

Influence of Entrepreneurial Alertness and Self-Efficacy on Entrepreneurial Intention

อิทธิพลของการเตรียมพร้อมในการเป็นผู้ประกอบการและการรับรู้ความสามารถของตัวเองที่มีต่อความตั้งใจที่จะเป็นผู้ประกอบการทางธุรกิจ

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Abstract

Entrepreneurs have a substantial role in developing business and driving economics. Understanding human factors that influence the intention of the potential entrepreneurs to develop a business would be beneficial for the educators and stakeholders to design the courses that enhance the entrepreneurial readiness for those potential entrepreneurs. This research aimed to investigate and clarify the relationship among three human factors - entrepreneurial alertness, self-efficacy, risk-taking and entrepreneurial intention. Work effort was appointed as a mediator that intervened the relationship between the aforementioned human factors and entrepreneurial intention. Senior standing undergraduate students were targeted to be the population in this study since they are in the transition period from the education to the work force. They have to make decision to find a job in a business firm, to work for their family businesses (if any) or to develop their own business or even to pursue for the further education. Questionnaire survey was designed. Four hundred seventy-six sets of data were used in the data analysis. Structural equation modeling was conducted. Three important findings were obtained. First, entrepreneurial alertness and self-efficacy positively affected work effort. Second, entrepreneurial alertness and risk-taking directly affected entrepreneurial intention while self-efficacy indirectly affected entrepreneurial intention via work effort. Third, work effort was positively related to entrepreneurial intention. Regarding the research findings, educational institutes can take an active role on developing and enhancing students' latent entrepreneurial potential and intention by designing the study programs and courses to promote and enhance entrepreneurial alertness and self-efficacy of the student. In addition, the practical skills to control of the risk aversion and risk taking behavior should, also, be embedded.

Keywords: Entrepreneurial Alertness, Self-Efficacy, Risk-Taking Behavior, Work Effort, Entrepreneurial Intention

บทคัดย่อ

ผู้ประกอบการมีบทบาทสำคัญในการสร้างธุรกิจซึ่งทำให้เกิดการขับเคลื่อนทางเศรษฐกิจและการพัฒนาประเทศ ความเข้าใจในปัจจัยที่ส่งผลต่อความตั้งใจในการเป็นผู้ประกอบการและการตัดสินใจที่จะริเริ่มพัฒนาธุรกิจของตนเอง จึงเป็นสิ่งสำคัญที่จะช่วยให้บุคลากรทางการศึกษาและผู้ที่เกี่ยวข้องสามารถจัดการศึกษาเพื่อเตรียมความพร้อม ให้กับผู้ที่มีโอกาสที่จะพัฒนาเป็นผู้ประกอบการในอนาคตสามารถสร้างสรรค์ธุรกิจใหม่ๆได้สำเร็จ งานวิจัยนี้มีเป้าหมาย หลักเพื่อศึกษาความสัมพันธ์ระหว่างคุณสมบัติบางประการของผู้ประกอบการ เช่น การเตรียมพร้อมในการเป็นผู้ประกอบการ การรับรู้ความสามารถตนเอง การยอมรับความเสี่ยงกับความตั้งใจที่จะเป็นผู้ประกอบการ โดยมีปัจจัยเกี่ยวกับการทุ่มเท ในการทำงานเป็นตัวแปรสื่อกลางระหว่างตัวแปรดังกล่าว กลุ่มประชากรเป้าหมายเป็นนักศึกษาระดับชั้นปริญญาตรี ปีสุดท้ายซึ่งเป็นกลุ่มที่กำลังตัดสินใจที่จะทำงานทำในบริษัทประกอบการทั่วไป ทำงานกับธุรกิจครอบครัว (ถ้ามี) หรือพัฒนาธุรกิจของตนเอง หรือเรียนต่อในระดับที่สูงขึ้นก่อนเริ่มทำงาน โดยเก็บข้อมูลด้วยแบบสอบถามจากนักศึกษา จำนวน 476 คน วิเคราะห์ข้อมูลด้วยการสร้างสมการเชิงโครงสร้าง (SEM) ผลการวิจัยพบว่า 1) การเตรียมพร้อม ในการเป็นผู้ประกอบการ และ การรับรู้ความสามารถตนเองส่งผลในเชิงบวกต่อความทุ่มเทในการทำงาน 2) การเตรียมพร้อมในการเป็นผู้ประกอบการ และ การยอมรับความเสี่ยง ส่งผลโดยตรงต่อความตั้งใจที่จะเป็นผู้ประกอบการ ในขณะที่ การรับรู้ความสามารถตนเอง ส่งผลทางอ้อมต่อความตั้งใจที่จะเป็นผู้ประกอบการ ผ่านความทุ่มเท ในการทำงาน และ 3) ความทุ่มเทในการทำงานมีความสัมพันธ์เชิงบวกกับความตั้งใจที่จะเป็นผู้ประกอบการ ผลการวิจัยชี้ให้เห็นว่าสถาบันการศึกษาควรจัดการศึกษาเพื่อเตรียมความพร้อมในการเป็นผู้ประกอบการให้นักศึกษา พร้อมกับเสริมสร้างความมั่นใจในการประกอบธุรกิจเพื่อให้นักศึกษาสามารถรับรู้ความสามารถตนเองที่ถูกต้อง นอกจากนั้นการส่งเสริมทักษะการยอมรับและการหลีกเลี่ยงความเสี่ยงที่เหมาะสมก็เป็นสิ่งจำเป็นในการส่งเสริม ให้นักศึกษาได้พัฒนาเป็นผู้ประกอบการธุรกิจต่อไปในอนาคต

