which can lead to the sustainable economic development of nations (Hussain, Sallehuddin, Shamsudin, & Jabarullah, 2018).

The above gives an insight into the magnitude of this study. Thailand is a country that yields a large number of international students, especially from Asia and Africa. Therefore, it is an important place for education that encourages new venture creation among foreign students. This study focuses on the relationship between entrepreneurial business venture creation and various variables that may influence it. This study will explain in detail the relationship between entrepreneurial orientation, entrepreneurship perception, university role, and new venture creation. Gartner, Mitchell, and Vesper (1989) state that within the concept of new venture creation, many entrepreneurial routes can be distinguished (Nobanee, 2018).

New venture creation is a means of revitalizing stagnate economies and of coping with unemployment problems by creating new job opportunities (Gürol & Atsan, 2006). According to the International Labor Organization (ILO, 2014), by 2018 the global youth unemployment rate is projected to rise to 12.8%, with growing regional disparities. Global youth unemployment rate was estimated at 12.6% in 2013, which amounts to almost 73 million young people. Informal employment among young person also remains pervasive and transitions to decent work are slow and difficult (ILO, 2014). The effects of youth unemployment are spreading across the world. Developed economies, European Union

countries, developing economies and less developed economies are all struggling to alleviate the rate of youth unemployment. On current projections, the rate of youth unemployment in the developed economies and European Union will not drop below 17% before 2016 (Ilo, 2014). However, the continued uncertainty about the economy, corporate and government downsizing and a declining number of corporate job providers has been increasing the appeal of self-employment and new venture creation (Garfield, 2018; Chienwattanasook, & Jermsittiparsert, 2019).

The problem of unemployment among the graduates is increasing globally due to increases in population, increases in number of university graduates, reliance on government employment, economic meltdown, and lower emergence of new ventures. The present world youth population is estimated at 1.5 billion, out of this, only 620 million are employable. Almost 90% of this population live in developing countries like India and China. According to the International Labour Organization, approximately 660 million youths will be seeking employment by year 2015. Every year the number of graduates increases, but the number of jobs remain at a similar level, this is a serious challenge for the global economy.

Literature Review

Entrepreneurship

Lumpkin and Dess (1996) defines entrepreneurship as an innovative function, as leadership rather than ownership. Entrepreneurship refers to the process of initiating, creating, organizing, leading, motivating, innovating, and taking risks in business ventures. The most important act of entrepreneurship is new entry. New entry can be achieved by entering new or existing markets with new or existing products or services (Lumpkin & Dess, 1996). Entrepreneurship has attained increasing levels of attention and interest since it's' emergence as a research field in the late 1970's. Entrepreneurship has been a popular interest area in economic literature since the late 1800'. History and Schumpeter (1949), as cited by Miller (2011), identified that the concept of entrepreneurship emerged further in the 1940's and 1950's as the start-up of new businesses was viewed to be entrepreneurial activity guided by the initial ideas. Schumpeter defines entrepreneurship as the continuous innovation and creation of new goods and services that will replace the old ones in terms of value and efficiency (Tripopsakul, 2018; Muhammad, 2016).

Wennekers and Thurik (1999) considered entrepreneurship as the ability and willingness of a person to discover new opportunities by identifying specific ways to utilize the opportunities in uncertain markets. Another definition by Hisrich, Peters, and Shepherd (2008) defines entrepreneurship as a real engine of economic development by the creation of new business activities, innovations in existing ones, creation of jobs and building economic activities. Entrepreneurship is an integrated concept, which pushes individuals or organizations in an

innovative direction (Kuratko & Hodgetts, 2004; Ghanney, 2018). Meanwhile Gartner (1985) defines entrepreneurship as the emergence of new ventures.

Another definition given by scholar, defines entrepreneurship as the propensity of mind to take calculated risks, with confidence, to achieve pre-determined business objectives. Entrepreneurship provides an avenue for one to become independent. Entrepreneurship provides an awareness that may lead to the desire of youths to become job providers. Entrepreneurship is an individual's propensity to engage in innovative, proactive, and risk taking behaviour to start new ventures (Knight, 2000; Hidayat et al. 2018; Setamanit, 2018).

All these definitions define entrepreneurship as a key driver to the global economy. Researchers view entrepreneurship activity as a systematic project which is determined by three basic items, entrepreneurship capacity, entrepreneurship opportunity, and entrepreneurship aspirations. Entrepreneurial aspirations is the degree of expectation of an individual to change from a potential entrepreneur to a real entrepreneur. Entrepreneurial capacity is an individual's ability to create and manage new ventures. Entrepreneurial opportunity is the possible extent to which a person can create new businesses which achieve success through the entrepreneur's effort.

In view of these debates on entrepreneurship definitions, the entrepreneurship concept remains in the theory building stage and is a "multidisciplinary jigsaw". The literature argues that entrepreneurship should be define based on a perceived level, which involves individual level, organizational level or an opportunity found at both individual and organizational levels. Some scholars like J. Schumpeter (1942), one of the pioneering researchers in this field, as cited by Lumpkin and Dess (1996), perceived entrepreneurship as an organizational level phenomenon. The scholars opined that research and development should be an organizational routine. Other scholars such as Gartner, Bird, and Starr (1992) supported J. Schumpeter's (1942) stand, by viewing the entrepreneurship concept as being conceptualized as a firm level phenomenon.

