

The Effect of Risk Taking Propensity on Entrepreneurial Intention: Entrepreneurial Self Efficacy as Moderator

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Abstract- Graduates are economic generator that could overcome the rises in Malaysian unemployment rate through their involvement as an entrepreneur. However, Malaysian graduates tracer study shows the unsatisfactory level of graduates becoming an entrepreneur after graduation. Recent studies are picking up in correlating the risk-taking propensity and the entrepreneurial self-efficacy to enhance the entrepreneurial intention. Viewing from the context of entrepreneurship education in Malaysian Polytechnics, this quantitative study explores whether the risk taking propensity could increase the level of entrepreneurial intention and how the development of entrepreneurial self-efficacy does moderates the relationship. A total of 384 respondents were selected using simple random sampling among the Malaysian Polytechnics students to answer the questionnaire that was adapted from Meertens and Lions (2008), McGee et al. (2009) and Chen et al. (1998), but only 317 responses are valid. Data was analysed using descriptive analysis and Partial Least Squares Structural Equation Modelling (PLS-SEM) to test the hypothesis of the study. The results demonstrate the roles of risk-taking propensity and entrepreneurial self-efficacy as a potential predictors in elevating student's intention to be an entrepreneur. But there were no significant moderating effect of entrepreneurial self-efficacy on the relationship between the risk taking propensity and the entrepreneurial intention. This findings provide implication for further research to discuss in depth the factors that influence the findings of the study.

Keywords: Risk taking propensity, Entrepreneurial Self-Efficacy, Entrepreneurial Intention.

1. Introduction

Current economic situation drives the younger generation nowadays being seen as potential job generators to reduce the rising unemployment rate in Malaysia. Malaysia's labour force survey report published by Department of Statistics Malaysia (DoSM) showed that the unemployment rate rose up to 3.4% (504,100) in 2016 compared to 3.1% (450,300) and 2.9% (411,100) unemployment rate in 2015 and 2014 respectively. The statistics been dominated by a group of 20-24 year olds at 37.7% unemployment rate followed by a population of 25-29 years old by 22.7% and a population of 15-19 years old which is 16.5% [1]. Thus, clearly shows that the unemployment issue in Malaysia is majorly dominated by the young workforce. In order reduce the unemployment rate and career dependency of current graduates on the public and private sectors, various approaches implemented by the government to nourish these young people to venture into entrepreneurship. This is because entrepreneurs have been recognized as a national economic generator through its function as a job generator ([2]; [3]).

Viewing from the context of entrepreneurship education in Malaysian Polytechnic, various efforts have been accomplished by Ministry of Higher Education (MoHE), the Department of Polytechnic Education (JPP), the Malaysian Polytechnic Entrepreneurship Centre (MPEC) and the Unit of Polytechnic Entrepreneurship in fostering entrepreneurship values among the students. As a result, there is a positive achievement in the Key Performance Index (KPI) of Polytechnic Entrepreneurship Unit in terms of the number of students participating in entrepreneurial programs or the number of students who venture into business and entrepreneurship within a year after graduation. However, the statistics shows the inadequate improvement as the percentage of graduates joining entrepreneurship is still low [4].

The Tracer Study reported that Malaysian Polytechnic have witnessed only 1.37% (303 of 23,960 respondents), 0.93% (251 out of 26,940 respondents) and 1.11% (329 out of 27,424 respondents) are self-employed graduates in 2012, 2013 and 2014 [4]. Another study by [5] reveals the percentage of Malaysians with entrepreneurial intentions or the Malaysians who are expected to start their business in the next three years is 11.6%. However, only 5.9% of them are consistently in progress starting a new business start within three and a half years [4]. The findings show that the entrepreneurship is not a first choice career path among Malaysian polytechnic graduates. Thus, there is a need to study the various aspects that helps in promoting entrepreneurial value among students such as self-efficacy and risk propensity.

2. Risk Taking Propensity

The risk taking propensity is often stated as one of the entrepreneur's competencies. This statement has been agreed by [6], [7], [8] and [9] which entrepreneurs should be able to take the risk to achieve the goals and objectives of entrepreneurship venture. This is because risks are generally defined as a possibility of any situation or event that may affect the achievement of an organization's objectives or goals [10]. While individuals may have the potential to gain substantial profits as a result of higher risk taking, however, there are also a cost that need to be invested in order to manage and address those risks and a potential loss may arise as a result of such behavior. Therefore, in order to reduce the loss severity resulting from the risk taking attitude, then, an entrepreneur should thoroughly identifies, calculates and determines its level of risk acceptance also stated that individuals with sufficient information on risk faced by their business have higher tendency to start-up a business.