คำสำคัญ: การเตรียมพร้อมในการเป็นผู้ประกอบการ, การรับรู้ความสามารถตนเอง, การยอมรับความเสี่ยง, ความทุ่มเทในการทำงาน ความตั้งใจที่จะเป็นผู้ประกอบการ

Introduction

The facts that entrepreneurial activities are crucial engines in economic system are apparent and widely acknowledged among scholars and policy makers. The activities considerably contribute to the economy in various forms, such as innovation of production methods, emergence of profitable businesses and generation of employments (Gerba, 2012). In 2020, The World Bank reported that small and medium enterprises (SMEs) contribute up to 40% of GDP in emerging economies and account for 50% of employment worldwide. Additionally, seven out of ten jobs in emerging countries are generated by SMEs. Such figures represent an important role of entrepreneurial activities in most economies (The World Bank, 2020). Nakagawa and Yellowlees (2020) discussed that the younger generations who were grown up with rapid changes in information technology would drive the technology advancement and allow technology to adapt to work. Flexible work arrangements and convenience in the work operation would support their work and preferred lifestyle. As a result, their perspectives on career path have been altered. That is, the attitude of working in a corporate with stable monthly income is unlikely an attractive choice for the young blood anymore. It is becoming replaced with a riskier path like self-employed careers such as being an entrepreneur that seems more psychological and, may be, financially rewarding (Mihalcea, Mitan & Vitelar, 2012; Kusumawardhani & Dwiarta, 2020). Even though, the aggregate economic growth definitely affects the decision to develop a business, the readiness to be an entrepreneur would be an important construct that could not be overlooked since the latent entrepreneurs could potentially advance to well-equipped entrepreneurs who can readily contribute to the nation's economy as a whole (Gerba, 2012). Thus, to understand how students will become interested to develop a business is as important as educating them how to run a business.

Entrepreneurial alertness has been mentioned in the current researches as the major factor affecting intention to develop one's own business instead of searching for the jobs in any companies (Tang, Kacmar & Busenitz, 2012). Those with entrepreneurial alertness would usually scan and search for the new business information, connect the separate pieces of business information and identify opportunity from such information to develop a new business venture. However, not all people with entrepreneurial alertness could end up with their own business (Thompson, 2009). Risk aversion and the confidence on their own capability to develop and handle a business might be the factors that prohibit them from doing so. Moreover, the effort and responsibility that they have to put when they have their own business comparing to when they work as a salaryman may hesitate them from being a business owner.

Since those who obtain practical trainings seem to have higher potential to do successful businesses, the understanding on the factors contributing to the entrepreneurial intention is emphasized. Among researcher and policy makers, the question asking how the entrepreneurial alertness, self-efficacy and risk-taking behavior can stimulate business students to start their own businesses is interestingly addressed. Moreover, in the meantime, there are extensive literatures that proposed the existing relationships between several personality factors and entrepreneurial intention (Sweida & Reichard, 2013; Samo & Hashim, 2016). In addition, some findings on the relationship between risk and entrepreneurship were also presented. However, the studied on both entrepreneurial alertness and risk factors were not sufficiently illustrated (Solesvik, Westhead, Kolvereid & Matlay, 2012). Thus, this study aims to examine the influence of two personality factors i.e. entrepreneurial alertness and self-efficacy together with the risk taking behavior on work effort and entrepreneurial intention. Even though not all undergraduate students would like to pursue entrepreneurial career, those possessing entrepreneurial intention can be deemed as a potential entrepreneur.

This necessitates an appropriate preparation through their education. Hence, the answers to clarify what and how undergraduate students develop their intention to be entrepreneur would be beneficial to both educators to design the courses that are suitable to the students and also the students who are potential entrepreneurs to successfully develop their business in the future or even apply their entrepreneurial mindset to any kinds of work that they do (Naumann, 2017; Haynie, Sheperd, Mossakowski & Earley, 2010).

Research Objectives

To seek the answer for the main research question i.e., “How do entrepreneurial alertness, self-efficacy and risk taking behavior affect work-effort and intention to develop their own business after graduating?” three objectives were determined as follows:

1. To identify the effects of entrepreneurial alertness and self-efficacy on work effort.
2. To identify the effects of entrepreneurial alertness, risk-taking behavior and self-efficacy on entrepreneurial intention.
3. To identify the effect of work effort on entrepreneurial intention.