Additionally, the literature look at entrepreneurship concepts as an individual level phenomenon. Historically, any individual who can identify market opportunities, acquire required resources, and create a new venture with the aim of getting profit, is considered as an entrepreneur. Based on this school of thought, a specific characteristic which differentiates an entrepreneur from others is undertaking the risk of introducing new products, services and processes. Based on this assumption, the entrepreneurship concept should be conceptualized as an individual, rather than a firm level, phenomenon.

Entrepreneurial Orientation (EO)

Entrepreneurial orientation has received conceptual and empirical support from different authors over a period of time. Entrepreneurial orientation is one of the strategic areas in which scholars prioritize development. Scholars also define entrepreneurial orientation as the activity of implementing new business and the strategic decision process that solve problems in response to environmental business changes. Individuals who have entrepreneurial orientation can stand independently by applying the concepts of innovation, risk taking and proactivity to explore market opportunities. Entrepreneurial orientation creates an awareness among students that can help them to set up new enterprises after their graduation.

The concept of entrepreneurial orientation can be sourced back to the work of Miller (1983), who is the pioneer in initiating the measures of entrepreneurial orientation. Miller (1983) opined that a firm is responsible for innovation, taking risky ventures, and taking pro-active measures in order to beat their competitors. The original work of Miller (1983) identified three key factors of entrepreneurial orientation in entrepreneurial organizations; innovation, risk taking and pro-activeness. Later, different scholars adopted Miller's concept of entrepreneurial orientation (Perin, Simões, & Sampaio, 2018). A study by Lumpkin and Dess (1996) adds two more dimensions of entrepreneurial orientation. Innovation, risk taking, and pro-activeness were already offered by Miller (1983), while autonomy and competitive aggressiveness were added by Lumpkin and Dess (1996). Following studies on conceptualizing entrepreneurial orientation, agreed that the dimensions provided by both Miller (1983) and Lumpkin and Dess (1996) are acceptable. The objective of initiating an enterprise, can only be achieved when there is a strong offer of effective entrepreneurial orientation and awareness among the students.

Nevertheless, various scholars conceptualize entrepreneurial orientation at a firm and individual level. Bolton and Lane (2012) in their study, used 1,100 university students in southern USA, as a sample to validate the five entrepreneurial dimensions presented by (Lumpkin & Dess, 1996; Hallunovi & Berdo, 2018). The results show that three out of the five dimensions, innovativeness, risk taking, and pro-activeness are validated on individual entrepreneurial orientation as they show a statistical correlation with measures of entrepreneurial intention. The remaining factors of autonomy and competitive aggressiveness were found to have no relation.

Innovativeness is an essential tool used to characterize entrepreneurs. Schumpeter (1934) was an early scholar who explained the importance of innovation in the process of entrepreneurial orientation, as cited by Kimberly (1981). Innovativeness provides a willingness to move on from current practices, ideas, or technology. Innovativeness is linked to entrepreneurial concepts through combining creative resources to develop new entrants. Innovativeness

emphasizes the importance of technological leadership. However, innovativeness is defined as a predisposition for engagement in creativity and experimentation, through the introduction of new goods or services, and leadership in technology through research and development processes.

The term pro-activeness is used as one of the traits of an entrepreneur. This term explains the characteristic of entrepreneurial actions in articulating future opportunities, in terms of goods, technologies, and market or consumer demand. Venkatraman (1989) defines pro-activeness as a means of anticipating and acting on future demands by exploiting new opportunities which may or may not be related to the current line of operations, as well as the introduction of new products and brands ahead of others.

Entrepreneurship Perception

Perceptions play an important role in the discovery and creation of views on entrepreneurship (Edelman & Renko, 2010; Haque & Chandio, 2013). There is strong agreement that cognitive factors such as attitudes and perceptions towards entrepreneurship, have a significant role in the engagement in entrepreneurial venture creation. Entrepreneurship perception is one of the issues considered in this study in order to identify its relationship with business venture creation. Entrepreneurial perception can be defined as the perceived personal ability of an individual to discharge a given task. Fagenson and Marcus (1991) consider that individuals choose their career based upon their perception of, and the associated fit with, a certain profession.

The concept of perception combines two key elements in entrepreneurship, namely, perceived feasibility and perceived desirability. The plan to establish new ventures is determined by these two factors. Researchers define the perceived feasibility of entrepreneurship as the process by which the creation of a new venture is perceived as a feasible career option. The authors came up with five elements of perceived feasibility, these being; start up success, ability to cope with start-up workload, sureness of themselves about the start-up, and adequate start-up knowledge. On the other hand, the authors also define perceived desirability as a situation in which starting a new venture is perceived as a desirable career option. The authors came up with a scale to measure perceived desirability elements; I would love doing it, I would not be tense at all, and I would very enthused. Additionally, the authors suggest that entrepreneurial experience is another determinant factor for feasibility and desirability perception. Based on this notion, an individual can perform any activity, or choose any career, in line with their personal ability.