Generally, the risk taking propensity measures the individual's level of risk acceptance. In the context of business and entrepreneurship, the entrepreneurial risk taking propensity is defined as the individual's tendency to take certain risks related to their business operations primarily in business decision-making. Each individual has a different level of risk taking propensity depending on the situation he or she has experienced. The risk taking propensity may categorize into three which are risk taker, risk averse and risk neutral.

There are some discrepancies in the idea of determining whether the level of risk taking propensity may affect entrepreneurial intention. Research by found that risk taking propensity does not influence entrepreneurial intention directly instead risk taking propensity should be mediated by the entrepreneurial self-efficacy in enhancing the entrepreneurial intention. This idea was supported by where the entrepreneurial self-efficacy affects the tendency of entrepreneurs to take the risk by allowing the entrepreneurs with high level of self-efficacy to be more comfortable in taking risks. In other words, they are more likely to perform risky activities when they were convinced that they can successfully perform the activity. This idea contrary with where risk taking propensity did influences the entrepreneurial intention found that highly risk-taking propensity individuals tend to believe in their ability to do entrepreneurial activity especially in the business opportunity identification phase thus enhancing the intention to be an entrepreneur. These conflicts of previous research findings excites the researcher to view from the context of entrepreneurship education in Malaysian Polytechnic, whether the tendency in risk taking does moderates the relationship between entrepreneurial self-efficacy and entrepreneurial intention.

$H_1 =$ Risk taking propensity (RTP) positively correlated with entrepreneurial intention (EI)

3. Entrepreneurial Self-efficacy

The Self-Efficacy Theory developed by refers to the individual's belief of their ability to complete a task. The theoretical basis states that individuals are more likely to accomplish the activities which they believe they are capable in doing. This theory was supported by where high level of self-efficacy individuals are more likely inspired in accomplishing a risky activities and enthusiastically facing the challenges and obstacles in achieving their objectives compared to the individuals with low level of self-efficacy. Primarily, the theories have been used to vanquish the behavioral issues. The concept is then was extended and unfolded as a domain activity of a career.

Recent studies persistently promote the idea of self-efficacy in shaping the individual's tendency to perform the entrepreneurial tasks and activities. This is because the development of self-efficacy can help in nourishing interest, increasing the tendency, endurance and consistency of individuals towards a career. However, to what extent the entrepreneurial self-efficacy may influences the individual intention towards entrepreneurship? Emphasized that self-efficacy should focus on a specific domain of activity. This is because the more specific the domain of the activity is measured, the more accurate the assessment of the study focuses on the individual's belief in performing the activity. Thus, in the entrepreneurship context, self-efficacy has been seen as the individual belief in their abilities and skills in executing the entrepreneurial activities. Self-efficacy dimensions also need to be thoroughly identified and measured so that entrepreneurial education would be able to appropriately aim on its goal in enhancing the individual's competence in accomplishing the entrepreneurial activities.

Numerous measures of self-efficacy have been developed either to measure or evaluate in general or in specific context of entrepreneurship. Concludes that previous measurement of entrepreneurial self-efficacy had three types of limitations: (1) fails to clearly distinct the general self-efficacy from the venture creation process related self-efficacy, (2) fails to take into account the multidimensional nature of entrepreneurial self-efficacy, and (3) fails to include nascent entrepreneurs in the measurement testing. Thus, developed an entrepreneurial self-efficacy measurement based on four discrete phases of entrepreneurial activities. These four discrete phase of entrepreneurial activities which focus on entrepreneurial activities during commencement of venture namely (i) searching; (ii)

planning; (iii) marshalling; and (iv) implementing. This study uses the instrument developed to view the entrepreneurial self-efficacy from the perspective of entrepreneurial education in Malaysian Polytechnic in order to investigate to what extent does the entrepreneurial self-efficacy enhances the student's intention towards entrepreneurial activity.

H₂ = Entrepreneurial self-efficacy (ESE) positively correlated with entrepreneurial intention (EI)

H₃ = Entrepreneurial self-efficacy (ESE) moderates the relationship between risk taking propensity (RTP) and entrepreneurial intention (EI)

4. Conceptual Framework

Based on the above discussion as illustrated in prior literature, the conceptual framework of this study constructed as Figure 1.

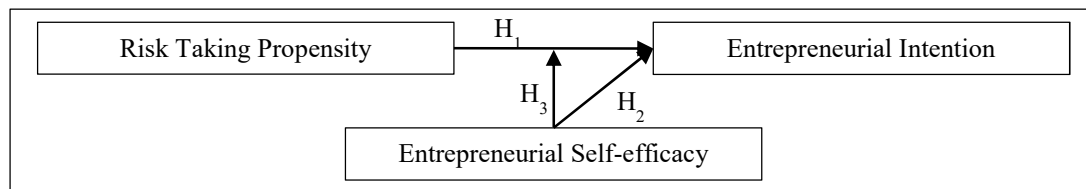


Figure 1. Research Conceptual Framework

5. Methodology

The population of this study is Malaysian Polytechnic Diploma students. The enrolment statistics for full-time students according to the level of study in Malaysian Polytechnic 2014-2015 shows the total enrolment of 94,642 Malaysian Polytechnic Diploma students. Using simple random sampling technique, 382 samples were needed to carry out this study. Only 317 responses are valid to be analysed out of 382 questionnaires that been distributed (82.98% respondents' response rate) stated that the data for educational based studies with 80% respondents' response rate is sufficient to be analysed.

