

Appropriate behaviours and courses delivery on entrepreneurship intention of TVET students

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ABSTRACT – The study of entrepreneurship courses effectiveness among TVET students is important. It reflects whether they could be self-reliant and contribute meaningfully to the nation. Thus, the research objective investigated whether the courses delivery could induce a moderating effect on the model under study. Convenience sampling was used to select 108 students from Engineering Technology programs who studied entrepreneurship. Overall results exhibited significant entrepreneurial intention among the students. The three variables chosen correlated well with one another. Courses delivery as moderator showed good interaction with students' appropriate behaviours by additional 2.5% toward business intention. Subsequently, 19.4% students have involved in real business, exceeding the ministry's target of 10%. Eventually, effective conducts of entrepreneurship courses successfully enhanced students' venture into real business.

1. INTRODUCTION

Self-employment has been one of the employability criteria of Technical and Vocational Education and Training (TVET) graduates, said [2]. Research findings by [1] and [5] supported the entrepreneurial intention level of vocational and technical students in Malaysia. The studies asserted that interest and attitudes in entrepreneurship were very strong while moderate for social norms, efficacy, and efficiency of entrepreneurship knowledge. Likewise, entrepreneurship education should equip students with entrepreneurship knowledge and skills, which can be their source of interest to become an entrepreneur when facing the possibility of not getting hired in the labour market, according to [3]. It is indeed a fact that TVET managed to bridge skills gap or mismatch among the workforces.

The entrepreneurship students' appropriate behaviours have been widely discussed by previous researchers. According to [10], scholars have always focused on the characteristics of a person in the study of entrepreneurship. In the TVET case, students also exhibit certain behaviours, thoughts, or feelings after learning entrepreneurship knowledge, stressed [12]. A strong desire is the most important element for the implementation of entrepreneurship activities so that it can influence oneself to make decision to invest in a business, as mentioned by [13]. The entrepreneurship courses aim to train and improve students' performance during its implementation period. The intention to do

business becomes clear when the students finally manage to open new business, asserted [11, 17]. This passion is a testament of a deep interest in business. As an entrepreneur, [14, 15] maintained that hard work and continuous dedication are capable of realizing business ideas. Competencies gained through entrepreneurship courses could give both short-term and long-term positive effects. The feeling of enjoyment is achieved when students acquire and maintain a high entrepreneurial spirit after undergoing the activities successfully, claimed [15]. Subsequently, [16] assumed that these students must also demonstrate entrepreneurship skills like sales and marketing, etc. in their courses activities after identifying the products and opportunities to develop further. The courses should be conducted using instructional methods that are guided by business theories and moderated by active learning, giving feedback, and taking actions, argued [20]. In the active learning held within 14 study weeks, students have accomplished individual sales and team's business plan activities involving digital marketing strategies. Students could experience the entrepreneurship process including preparation, launching, marketing, sales, and business management as in a real business situation. On the other hand, [18] translated high self-efficacy as expertise upon completion of a courses that aims to improve a student's skills. As such, understanding of the content is important since entrepreneurs will certainly be evaluated for their skills by customers, affirmed [19]. The entrepreneurship courses stressed that TVET students be able to understand the syllabus and adopt necessary skills to successfully establish and manage their own business interest. Students are encouraged to perceive the importance of entrepreneurship as their potential career after graduation. Thus, future progress is achieved when their business ideas become an aspiration to confidently make the first sales and generate a profit. In this sense, [17] believed that self-sustainability will be the result of continuous progress where there exist positive feelings in understanding the importance of entrepreneurship.

Since end of 2017, TVET has intensified into academic excellence programs that increasingly gained attention from employers due to the emergence of IR4.0 industry. With the primary goal of realizing global workforce, the main foundations of TVET have been built upon practical components, psychomotor skills, and exposure to industry. In addition, entrepreneurship role was integrated into TVET education to improve the

communities' well-being by creating new career opportunities for future graduates and young generations, alleged [3]. Even the ministry has targeted that at least 10% of these graduates to become entrepreneurs [9]. Therefore, it is critical to enhance the entrepreneurial mindset among TVET students to generate business and as many job creators as possible, reminded [4].