Renko, Shrader, and Simon (2012) define perception as a familiarity, awareness, or understanding gained through physical senses, mental imaging, and intuition. This definition

shows that perceptions are shaped by what a person knows, what we think we know, and what we do not know. Perceptions of an individual can be right or wrong, they are like guesses for the future. Renko et al. (2012) opined that perception can be shaped by imagination, creativity, or intuition. Knowledge also plays a crucial role in shaping individual entrepreneurial perceptions, whereby decisions are made base on the entirety of perception.

In many cases opportunity might misperceived but accuracy is very critical in perceiving entrepreneurial venture start-ups (Renko et al., 2012; Higa & Shimojima, 2018). Shapero and Sokol (1982) agree that new ventures emerge as a result of an individual's choices, which ultimately decide on whether future outcomes are desirable or feasible in pursuing outcomes. In a study conducted by Edelman and Renko (2010), the authors viewed the perception of entrepreneurial opportunities as a base that motivated individual's to making decisions based on subjective assessments rather than on the objective environment. They opined that the ability to identify and exploit opportunities is dependent upon an individual's prior knowledge, while opportunity exploitation is dependent upon an individual having the required cognitive capabilities. On the creation of ventures, they also suggested that venture creation should be based on entrepreneurial perceptions and social cognitive enactment processes.

University's Role

The university environment is crucial in shaping an individual's new venture creation. Etzkowitz, Webster, GEBHART, and TERRA (2000) explain the increasing roles of universities, as educational providers, in the promotion of entrepreneurial mindsets among students. Universities have an important role to play in the development of business venture creation among students, in a local and international context. Universities are expected to move from being traditional providers of knowledge to providing modern entrepreneurial functions. Universities have an important role to play in nurturing entrepreneurial inclinations among students. Developing entrepreneurial skills would enable students to feel confidence, to act creatively, and to become innovative leaders in the future. Universities and institutes of higher learning contribute toward promoting entrepreneurial minds and spirits among students. It is clear that future professionals must show a willingness to be proactive and entrepreneurial, even if they are not the real owners of a business enterprise.

Israel and Johnmark (2014) state that universities have an important role to play in promoting entrepreneurial activities, since higher institutions of learning are seen as a place that shape entrepreneurial culture and aspiration among students. Universities serve as a seedbed of entrepreneurial inductions, and as training environment, that can guide the way students think and behave in relation to entrepreneurship. Universities and other institutions have to provide and ensure that students are ready to act as professionals by ensuring that they acquire

scientific academic knowledge and technical know-how in pursuing entrepreneurial opportunities.

It is crucial for universities show a positive image of entrepreneurship career options, so as to nurture the behaviour of students within the university environment. This can be achieved by providing consumables, essential facilities, materials, and equipment, that would enhance entrepreneurial activities across the campus, and may influence a student's entrepreneurial behaviour. This notion was supported by Fayolle, Gailly, and Lassas-Clerc (2006), who insisted that career selections are easily influenced by the environmental factors in which a person is familiar with and interacts with over a period of time.

A student's engagement in entrepreneurial activities at university, is one of the factors that motivate a student's entrepreneurial commitments and is the preliminary stage of venture creation. This can involve petty business activities across the campus such as selling bread, drinks, scarves, clothes, shoes, health and beauty products, top up recharge cards as well as some essential services like photo copying, printing, barbing saloon, electrical/electronic repairs, car renting etc. It is a challenge to merge studies together with these business engagements, especially for full time students, due to the tied learning activities. Some students allocate time for entrepreneurial involvements based on their time table. Time utilization for an entrepreneur is very crucial. Many scholars view time as a currency which needs to be wisely utilized. The notion behind this assumption is to inculcate a student's entrepreneurial mindset from the start so that after graduation, they have at least acquired basic business venture skills. At the same time, engagement in business activities during studies will help boost their financial capability.

New Venture Creation

New venture creation is at the heart of entrepreneurship. Prior research on new venture creation has mentioned many antecedents that distinguish entrepreneurs from non-entrepreneurs. Lumpkin and G. G. Dess (1996) argue that "the essential act of entrepreneurship is new entry" (p.136). Scholars in the early stage of developing entrepreneurship promulgated that new venture creation is at the heart of entrepreneurship (Gartner et al., 1989). New venture creation in this study is determined by the above variables, in order to assess their relationship. The concept of new ventures have been seen as any business enterprise whose age is less than five years. The essential act of entrepreneurship is creating new business ventures. On this notion, Lumpkin and G. G. Dess (1996) defined new entry as venturing new or existence markets with new or existing goods or services. There are many studies that show a positive relationship between new venture creation, firm survival and changes in technology. This study focuses on entrepreneurial

mindsets and business venture creation among students in general and among UUM international students in particular.

There is argument among scholars on the factors that lead an individual to become an entrepreneur. Many studies have used Ajzen's model theory of plan behaviour in shaping an entrepreneur's intentions towards new venture creation. The present study will apply two theories, Ajzen's theory (TPB) and Shapero's theory of entrepreneurship event (SEE). New venture creation is the process of perceiving an opportunity and responding to the opportunity; it also involves innovation and it assumed that something is created from nothing and resources are being harmonized in a new dimension. For example franchise business require less innovation and lower risk taking than start-up ventures. Similarly, new venture creation has been defined as a means of recapitalizing stagnated economies and solving unemployment problems by creating new job opportunities (Gürol & Atsan, 2006).