Expected Outcomes

The relationships among the main constructs and the direction of their effects are expected to be clarified. The findings from this study provide apparent benefits to the educational institutes and potential entrepreneurs. The university is to gain insights about what factors influencing entrepreneurial intention and how they affect. The findings also essentially contribute to learning programs and course designs that help preparing and cultivating students who exhibit apparent intention to be entrepreneurs or who possess personality factors i.e. entrepreneurial alertness and self-efficacy together with the risk taking behavior. Subsequently, the learning programs are expected to facilitate those students to deploy their latent entrepreneurial potentials, gain confidence and to get them ready to pursue a self-employed career path or to integrate their entrepreneurial potential and mindset to improve their working performance and creativity for any students who do not pursue for the self-employed career in the meantime.

Literature Review and Theoretical Background

Entrepreneurial intention referred to the state of mind that represents self-conviction of a person to venture one's own business, rather than motivated to be employees. With the intention to be entrepreneur, individuals exhibited desire to deliberately put efforts towards entrepreneurial activities. They are likely to involve in early-stages entrepreneurial activities, such as estimating associated risks, setting business goals, gathering resources, and expressing enthusiasm in perusing entrepreneurial careers (Sánchez, 2012; Mwiya, Wang, Shikaputo, Kaulungombe & Kayekesi, 2017). The two personality traits, self-efficacy and entrepreneurial alertness, together with the risk-taking behavior were emphasized as the antecedents of work effort and entrepreneurial intention in this study. Related literature of the three antecedents and potential relationship between them and entrepreneurial intention are reviewed as follows:

Entrepreneurial Alertness

Kirzner (1973) introduced the term entrepreneurial alertness in 1973 to explain individual ability to acknowledge opportunity, regardless of insufficient information clue. The term was analogized with the “entrepreneurial antenna” that may lead a person to think of business development. The model of entrepreneurial alertness in this study derived from the study of Tang et al (2012) which emphasized on cognitive capabilities and proactive processes of the entrepreneurial alertness. The three complementary attributes that comprised the construct were 1) scanning and searching for new information; 2) ability to connect previously separate pieces of information; and 3) identifying opportunity from the new information. Studies conducted with business students revealed that the tendency to commence a business was explained with high entrepreneurial alertness (Samo & Hashim, 2016). Students with entrepreneurial alertness were guided to develop a vivid schema of entrepreneurship and to realize their entrepreneurial value and attitude. Thus, the appreciation of self-employed career path would lead them to develop strong motive to be an entrepreneur. Solesvik et al (2012) added the effect was even apparent in the active students of entrepreneurship course, in which entrepreneurial alertness was idiosyncratic competency, await to be enhanced and cultivated. Due to the consistent results from previous studies, entrepreneurial alertness in students was expected to contribute to the exhibition of purposive effort and how intention to venture a business was formulated. Thus, the entrepreneurial alertness has potential to influence work effort and entrepreneurial intention of a person.

Self-efficacy

In 1997, Bandura (1997) referred the term self-efficacy to as an individual belief that one had capabilities to do or achieve outcomes of a given task. That self-belief in desirable outcomes, then, motivated the person to act, accordingly. Vertel (2011) proposed that those processing high self-efficacy were prone to interpret a situation in an optimistic way in which obstacles were considered as challenges to be overcome. Mufti, Parvaiz, Qadus and Rahman (2019) also found that considerable effort due to self-efficacy demonstrated a strong will to pursue their goals and fulfill work goals regardless of the difficulties. As such, self-efficacy would be one of the major factors that reassure a person to perform their specific behavior including developing a new business venture.

In the meantime, there were consistent findings reporting the relationships and effects between entrepreneurial intention and self-efficacy in the studies with students. Students were found to be better in making a decision and more optimistic in doing one’s own business when they had high self-efficacy (Sweida & Reichard, 2013). Whenever knowledge, experience and skills were adequately gathered, they were driven with confidence to put effort and actually execute their own business venture (Drnovšek, Wincenc, & Cardon, 2010). Gelaidan and Abdullateef (2017) also added education and social supports, such as family and peers, must be actively present in order to advance such belief in being successful entrepreneur to the intention to develop a business.

Risk-Taking

Risk-taking was defined as tendency to prefer and choose risky options rather than certain ones, in an expected exchange of more lucrative rewards (Paulsen, Platt, Huettel & Brannon, 2012). In the other words, risk seekers tended to select an option with higher risks, such as betting high value choice, instead of the alternative with lower risk but having lower reward (Alexander, Fukunaga, Finn & Brown, 2015). In contrast, risk-averse individuals had tendency to minimize uncertainty associated to the available options, based on the analysis of cost-benefit. Such behavior could be explained with the loss-avoidance intention to secure gains. Mixed findings were found in studies of risk-taking and risk averse behavior conducted with undergraduates. Several empirical studies revealed those with intention to start own business considered themselves risk averse and did not perceive risk in a positive way. However, the phenomenon was argued with the lack of adequate knowledge about associating risk and actual experience of entrepreneurship in students (Dinis, Do Paco, Ferreira, Raposo & Rodrigues, 2013). Meanwhile, Solesvik et al. (2012) found risk aversion in students were not contingent on entrepreneurial education. Beverland and Lockshin (2001), then, justified the inconsistent entrepreneurial risk behaviors with momentariness and subject to change due to environments. Accordingly, the mixed results of the relationship between individuals' risk-taking propensity and entrepreneurial intention in business students is appealing to be examined. Even though, the relationship between risk taking and entrepreneurial intention has been illustrated, a direct relationship between risk-taking and work effort could not be assumed. Lack of relevance between tendency to accept risk and effort exerted on work explains little or has no contribution in pragmatic domain. Thus, the effects of entrepreneurial alertness, self-efficacy and risk taking behavior on entrepreneurial intention and the effects of entrepreneurial alertness and self-efficacy on work effort would be examined. As such, the first two research hypotheses were proposed as follows:

Hypothesis 1: Entrepreneurial alertness (a) and self-efficacy (b) affect work effort.