1.1 Problem Statement

Study by [2, 12] revealed that there was substantial effort taken in implementing the entrepreneurship courses throughout the TVET institutions. It accentuated conduct of these courses at the beginning of their programs, to enable students to achieve effectiveness. The programs could be improved when necessary to allow the number of entrepreneurs among students to increase and capable of competing at global level. Nevertheless, [4, 10] emphasized the moderate degree of entrepreneurial mindset among TVET students under the Ministry of Higher Education due to education levels, family backgrounds, friends influence, and the students' engagement with business activities.

Hence, the study is motivated by the idea from [3, 4, 13] that higher learning institutions should be more focus on the key growth factors of entrepreneurial mindset of potential talents among universities' TVET students in Malaysia. Because the Malaysian Technical University Network (MTUN) have upgraded their entrepreneurial courses based on Malaysia Digital Economy Corporation (MDEC) syllabus, there is a need for continuous evaluation of its effective implementation.

1.2 Research Objective

The research objective attempt to evaluate the effective conduct of entrepreneurship (business) courses among TVET students from Engineering Technology programs. Based on the entrepreneurship literatures, from [10-20], the following research questions were derived in answering this objective:

- a. Do students perceive importance of entrepreneurship courses?
- b. Do students have business interest?
- c. Do students acquire sales/marketing skills?
- d. Do students enjoy business?
- e. Do students understand business syllabus?
- f. Do students receive well courses delivery?
- g. Do students fulfill entrepreneurship intention?

2. METHODOLOGY

The study used survey to analyse entrepreneurship conducts among Engineering Technology students at one of TVET higher learning institutions in Malaysia. Based on the entrepreneurship courses, students appropriate behaviours were obtained from seven items associated with [1, 5]. These include perceive importance, business interest, sales/marketing skills, enjoy business, understand syllabus, courses delivery, and entrepreneurship intention.

The population consisted of sixth semester students from two programs at an MTUN university in the southern region of Malaysia. Using a convenience sampling, participants were selected based on the availability to take part [6]. This way, faster results can

be obtained, and the samples may not be representative of other non-specified characteristics.

A samples size of 108 students have been gathered where the same number of questionnaires were distributed and collected by hands during the last lecture of the semester. Initial descriptive statistics analysis was done on three demographic items to determine the samples frequencies and percentages [7]. This is important to ensure we have acceptable variances when conducting investigations on the variables data.

Subsequently, three variables were identified namely students appropriate behaviours as the independent variable, which was moderated by courses delivery, and entrepreneurship intention being the dependent variable. The framework can be seen in below Figure 1. Reliability, correlation, and regression analysis were conducted using SPSS version 26. Results of model 1 and model 2 of the study were presented in Table 1 to Table 3 to evaluate the effectiveness of the TVET students' appropriate behaviours and whether courses delivery has a role as a moderating effect to better the entrepreneurship intention achievement. As explained by [21], the model 1 describes the direct effect of the predictor variables on the dependent variable, while the model 2 clarifies how these direct effects and their interaction create moderating effect by strengthening or weakening the direct relationship.

2.1 Research Framework

The following Figure 1 of the research framework was analyzed using SPSS version 26.

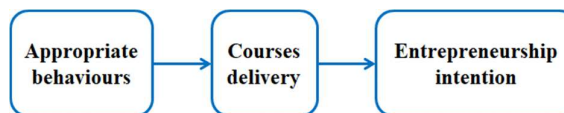


Figure 1 Research framework

3. RESULTS & DISCUSSION

On demographic profiling, the results recorded 52.8% and 47.2% respondents from programs acronym as 'C' and 'Z' respectively. The samples size gathered comprised of 61% male and 39% female, with 78% Malay, 11% Chinese, and 11% Indian. Descriptive analysis revealed 65.8% students preferred to run "own products" while 19.4% have already become "owner of registered business". Results on reliability registered $\alpha = 0.55$ for the 5 items of the student's behaviour which is moderately reliable.