In the previous part of this research, the researcher's defined entrepreneurship as the process of creating new ventures. Chrisman, Bauerschmidt, and Hofer (1998) confirm that entrepreneurship is very important to venture creation. There are many factors that shape entrepreneur's venture creation such as: entrepreneurs' intentions, perceptions, risk taking and control (Kruegerr, Reilly, & Carsrud, 2000). Shaver, Gartner, Crosby, Bakalarova, and Gatewood (2001) opined that new venture creation can be determined by the individual perceptions, culture, personal growth, and other internal and external environmental factors.

A new venture is the process of creating and organizing a new business that develops, produces, and markets goods or services to satisfy unmet market needs and wants for the intention of gaining profit and growth. Chrisman et al. (1998) observed that there is a concrete reason that many ventures are initiated by teams of entrepreneurs' and the outcomes of this group have a positive result on new ventures. The creation of a new entrepreneurial venture is predicated upon the decisions of its' owners pertaining goods or services, buyers, resources, technologies, and a firm's methods.

Israel and Johnmark (2014) in their study on entrepreneurial mindset among female university students of Jos Nigeria, highlighted that the perception of entrepreneurship, role model, and university role, have significant effects on new venture creation. The study utilized a sample size of about 400 female students from three faculties. The study analyzes the data through the means of simple percentages and transforms it to tables and charts. The study found a weak relationship between teaching entrepreneurship and female students' entrepreneurial mindset. Therefore the study recommended universities to create supportive entrepreneurship environments that could encourage new venture creation among female students.

A study was completed on university training for entrepreneurial competencies and its' impact on intention of venture creation and intention of university students. The author's tested the theory that entrepreneurship education programs can encourage students' intentions to venture into businesses. The researchers collected data from 864 university students in Castilla & Leon Spain. The researcher used planned behaviour theory in order to differentiate between students with high competency on venture creation and those with low competency. The result shows that students in the programed group are more competent toward self-employment than the students in the control group.

Based on the literature, we have drawn the following hypothesis

- H1: Entrepreneur orientation has a significant impact on new venture creation.
- H2: Entrepreneur perception has a significant impact on new venture creation.
- H3: University role has a significant impact on new venture creation.
- H4: Entrepreneur perception has a significant impact on university role.
- H5: Entrepreneur perception has a significant impact on university role.
- H6: University role mediates the relationship between entrepreneur orientation and new venture creation.
- H7: University role mediates the relationship between entrepreneur perception and new venture creation.

Methodology

The nature of present study is quantifying the nature and explaining the relationship between independent mediating and dependent variables. The correlational part determines whether export performance and marketing program are correlated, while the descriptive part describes the exporters profile and ratings of the subject matter.

This research has been formulated on the basis of hypothetico-deductive approach, which is a scientific method. It consist of seven steps: problem identification, problem statement, and hypotheses formulation, establishing measures, gathering data, data analysis and interpretation of the findings. The main constituent is the deductive approach, which involves formulation and application of a general theoretical framework for a certain practical case. Using previous research, a theoretical foundation was designed. In addition, a quantitative survey approach is employed. In this approach, the study determines the research objectives, develops a research design, determines a valid and reliable instrument of research, survey conduction, data collection and analysis, and interpretation and suggests findings.

The nature of present study is cross-sectional i.e. the research took place at a specific time period, since this is convenient for the academics. An email-questionnaire survey was also

developed for data collection, which was then used for statistical testing to assess the formulated hypotheses. This method was chosen because it requires less time, lower cost and covers a wider geographical area. The survey research method involves collecting data from the people for a particular case. In other words, the current study is a field study conducted under a natural setting, however a correlational study is usually carried out in an environment where researchers do not interfere and let the events happen in a normal setting. The survey conduction is done for generalizing the outcomes. The population already had high validity since the items of the questionnaires were quite relevant and directly addressing the items of a dimension.

Cluster sampling was used for the survey research. A Five-technique approach was adopted for sample size calculation (Hye, & Lau, 2015; Hidayat, Kristiyanto, & Riyadi, 2019). When estimating sample size, the total population and population sample size is calculated. The present study determined both of these using a Krejcie and Morgan (1970) table; a sample size 310 was obtained. In the field of social sciences, researchers mostly employ SEM, since it is a powerful tool for testing multiple associations simultaneously (Hair, Hult, Ringle, & Sarstedt, 2016). Previously, several researchers have advocated the use a co-variance approach, AMOS, but PLS-SEM has unique features which make it a potential replacement for the CB-SEM approach.

In this research, three variables have been used and the rule of thumb suggests a sample size of 30. A 310 sample size has been selected in this study, this is considered suitable and acceptable. Stratified random sampling design was used in the research. Proportionate random sampling was used. The population is divided into subgroups or strata from where random samples are drawn from each of the created strata in proportion to the entire population. Questionnaires were distributed with the help of area stratified random sampling.