Hypothesis 2: Entrepreneurial alertness (a), self-efficacy (b) and risk-taking (c) affect entrepreneurial intention.

Work Effort and Entrepreneurial Intention

Work effort referred to the extent of hard work a person exerted to complete a task. It was consistent to motivation to achieve a task, in which a motivated individual expressed such psychological state through great effort intensity towards task accomplishment (Pierro, Kruglanski & Higgins, 2006). Hence, such effect exhibited the relationship among psychological factors, i.e. self-efficacy, work motivation, work effort and work performance. Work effort reflected three aspects of individual's behavior i.e. 1) intensity of effort exerted on a task; 2) direction the effort; and 3) persistence on exertion of such effort (Yeo & Neal, 2004). Extensive body of literatures found that work effort was a positive predictor of several performance indicators besides task performance, such as technical knowledge and sales objectives. Additionally, effort that was exerted beyond what it needed to complete the task was typically associated to work engagement and organizational citizenship behavior as well (Piccolo & Colquitt, 2006). Despite individuals engrossing themselves for common good of one's organization, there was absence in the body of research supporting work effort in tendency to engage in self-employed job or being entrepreneur. With strong characteristics of entrepreneur and confidence in achieving a task, business students were expected to exert considerable amount of effort on the tasks which finally should contribute to overt intention to initiate entrepreneurial activities.

Karabulut (2016) added to know how much the effort and perseverance individuals have in achieving entrepreneurial success could be gauged through entrepreneurial intention as well. Mwiya et al. (2017) postulated entrepreneurial intention was an influencer of entrepreneur's actions that derived from holistic thought processes or cognitive behaviors such as analyzing opportunity, assessing business environment, conceiving business models, and so forth. Hence, the notion is aligned with the concept of entrepreneurial alertness which was also depicted with cognitive capabilities. In Sánchez's (2012) findings, personal traits and external factors were the apparent influencers of entrepreneurial behaviors in students. The outstanding external factors were business education and social supports while entrepreneurial alertness, risk tolerance, need for achievement and internal locus of control were strong internal drives of entrepreneurial intention and actions (Yahya, Abdulmalik & Saleh, 2019). Kabir, Haque and Sarwar (2017) stressed entrepreneurial actions in business students did not occur accidentally but rather purposive behaviors and effort that were subsequent to strong desire to venture a new business. Hence, the findings led to make an assumption that entrepreneurial intention could be the result of individuals' traits and purposive work effort. To investigate such relationship, the last hypothesis is proposed as follows:

Hypothesis 3: Work effort affects entrepreneurial intention.

Regarding the relationship among the aforementioned constructs, a research framework on entrepreneurial intention and its potentially influencing factors can be proposed in Figure 1 as follows:

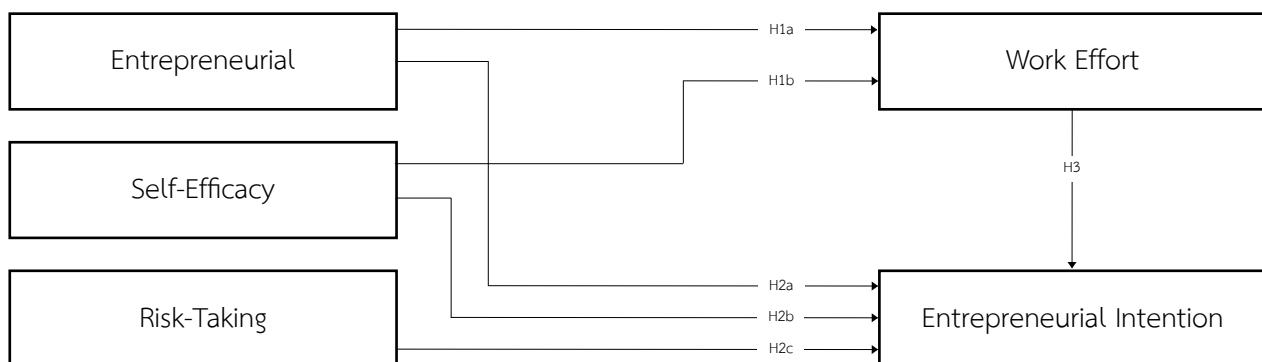


Figure 1: Research Framework

Research Methodology

To test the research framework and proposed hypotheses, a questionnaire survey was designed. A total of 45 Measurement items were used to measure all major constructs proposed in the research framework. Thirteen items modified from Tang et al (2012) were used to measure three dimensions of entrepreneurial alertness i.e. scan & search, association & connect, and evaluation & judgment. Five-point Likert scale was designed. The measurement of self-efficacy was modified from the widely used General Self-Efficacy Scale (GSE) developed by Schwarzer and Jerusalem (1995). All ten items were employed but the original scale of four-point rating scale varying from “not at all true” to “exactly true” was modified to five-point Likert scale varying from strongly agree to strongly disagree. Even though the entrepreneurial self-efficacy (ESE) scales (e.g. Newman, Obschonka, Schwarzc, Cohena & Nielsen, 2019; Sweida & Reichard, 2013; Chen, Greene & Crick, 1998) were used in other researches on entrepreneurial intention, the general self-efficacy scale was applied in this study since the targeted people were students who have not yet started their businesses or working lives.