This quantitative study uses 24-item questionnaire to obtain respondents' feedback on risk taking propensity, entrepreneurial self-efficacy and entrepreneurial intention. All items are Likert scaled at 5 points where 1 - strongly disagree; 2 - disagree; 3 - less agree; 4 - agree; and 5 - strongly agree.

To measure the risk taking propensity construct, five items in the questionnaire was adapted and modified from Risk Propensity Scale developed to focus on tendency of students in taking business and entrepreneurship risk. This is because the tendency for risk taking varies according to the situation, frequency and severity of the risk. The Cronbach Alpha value for this instrument is 0.6656.

Whereas, the entrepreneurial self-efficacy measurement contains 15 items which were adapted and modified from the questionnaire developed. This questionnaire was chosen because the measurement of self-efficacy was more focused on four discrete phase of entrepreneurial activity in the commencement of business. The Cronbach Alpha score for this instrument is 0.8960.

The constructs of entrepreneurial intention were measured using questionnaire developed by. This instrument comprises four items questionnaire to measure the tendency of individuals to engage in entrepreneurial activity within 5 years after graduation. The Cronbach Alpha score for this instrument is 0.9052.

Partial Least Square - Structural Equation Modelling (PLS-SEM) were used to answer the research questions which were conducted using SmartPLS software to explore how the entrepreneurial self-efficacy acts as a moderator in the relationship between risk taking propensity and entrepreneurial intentions. According to the effect of moderator with β value < 0.02 is weak, $\beta > 0.15$ value is moderate and $\beta > 0.35$ is strong.

6. Result and Discussion

The frequency analysis showed that 317 respondents consisted of 101 male students (31.9%) and 216 female students (68.1%). According to the education background, a total of 228 students (71.9%) from non-technical fields such as commerce, tourism and hospitality. Meanwhile, the remaining 89 respondents are technical students (28.1%). A total of 234 respondents (73.8%) had business backgrounds either through family, relatives, friends or

others. Most of the respondents had participated in entrepreneurship courses, which consisted of 237 people (74.8%).

PLS-SEM

In order to employ Partial Least Square - Structural Equation Modeling (PLS-SEM) analysis, two stages analytical model recommended was conducted to test the relationship between construct and indicators (the measurement model) and the relationship between constructs (the structural model).

The measurement model

To conduct PLS-SEM analysis explains that the structural model only valid and reliable if the model can explain how each of its constructs is measured. Therefore, the convergence and discriminant validity for this study validity as well as Cronbach Alpha and composite reliability for this study reliability should comply the criteria requirement first.

Construct	Items	Loadings	AVE	CR
Risk Taking Propensity (RTP)	RTP1	0.5568	0.4225	0.7827
	RTP2	0.5779		
	RTP3*	0.6662		
	RTP4	0.7598		
	RTP5	0.6723		
Entrepreneurial Self-Efficacy (ESE)	ESE1	0.6088	0.4114	0.9120
	ESE2	0.6000		
	ESE3	0.5334		
	ESE4	0.5624		
	ESE5	0.5915		
	ESE6	0.5906		
	ESE7	0.6464		
	ESE8	0.6980		
	ESE9	0.6693		
	ESE10	0.7299		
	ESE11	0.6721		
	ESE12	0.7223		
	ESE13	0.7778		
	ESE14	0.5575		
	ESE15	0.6053		
Entrepreneurial Intention (EI)	EI1*	0.8795	0.7793	0.9338
	EI2*	0.9116		
	EI3*	0.8378		
	EI4*	0.9004		

Table 1 Convergent validity

Note. n = 317; * = reversed score item

Convergence validity explains the extent of each construct fit the model. Based on loadings, internal consistency (CR) and average variance extracted (AVE) are used to test convergence validity. Table 1 demonstrates the loadings for each item in the construct are greater than 0.5 which exceed the value recommended by. The results also shows that each construct has a CR value that exceeds the recommended value of 0.7 . Meanwhile, even though the AVE, which is the squares of loading divided by the number of indicators for each construct was found to not achieve the recommended value of at 0.5, but the value of AVE> 0.5 is acceptable if the composite reliability exceed 0.6 . Thus, this study has successfully established the acceptable requirements of convergent validity.