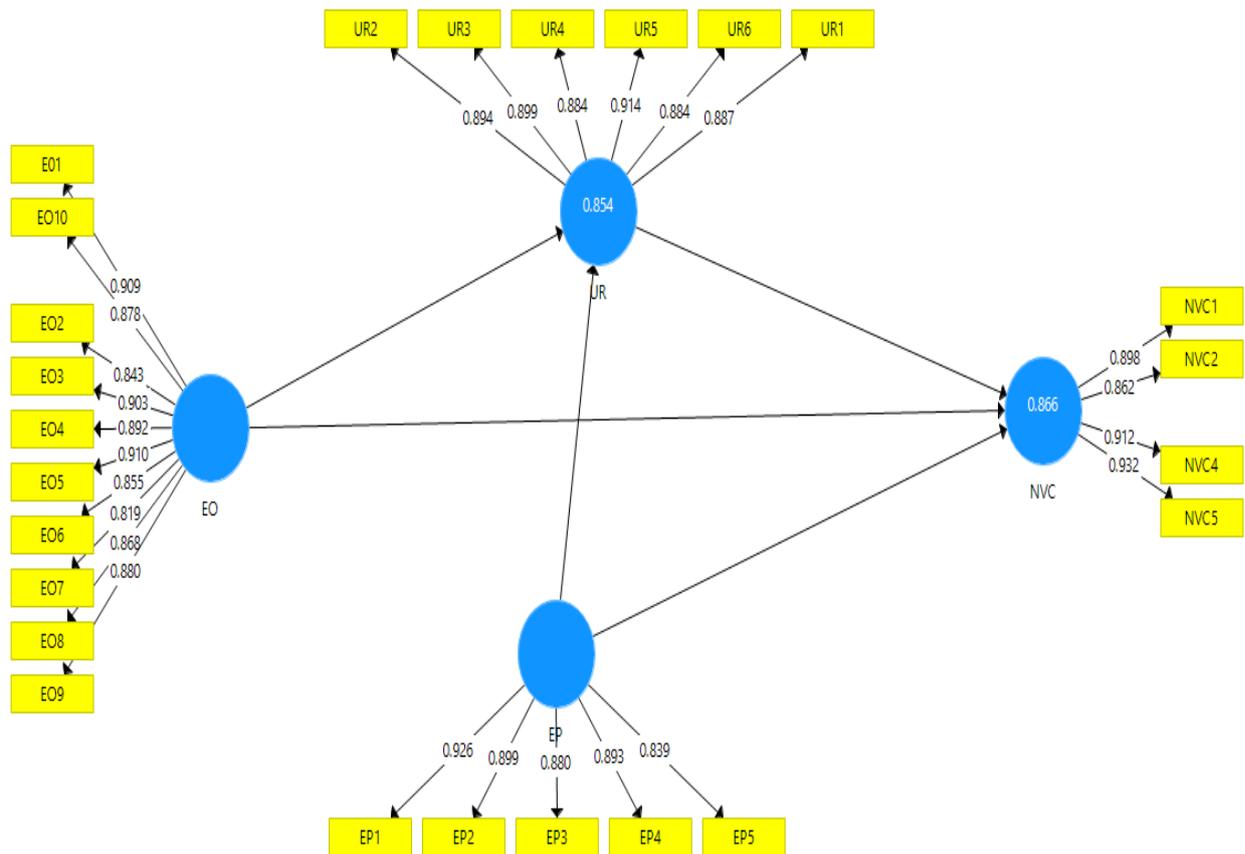
Results

PLS-SEM is a popular and a robust approach which has gained considerable attention among researchers and scholars. Urbach and Ahlemann (2010) have observed arguments by the researchers in favour of this approach. Additionally, Hair et al. (2016) suggested that PLS is beneficial when it is adopted solely for the explanation and predictive relevance of the constructs. Thus, this paper has employed PLS-SEM due to its flexibility, lower requirement of sample size, and proper handling of multiple regressions. Furthermore, the PLS-SEM consisted of formative and reflective constructs.

Hair et al. (2016) also supported reasons for incorporating PLS. The measurement model of this study is shown in Figure 1. The SEM-PLS analysis involves the outer and inner model estimation. The outer model includes the measuring of its elements or components, assessing

the degree of indicators theoretical loadings and correlating with the corresponding constructs. To put it differently, the outer model analysis verifies whether the survey items are measuring the constructs as expected. Thus confirming the validity and reliability of the model, which are the two commonly used criteria under SEM-PLS for analyzing the measurement model (Izadi & Ahmadian, 2018; Ramayah, Lee, & In, 2011). The outcome regarding the relation between the constructs is determined through the measures of validity and reliability. The measurement model's suitability is analysed by: 1) observing the convergent validity for the measures of indicators, using average variance extracted, 2) discriminant validity by following the outer loadings and Fornell and Larcker (1981) criterion, and 3) individual reliabilities of the items, such as internal consistency reliability and indicator reliability by estimating composite reliability.

Figure 1. The Measurement Model



The outer loading of the items is higher than the threshold values 0.70.

Table 2: Outer Loadings

	EO	EP	NVC	UR
E01	0.909			
EO10	0.878			
EO2	0.843			
EO3	0.903			
EO4	0.892			
EO5	0.910			
EO6	0.855			
EO7	0.819			
EO8	0.868			
EO9	0.880			
EP1		0.926		
EP2		0.899		
EP3		0.880		
EP4		0.893		
EP5		0.839		
NVC1			0.898	
NVC2			0.862	
NVC4			0.912	
NVC5			0.932	
UR2				0.894
UR3				0.899
UR4				0.884
UR5				0.914
UR6				0.884
UR1				0.887

The relation among the latent and observed variables is exhibited in the measurement model. Changes in items of the model can also occur while estimation of the measurement model. To confirm validity, confirmatory factor analysis is employed by taking first and second order constructs. Through the formative, structural, and reflective modelling, each element of the measurement model is estimated separately.