For risk-taking behavior, six measurement items were modified from DOSPERT risk-taking scale developed by Blais and Weber (2006). Original DOSPERT scales measured risk-taking behavior of a person in five dimensions i.e. social, financial, recreational, health/safety and ethical. However, only six items measuring social risk-taking were applied in this study. The five-point Likert scales varying from strongly agree to strongly disagree were used instead of the original rating scale varying from extremely unlikely to extremely likely. Next, the work effort scale of De Cooman, De Gieter, Pepermans, Jegers, and Van Acker (2009) was adopted. Ten items were modified from the original version to cover the three dimensions of the work effort i.e. intensity, direction, and persistence. Lastly, the entrepreneurial intention was measured by six items modified from the entrepreneurial intention scale of Liñán and Chen (2009). The five-point Likert scales varying from strongly agree to strongly disagree were also applied for work effort and entrepreneurial intention.

All measurement items were translated into Thai. Three university lecturers from the department of entrepreneurship and innovation management of Assumption University were invited as the experts to check for the content validity of the measurements. The IOC (Index of Item Objective Congruence) testing was applied. The congruence indices between 0.67-1.0 were illustrated. Satisfactory results of the content validity were ensured. Pre-test was conducted with 50 students who were at their last semester. Cronbach's alpha coefficients results were employed to perform reliability analysis on the pre-test data. The results met satisfactory levels. The Cronbach's alpha coefficients varied from 0.786 to 0.916. All surpassed the required level of 0.70 (Nunnally, 1978) as seen in Table 1. Qualifications of the questionnaire to be used as the major data collection tool were evident.

Table 1: Reliability of the Measurements

Constructs	Cronbach's alpha	Items
Entrepreneurial Alertness	0.891	13
General Self-Efficacy	0.888	10
Risk-Taking Behavior	0.786	6
Work effort	0.907	10
Entrepreneurial Intention	0.916	6

Senior standing undergraduate students enrolling in their last semester were targeted population of the study because they were in the transition period from education to the workforce. Most of them were in the job decision period whether to search for a job and work in a firm, work with their family, develop their own businesses, pursue for further education or other choices. As in the transition process to become a salary employee or a self-employed entrepreneur, the “entrepreneurial intention” was selected as the dependent construct of the study instead of the entrepreneurial decision. A total of 450 respondents were determined as the sample size on the basis on the requirements of the SEM which was used as main data analysis method. With 10 data for each measurement item by 45 items, at least 450 samples were the targeted sample size. Five universities, three private and two public universities in Thailand were purposively selected. The names of the universities were gathered from the students in the pretest process. The pre-test samples were asked to mention five names of the universities in Thailand that come first to their mind in the last part of the pre-test questionnaire. The top five universities were selected in this study. Quota sampling technique was designed. One hundred students were targeted from each university. Online questionnaire survey was applied. Questionnaires were sent to the senior standing students to the selected universities during October to December, 2020. The three screening questions were used as seen in Table 2 as follows:

Table 2: Screening Questions for the Sample Selection Process

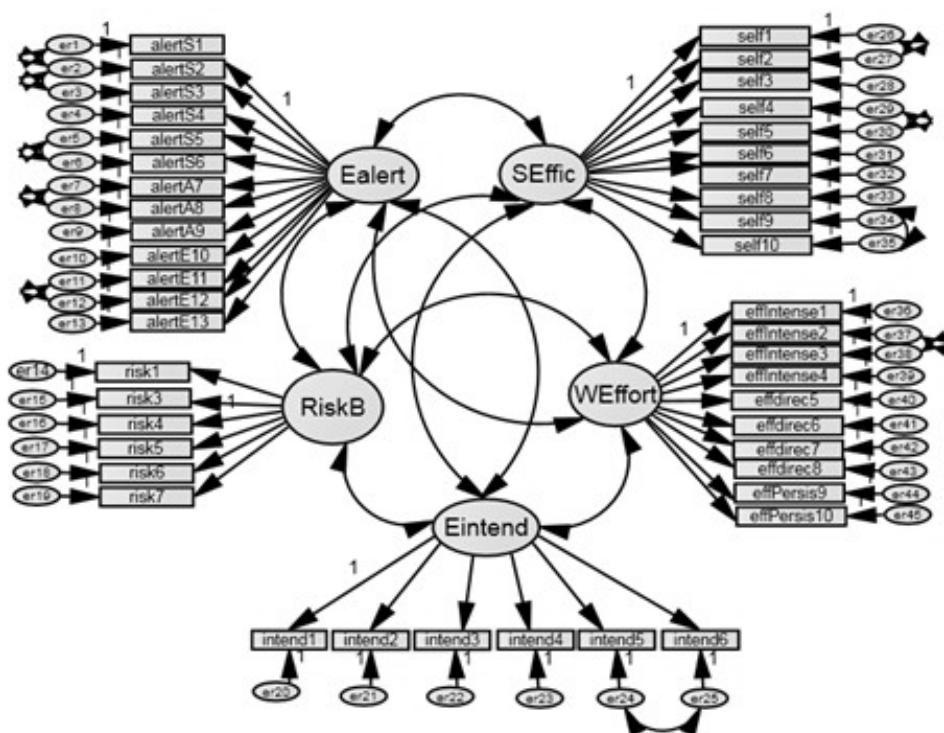
Screening Questions	Sample Selection	
	Ans “Yes”	Ans “No”
1) Is this your last semester?	✓	Excluded
2) Will you pursue for further study right after graduation?	Excluded	✓
3) Do you have the company that you decide to work with?	Excluded	✓