	RTP	ESE	EI
Risk Taking Propensity (RTP)	0.6500		
Entrepreneurial Self-Efficacy (ESE)	.4479*	0.6414	
Entrepreneurial Intention (EI)	.3311*	.3318*	0.8828

Note. n = 317; bold value is the square root of AVE; p < 0.01*

Table 2 Discriminant validity

Discriminant validity explains the extent of each construct differs from another constructs. There are three methods to measure the discriminant validity which are the Fornell-Lacker criteria, cross-loading and Heterotrait-Monotrait Ratio of Correlation (HTMT). This study uses the method that compares the square root of AVE with the correlation coefficient of each construct. Table 2 displays the correlation coefficient for each construct is lower than the square root of AVE thus, explains that this study has successfully demonstrated the satisfactory discriminant validity.

Assessment of structural model

The predictive power of research model presented by determination coefficient, R^2 . The study found that the value of $R^2 = .1099$ indicates that risk taking propensity only explains 10.99 percent variance of entrepreneurial intention. This means that various other factors should to be taken into account in developing entrepreneurial intention among Malaysian Polytechnic students. Further, the R^2 value increased to .1336 with the entrepreneurial self-efficacy as a moderator. This result indicates that 13.36 percent variance of entrepreneurial intention is explained by risk taking propensity with the indirect effect of entrepreneurial self-efficacy.

The bootstrapping function with 1000-resampling from 317 cases performed to calculate the path estimates and t-value. Table 3 shows the structural model’s analysis results. The results revealed that the risk taking propensity ($\beta = 0.2283, p < .01$) positively related to entrepreneurial intention ($r = 0.3311, p < .01$) which supported H_1 . This study’s finding is consistent with. In detail of risk tolerance categories, [9] found that a risk lover or risk taker has positive and moderate effect on entrepreneurial intention which supported the finding of. However, the finding of [9] provides insufficient data to show that a risk neutral and risk avoidance behavior may impact the entrepreneurial intention. While which studied the context of social entrepreneurship also discovers that risk taking propensity does contributes towards entrepreneurial intention. Thus, these results verified that the propensity towards taking risks as a characteristic of those who intends to venture in the future considering that starting and managing a business often requires good risk management skills.

Hypothesis	Relationship	Path Coefficient (β Value)	Standard Error	t-value	Decision
H ₁	RTP → EI	0.2283	0.0580	3.9386*	Supported
H ₂	ESE → EI	0.2296	0.0529	4.3368*	Supported
H ₃	ESE × RTP → EI	0.0152	0.0456	0.3332	Not supported

Table 3 Path coefficient, standard error and t-value

Note. $p < 0.01^*$

The entrepreneurial self-efficacy ($r = 0.4479, p < .01$) also positively related to entrepreneurial intention ($\beta = 0.2296, p < .01$). Thus, supported H_2 . The findings of this study are in line with the study conducted by which explains that the development of self-efficacy helps in enhancing interest and tendency along with the endurance and consistency of individuals towards a career. However, the result is contrast with where behavioral control factors which represented by the strong belief in the ability to accomplish business activities is the weakest factors that affects the entrepreneurial intention compared to student attitudes and subjective norms (social support from family and friends) explains that rather the high level of self-efficacy to guarantee a success in achieving goals, the individuals with high levels of self-efficacy are more likely to be consistently progressing until they succeed in venturing a business.

This study also found that even though high level of entrepreneurial self-efficacy may increase the student's interest in participating in the entrepreneurship field but there is insufficient evidence to supports that entrepreneurial self-efficacy may acts as moderator to improve the relationship between risk taking propensity and entrepreneurial intention. Thus, H_3 is not supported. Model developed by displayed that entrepreneurial self-efficacy acts as mediator in the relationship between risk taking propensity and entrepreneurial intention rather that acts as moderator which explains that when the effect of entrepreneurial self-efficacy removed, then the relationship between risk taking propensity and entrepreneurial intention disappears. However, this study sufficiently shows how risk taking propensity predicts the entrepreneurial intention without the indirect effect of entrepreneurial self-efficacy.

7. Conclusion

Analysis result showed that risk taking propensity is positively and significantly affects the entrepreneurial intention. While entrepreneurial self-efficacy in entrepreneurship study does not acts as moderator in the relationship with risk taking propensity and entrepreneurial intention, but it is rather acts as a predictor of entrepreneurial

intention. This suggests that student's psychological aspect which represented by entrepreneurial self-efficacy also helps in enhancing student propensity to venture in future especially among Malaysian Polytechnic students.

This study subjects to a limitation where this research did not make a stratification of respondent's backgrounds. Therefore, future research needs to consider these aspects and consider entrepreneur's profile such as age, gender, entrepreneurship experiences, and family background and education background as control variables.

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