Table 3: Reliability

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
EO	0.966	0.967	0.971	0.767
EP	0.933	0.934	0.949	0.789
NVC	0.923	0.924	0.945	0.813
UR	0.950	0.950	0.960	0.799

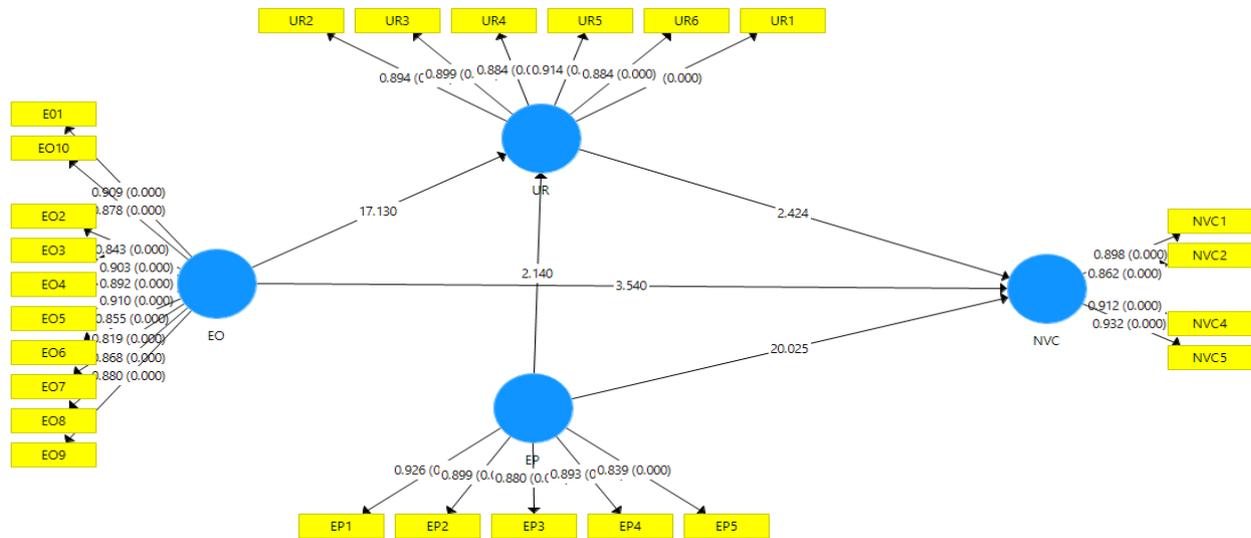
In empirical researches, a Fornell and Larcker (1981) criterion is widely used and is an effective measure to assess discriminant validity. Discriminant validity shows whether the reflective variables are related to their constructs, thus, Fornell and Larcker (1981) criterion was used as a threshold. The Reliability index must exhibit a value equal to or higher than 0.70. The outer and cross-loadings exhibited the same values. The cross loadings in a study determine any correlation existing between the constructs. The values of discriminant validity are presented in Table 4.

Table 4: Reliability

	EO	EP	NVC	UR
EO	0.976			
EP	0.687	0.988		
NVC	0.712	0.921	0.901	
UR	0.921	0.690	0.673	0.894

Afterwards, the structural model of the study is estimated. The SEM-PLS simultaneously estimates a set of all constructed variables. Thus, the structural model determines both the direct and indirect impacts of all the involved variables. It is presented as follows:

Figure 2. Structural Model



The structural model according to Hair, Sarstedt, Hopkins, and G. Kuppelwieser (2014) deals with dependent relationships connecting the constructs in the hypothetical model. It is a useful representation of interrelationships among constructs i.e. it explains the relationship between latent variables. The relationship among the variables in the formulated hypotheses in this study, as indicated in the model, was tested through the structural model. The structural model comprises the exogenous variable, which is distributed leadership, and the endogenous variables, which are quality administrative processes, quality academic processes and institutional effectiveness. The structural model was assessed for collinearity issues, relevance and significance of the structural model relationships. The hypothesis (H1-H5) explaining the direct relationships are accepted significantly.

Table 5: Direct relationships

	(O)	(M)	(STDEV)	T Statistics	P Values
EO → NVC	0.151	0.157	0.047	3.540	0.001
EO → UR	0.845	0.840	0.050	17.022	0.000
EP → NVC	0.817	0.811	0.048	20.025	0.000
EP → UR	0.110	0.116	0.052	2.140	0.033
UR → NVC	0.207	0.206	0.083	2.424	0.013

The level of mediation is also checked to assess university role. Furthermore, a bootstrap method, having 5000 samples, was used for analysing the significance of a relationship of 320 cases. All hypotheses exhibited less than 0.05 p-value which is the threshold level for the hypothesis's acceptance. The t and p values for H6, is above 1.96 and less than 0.05, respectively, thus satisfying the threshold level, and results in acceptance of the hypotheses.