Students who answered “yes” for the first question were continued with the second question while those who said “No” were excluded. Those who answered “Yes” for the second question were excluded from the study. Lastly, students who already selected to work in any particular firms were also excluded since their job selection process was complete. The screening questions were applied to ensure that all samples were senior standing students who were in the process of transition to the workforce. Students who want to pursue for the further education were excluded from the study because they would not enter the workforce in this period. Students who already get a job in any firms were also excluded since they would not have an intention to become an entrepreneur in this meantime. A total of 500 data sets were gathered as planned but twenty-four data sets were found incomplete. Thus, 476 complete data sets were usable for the analysis. As the targeted sample size was 450, a total of 476 samples were acceptable since it exceeded the targeted sample size. Most of the respondents (57.6%) were female. Most of them majored in business administration (49.8%) followed by Finance, Economics, and Accounting (25.9%). The rest were from the schools of arts and liberal arts, communication arts and others with 10.1 %, 9.6% and 4.6%, respectively.

Data Analyses

First analysis was to verify the construct validity of the measurements. Confirmatory factor analysis (CFA) was used. All forty-five measurement items were assigned to the CFA model, specifically 13 items for entrepreneurial alertness, 10 items for self-efficacy, 6 items for risk-taking behavior, 10 items for work effort and 6 items for entrepreneurial intention. The results showed the fitness of CFA model with the data.

1.848 of Chi-square per degree of freedom was less than the cutoff point of 3. Meanwhile all fit indices were greater than the required level of 0.9 (IFI=0.925, TFI=0.919, and CFI=0.924). Only the direct goodness of fit index (GFI) was 0.867 was found less than the recommended level, 0.90. Nonetheless, it would be considered acceptable since the data were collected from the large sample size while other fit indices were in the acceptable level. In addition, 0.042 of the Root Mean Square Error of Approximation, less than the cutoff point of 0.05 was exhibited. Hence, construct validity of the measurements was ensured based on such satisfactory results. The analysis with the structural equation model could be done in the next stage. The CFA model is illustrated in Figure 2.

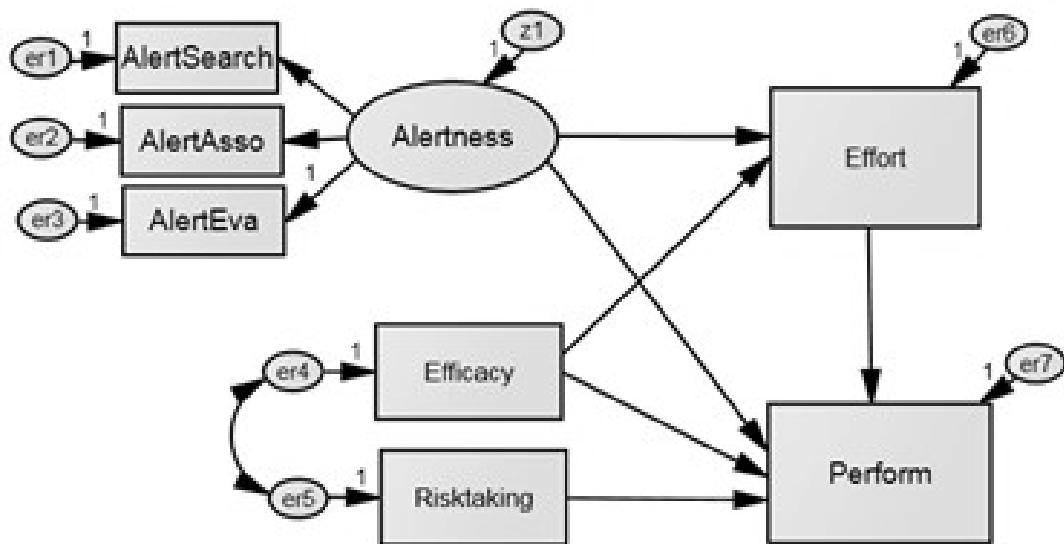


Remarks: $\chi^2/df=1.848$; IFI= 0.925; TLI=0.919; CFI=0.924; RMSEA=0.042

Figure 2: Confirmatory Factor Analysis Model

Structural equation modeling was developed. Mean scores of self-efficacy, risk-taking behavior were put as the independent constructs of the model while the second order construct of entrepreneurial alertness was designed. The mean score of three dimensions, i.e. scan & search, association & connect, and evaluation & judgment were used as the first order constructs of entrepreneurial alertness. Entrepreneurial intention was appointed as the dependent construct of the model where the work effort was appointed as the intervening construct between the three independent constructs and entrepreneurial intention. Mean scores of both work effort and entrepreneurial intention were used in the analysis. All 476 data were used.