Table 6: Indirect relationship

	(O)	(M)	(STDEV)	T Statistics	P Values
EO -> UR -> NVC	0.175	0.173	0.072	2.441	0.015
EP -> UR -> NVC	0.023	0.024	0.014	1.902	0.000

Coefficient of determination, also known as R^2 , shows how much variation in dependent variables is caused by the independent variables. The scale ranges between 0-1, values closer to 0 show insignificant coefficients having weak or poor predictive relevance, whereas values moving towards 1 shows greater accuracy in predicting. The R^2 values of 0.25, 0.50, & 0.75 explains weak, moderate, and substantial predictive power, respectively. For the present study, the R^2 values are 0.866 and 0.854 indicating that independent variables are responsible for 86.6% and 85.4% variation in dependent variables.

Table 7: R-square

	R Square
NVC	0.866
UR	0.854

Conclusion and Discussion

The main focus of the current study is to examine the mediating effect of university role in determining the relationship between entrepreneur orientation, entrepreneurial perception and new venture creation among university students in Thailand. It recognises the challenge to merge studies together with business engagements, especially for full time students due to tied learning activities. However, some students allocate time for entrepreneurial involvements base on their timetable. Time utilization for an entrepreneur is crucial, and many scholar's views time as a currency which needs to wisely utilized. The notion behind this assumption is to inculcate student's entrepreneurial mindset from the start so that after graduation at least they have acquired basic business venture skills. The nature of the present study is quantifying the nature and explaining the relationship between independent mediating and dependent variables.

This paper employed PLS-SEM due to its flexibility, lower requirement in case of sample size, and proper handling of multiple regressions. Furthermore, the PLS-SEM consisted of formative and reflective constructs. This study has focused on the relationship between entrepreneurial business venture creation and various variables that might influence it.



This study has explained in detail the relationship between entrepreneurial orientation, entrepreneurship perception, university role, and new venture creation. The researcher found that 52% of the businesses run by the students were open only for sometimes; while 46% were open for all time. For those that open for sometimes the result shows that they did so during their free hours. The study also discovered the effects of academic performance for those involved in business activities during their studies. The findings indicate that only 8% those involved in business activities were affected negatively, while more than 60% of the students shows a positive improvement in their academic excellence. 32% argued that their performance was affected neither positively or negatively.

REFERENCES

- Bolton, D., & Lane, M. D. (2012). Individual entrepreneurial orientation: Development of a measurement instrument. *Education+ Training*, 54(2/3), 219-233.
- Chienwattanasook, K. & Jernsittiparsert, K. (2019). Impact of Entrepreneur Education on Entrepreneurial Self-Employment: A Case Study from Thailand. *Polish Journal of Management Studies* 19(1), 106-116.
- Chrisman, J. J., Bauerschmidt, A., & Hofer, C. W. (1998). The determinants of new venture performance: An extended model. *Entrepreneurship Theory and practice*, 23(1), 5-29.
- Davey, T., Plewa, C., & Struwig, M. (2011). Entrepreneurship perceptions and career intentions of international students. *Education+ Training*, 53(5), 335-352.
- Edelman, L., & Renko, H. (2010). The impact of environment and entrepreneurial perceptions on venture-creation efforts: Bridging the discovery and creation views of entrepreneurship. *Entrepreneurship Theory and practice*, 34(5), 833-856.
- Etzkowitz, H., Webster, A., GEBHART, C., & TERRA, B. (2000). The future of the university and the university of the future: The Evolution of ivory Tower to Entrepreneurial Paradigm Research Policy, no. 29: UK.
- Fagenson, E. A., & Marcus, E. C. (1991). Perceptions of the sex-role stereotypic characteristics of entrepreneurs: women's evaluations. *Entrepreneurship Theory and practice*, 15(4), 33-48.
- Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programmes: a new methodology. *Journal of European Industrial Training*, 30(9), 701-720.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics: SAGE Publications Sage CA: Los Angeles, CA.
- Gartner, W. B. (1985). A conceptual framework for describing the phenomenon of new venture creation. *Academy of management review*, 10(4), 696-706.
- Gartner, W. B., Bird, B. J., & Starr, J. A. (1992). Acting as if: Differentiating entrepreneurial from organizational behavior. *Entrepreneurship Theory and practice*, 16(3), 13-32.
- Gartner, W. B., Mitchell, T. R., & Vesper, K. H. (1989). A taxonomy of new business ventures. *Journal of business venturing*, 4(3), 169-186.
- Garfield, A. (2018). Uprooted in Art: Contemporary Considerations of Refugee Art. *International Journal of Social Sciences Perspectives*, 2(2), 101-111.

- Ghanney, R. A. (2018). How parental education and literacy skill levels affect the education of their wards: The case of two schools in the Effutu municipality of Ghana. *International Journal of Education and Practice*, 6(3), 107-119.
- Gürol, Y., & Atsan, N. (2006). Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey. *Education+ Training*, 48(1), 25-38.
- Hallunovi, A., & Berdo, M. (2018). The Relationship between Risk Management and Profitability of Commercial Banks in Albania. *Asian Themes in Social Sciences Research*, 1(2), 44-49.
- Haque, S., & Chandio, J. A. (2013). Human Capital Flight in Pakistan: Strategies for Coping Brain Drain Situation. *International Journal of Economics Business and Management Studies*, 2(2), 75-82.
- Hair, Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*: Sage publications.
- Hair, Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European Business Review*, 26(2), 106-121.
- Hidayat, R., Kristiyanto, A., & Riyadi, S. (2019). Management Achievement Coached Badminton Club Klaten Districts 2019th. *International Journal of Multicultural and Multireligious Understanding*, 6(3), 143-148.
- Hidayat, B., Rauf, A., Sabrina, T., & Jamil, A. (2018). Potential of Several Biomass as Biochar for Heavy Metal Adsorbent. *Journal of Asian Scientific Research*, 8(11), 293-300.
- Higa, Y., & Shimojima, K. (2018). Practical Example of Introductory Engineering Education Based on the Design Process and Teaching Methodology Using a Gyro Bicycle. *Asian Journal of Education and Training*, 4(1), 51-55.
- Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2008). *Entrepreneurship kewirausahaan. Jakarta: Salemba Empat.*
- History, H. U. R. C. i. E., & Schumpeter, J. A. (1949). *Change and the entrepreneur: Postulates and patterns for entrepreneurial history*: Harvard University Press.
- Hussain, H.I., Sallehuddin, S., Shamsudin, M.F. & Jabarullah, N.H. (2018) Debt Maturity Structure and *Shari'ah* Compliance: Evidence from Malaysia, *European Research Studies Journal*, 21 (1), 179 – 189.



- Hye, Q. M. A., & Lau, W. Y. (2015). Trade openness and economic growth: empirical evidence from India. *Journal of Business Economics and Management*, 16(1), 188-205.
- Ilo, S. C. (2014). *The church and development in Africa: Aid and development from the perspective of Catholic social ethics* (Vol. 2): Wipf and Stock Publishers.
- Israel, K. J., & Johnmark, D. R. (2014). Entrepreneurial mind-set among female university students: A study of University of Jos Students, Nigeria. *Chinese Business Review*, 13(5).
- Izadi, S., & Ahmadian, S. (2018). The Effects of Strategic Orientation and Firm Competencies on Export Performance. *Revista Publicando*, 5(15), 834-857.
- Kimberly, J. R. (1981). Managerial innovation. *Handbook of organizational design*, 1(84), 104.
- Knight, G. (2000). Entrepreneurship and marketing strategy: The SME under globalization. *Journal of international marketing*, 8(2), 12-32.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610.
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of business venturing*, 15(5-6), 411-432.
- Kuratko, D. F., & Hodgetts, R. M. (2004). *Entrepreneurship: Theory, Process. Practice*, 6.
- Lumpkin, & Dess. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of management review*, 21(1), 135-172.
- Lumpkin, & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of management review*, 21(1), 135-172.
- Nobanee, H. (2018). Efficiency of working capital management and profitability of UAE construction companies: size and crisis effects. *Polish Journal of Management Studies*, 18 (2), 209-215.
- Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management science*, 29(7), 770-791.
- Miller, D. (2011). Miller (1983) revisited: A reflection on EO research and some suggestions for the future. *Entrepreneurship Theory and practice*, 35(5), 873-894.
- Muhammad, R. (2016). Assessing the Laboratory Safety and Security Skills among Science, Technology and Mathematics (STM) Teachers in Sokoto State, Nigeria. *American Journal of Education and Learning*, 1(2), 62-68.

- Perin, M. G., Simões, C., & Sampaio, C. H. (2018). *Insights into the Relationship between Entrepreneurial Orientation and Performance: Evidence from Brazil: An Abstract*. Paper presented at the Academy of Marketing Science World Marketing Congress.
- Ramayah, T., Lee, J. W. C., & In, J. B. C. (2011). Network collaboration and performance in the tourism sector. *Service Business*, 5(4), 411.
- Renko, M., Shrader, R. C., & Simon, M. (2012). Perception of entrepreneurial opportunity: a general framework. *Management Decision*, 50(7), 1233-1251.
- Schumpeter. (1934). Change and the Entrepreneur. *Essays of JA Schumpeter*.
- Schumpeter, J. (1942). Creative destruction. *Capitalism, socialism and democracy*, 825, 82-85.
- Setamanit, S. (2018). Evaluation of outsourcing transportation contract using simulation and design of experiment. *Polish Journal of Management Studies*, 18 (2), 300-310.
- Shapero, A., & Sokol, L. (1982). The social dimensions of entrepreneurship. *Encyclopedia of entrepreneurship*, 72-90.
- Shaver, K. G., Gartner, W. B., Crosby, E., Bakalarova, K., & Gatewood, E. J. (2001). Attributions about entrepreneurship: A framework and process for analyzing reasons for starting a business. *Entrepreneurship Theory and practice*, 26(2), 5-28.
- Tripopsakul, S. (2018). Social media adoption as a business platform: an integrated TAM-TOE framework. *Polish Journal of Management Studies*, 18(2), 350-362.
- Urbach, N., & Ahlemann, F. (2010). Structural equation modeling in information systems research using partial least squares. *Journal of Information technology theory and application*, 11(2), 5-40.
- Venkatraman, N. (1989). The concept of fit in strategy research: Toward verbal and statistical correspondence. *Academy of management review*, 14(3), 423-444.
- Wennekers, S., & Thurik, R. (1999). Linking entrepreneurship and economic growth. *Small Business Economics*, 13(1), 27-56.