The non-significant chi-square value of the model ($\chi^2=9.902$, $df=9$, $p>0.05$) and the chi-square per degree of freedom that was less than 3.00 which is the cut-off point ($\chi^2/df = 1.10$) indicated the good fits of the model. In addition, all other fit indices also exceeded the required level of 0.90 (GFI = 0.994; AGFI = 0.981; RFI = 0.984; IFI = 0.999; TLI = 0.999; CFI = 0.999) while the root mean square error of approximation (RMSEA) was 0.015 which was less than the cut-off point of 0.05. Details of the structural relationships among constructs are presented in Figure 3 as follows:



Remarks: $\chi^2=9.902$, $df=9$, $p>0.05$;

$\chi^2/df=1.10$; RFI = 0.984; IFI = 0.999; TLI = 0.999; CFI = 0.999; RMSEA = 0.015

Figure 3: Structural Equation Model of the Proposed Model

Validity of the structural parts of the construct in the model was evident on the basis of satisfactory fits in the structural equation model. Thus, it could be used to test all proposed hypotheses.

Research Findings

As the fits of the structural equation model was illustrated, the coefficients of the path relationship (β) between the constructs can be analyzed and used to test hypotheses. Both unstandardized and standardized (in the brackets) as well as their critical values and its significant values are presented in Table 3 as follows:

Table 3: Structural Relationships of the Constructs in the Path Analysis

Path Relationships			Coefficients (β)		Critical Ratio	
H1a	Entrepreneurial Alertness	→	Work Effort	0.369 (0.333)	5.395	* * *
H1b	Self-Efficacy	→	Work Effort	0.394 (0.366)	6.563	* * *
H2a	Entrepreneurial Alertness	→	Entrepreneurial Intention	0.484 (0.359)	5.033	* * *
H2b	Self-Efficacy	→	Entrepreneurial Intention	-0.001 (0.000)	-0.006	NS
H2c	Risk-Taking	→	Entrepreneurial Intention	0.332 (0.244)	5.002	* * *
H3	Work Effort	→	Entrepreneurial Intention	0.104 (0.086)	1.682	*

Remarks: * $p<0.05$; ** $p<0.01$; *** $p<0.001$; NS = Not Significant;

$$R^2_{\text{Work Effort}} = 0.418; R^2_{\text{Entrepreneurial Intention}} = 0.341$$

Hypotheses 1 proposed the relationship between entrepreneurial alertness (a) and self-efficacy (b) and work effort. The result illustrating relationship between entrepreneurial alertness and work effort ($\beta=0.369$; $p<0.001$) and self-efficacy and work effort ($\beta =0.394$ $p<0.001$) were significant. Hypothesis 1 was supported by the data. Considering the standardized coefficients of the paths, self-efficacy had higher influence on work effort than entrepreneurial alertness.

Hypothesis 2 proposed relationship between entrepreneurial alertness (a), self-efficacy (b) and risk-taking behavior (c) and entrepreneurial intention. The result illustrating relationship between entrepreneurial alertness and entrepreneurial intention ($\beta =0.484$ $p<0.001$), and that between risk-taking behavior and entrepreneurial intention ($\beta =0.332$ $p<0.001$) were significant while the relationship between self-efficacy and entrepreneurial intention ($\beta =0.001$; $p>0.05$) was not significant. As a result, Hypothesis 2 was partially supported by the data.

Hypothesis 3 proposed the relationship between work effort and entrepreneurial intention. Marginal significant relationship was shown ($\beta =0.104$; $p<0.05$). Thus, Hypothesis 3 was also supported by the data. Moreover, regarding standardized coefficients, entrepreneurial alertness provided highest impact on entrepreneurial intention followed by risk-taking behavior, and work effort, respectively. Considering the multiple R-square, 41.8 percent of work effort could be explained by entrepreneurial alertness and self-efficacy while 34.1 percent of entrepreneurial intention could be explained in this model.

Conclusion

The findings indicated that entrepreneurial intention was directly influenced by entrepreneurial alertness as well as risk-taking, while indirectly influenced by entrepreneurial alertness and self-efficacy through work effort. Both direct and indirect influences of the entrepreneurial alertness on entrepreneurial intention were exhibited. Significant effects of the entrepreneurial alertness and self-efficacy on work effort were revealed as well as the significant effect of work effort on entrepreneurial intention. All hypotheses were supported by the data as proposed except the direct relationship between self-efficacy and entrepreneurial intention.

Discussion of the Findings

Relationship between entrepreneurial alertness and entrepreneurial intention found in this study was aligned with the findings of Samo and Hashim (2016) which postulated entrepreneurial alertness was the powerful predictor of entrepreneurial intention, both direct and indirect ways. Similarly, entrepreneurial alertness was considered one of strong internal drives of entrepreneurial intention and actions as proposed by Sánchez (2012) and Yahya et al (2019). Entrepreneurial alertness encouraged students to engage in related entrepreneurial behaviors either directly as a personal trait or indirectly through work effort – a determined effort to achieve work goals. In other words, entrepreneurial alertness, which embodies the behaviors from the three dimensions drove the students to be more likely to cultivate stronger intention to actualize ones' own business plan than those without the trait.

Meanwhile, self-efficacy, which explained entrepreneurial intention through work effort, emphasized the pragmatic effect of work effort that it transformed self-efficacy - thoughts and belief of success in doing a business - into actions and behaviors. Then, those actions and behaviors eventually contributed to formulating determined mental force to actualize the intention to pursue entrepreneurship. The findings were, also, consistent with that of Pierro et al. (2006), which argued that a person expressed psychological state such as self-efficacy through effort which later led to a greater potential to accomplish a task. Aligned with Drnovšek et al (2010), once the students gathered adequate knowledge and experience in venturing a new business, increasing confidence would propel their effort, intention and eventually implement their business plans.

In the meantime, the effect of risk-taking behavior on entrepreneurial intention clarified the mixed findings and understanding of risk in business students (Dinis et al, 2013). That is, senior standing students who deemed to be well-educated on the risk concept were inclined to take an entrepreneurial career path after grasping the concept of risk and returns or understanding how the returns on the self-employed jobs outweighed being employees in the long run. Supporting by Beverland and Lockshin (2001), risk-taking behavior is not permanent tendency where it is subject to the changes due to environment and time, such as courses that the students had attended and their senior-standing year.

Research Contribution

Research contribution can be categorized into three major categories, i.e. policy contribution, managerial contribution, and academic contribution. For the policy making, promoting entrepreneurial mindset and readiness, i.e. entrepreneurial alertness and entrepreneurial self-efficacy as well as the proper business risk taking behavior, to the young generation would be beneficial, more or less, to the country. As these constructs could affect, both directly and indirectly, to the intention to develop own business, promoting these constructs to the undergraduate students would help the students to become entrepreneurs in the future. However, for those who desire to work as an employee in the firm, entrepreneurial mindset and readiness would help them to apply these traits to their works which would lead to creative work, innovation, and more effective and efficient work as well.

For managerial contribution, the educational institutes can take an active role in developing and enhancing students' latent entrepreneurial potentials by designing the studying programs and courses, particularly for students with entrepreneurial alertness and self-efficacy. The purpose should be to engage the students in realistic business practices both inside and outside classroom, which allow them to perform or exert effort on entrepreneurial behaviors such as hand-on business workshops, dummy companies, business case analyses, business development completions, and so on. Eventually, they will be ready to build their own business and effectively run it with confidence. Moreover, accurate mindset about the concept of risk - tradeoff between returns and risk in doing a business - must be fully imparted to students.

Consequently, positive attitude and intention towards entrepreneurial career path shall be recognized. Then, the students' perception of desirability and feasibility to do a business will become vivid and concrete.

Regarding the academic contribution, as the influence of entrepreneurial alertness on entrepreneurial intention confirms the consistent findings conducted with various groups of subjects, this construct could be highlighted as a major influencing factor of entrepreneur-related constructs. The result from the undergrads sheds the light on the entrepreneur-related study in different levels of education, ranging from secondary school, high school and post-graduates. The results can be foundations to develop entrepreneur incubation models for the students who desire to pursue entrepreneurship from different educational levels. Strongest indirect effect of self-efficacy on entrepreneurial intention through work effort reflects the important role of work effort. Self-efficacy and work effort can be paired up to investigate their mutual effects on other context such as work performance and work productivity. The clarification of mixed findings of risk-taking and entrepreneurial intention paves a solid direction in students and educational role. The risk taking can be a predictor of other entrepreneurial variables, such as nascent entrepreneur and entrepreneurial performance.

Recommendation for the Future Research

It is known that entrepreneurial intention is considered as a crucial but not "a must" condition for a person to initiate entrepreneurial behaviors. Moreover, entrepreneurial intention does not always lead the individuals to be entrepreneur all the time. Some individuals may engage in entrepreneurial activities and start venturing their own business by meeting an opportunity accidentally without deliberate planning (Thompson, 2009). Hence, the further study should be conducted in a manner of longitudinal design which enables to track the progress of those who possess entrepreneurial intention whether or not they could really put their intention into practice. Alternatively, the study can also investigate on those who commence entrepreneurial activities without formerly possessing entrepreneurial intention. This would help identify other potential causes, besides lucks and chances in starting a business. Moreover, the moderating effect of business education i.e. majors, courses, subjects taken by the students, can be further considered to elaborate the understanding of entrepreneurial intention among students from various backgrounds.

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