Table 1 Correlation Matrix

Variables	1	2	3
1. Appropriate behaviours	1	-	-
2. Courses delivery	.554**	1	-
3. Entrepreneurship intention	.396**	.427**	1

** Correlation is significant at the 0.01 level (2-tailed).

All variables were well correlated as shown in Table 1. Appropriate behaviours and courses delivery, appropriate behavior and entrepreneurship intention, and

courses delivery and entrepreneurship intention were all significantly correlated with $r = .554, p < .05, r = .396, p < .05,$ and $r = .427, p < .05,$ respectively.

Table 2 Model Summary

Model	Change Statistics						Sig. F Change
	R	R ²	ΔR^2	ΔF	df1	df2	
1	.468	.219	.219	14.732	2	105	.000
2	.494	.244	.025	3.444	1	104	.047

- a. Predictors: (Constant), appropriate behaviours, courses delivery
- b. Predictors: (Constant), appropriate behaviours, courses delivery interaction effect

From Table 2, the R Square Change of model 2 indicated that the moderator role could further explain the variance in the dependent variable by 2.5% more, which was statistically significant ($p < .05$). In other words, the percentage improvement was enhanced by the predictors' interaction effect ($R^2 = .244, F(1,104) = 3.444, p = .047$). As such, it can be implied that courses delivery did moderate the relationship between appropriate behaviours and entrepreneurship intention.

Table 3 Model Coefficient

Model		Stand Coeff.			Collinearity Statistics	
		Beta	t	Sig.	Tol	VIF
1	(Const)		.000	1.000		
	Appropriate behaviours	.229	2.216	.029	.69	1.442
	Courses delivery	.300	2.899	.005	.69	1.442
2	(Const)		.000	1.000		
	Appropriate behaviours	.200	1.935	.037	.67	1.476
	Courses delivery	.238	2.212	.029	.62	1.596
	Interaction effect	-.178	-1.856	.047	.78	1.267

- a. Dependent Variable: entrepreneurship intention

From Table 3, it was evidence that there were significant direct effects for model 1. These direct effects of appropriate behaviours and courses delivery were statistically significantly observed respectively, where $Beta = 0.23, t(105) = 2.22, p = .029$ and $Beta = 0.30, t(105) = 2.90, p = .005$. With similar interpretation, it was also clear that the direct effects for model 2 were both found statistically significant. However, the interaction effect was a bit narrowly achieved with $t(104) = -1.856, p = .047$.

Regrettably, negative Beta sign in the interaction predictor signified the effects on students appropriate behaviours and courses delivery could be distracted if without a favourable plan to support all efforts. In this sense, it was critical to choose committed and knowledgeable lecturers to teach the entrepreneurship

courses effectively. In fact, the teaching plan designed has required students to complete four hands-on activities covering 80% of the total marks. These included business sales, business pitching, business plan, and business portfolio that in a way provided them a challenging opportunity to perform like entrepreneurs and in return assimilated the real experience.

Alternatively, in the first place, significant results were highly induced by descriptive measures of the items. It was found that majority of students or 92.6% ($SD = 0.263$) chose 'products category' for their venture. Other than that, the students positively responded by 83.3% ($M = 2.82, SD = 0.406$) on 'perceive importance', 88.9% on 'enjoy business' ($M = 4.16, SD = 0.763$), 'understand syllabus' by 81.5%, ($M = 4.25, SD = 0.672$), and 'sales/marketing skills' about 90.7% ($M = 2.86, SD = 0.502$). These encouraging outcomes were consistent with previous findings on entrepreneurship impacts [1], entrepreneurship aspirations [5], and entrepreneurship readiness [8]. On top of that, the main contributing factor of the research success could be the 81.5% of the students' enthusiasm to embark on entrepreneurship as a career path when the time is fit. And as a result, it was not surprised that the ministry target of 10% new entrepreneurs [9] from TVET institutions has effectively achieved 19.4% by the university students.

4. CONCLUSIONS

The TVET students from 'C' and 'Z' programs demonstrated effective trend in entrepreneurship intention. They should apply the critical appropriate behaviours to brave the multiple challenges created by Industrial Revolution 4.0 and now the Covid19 pandemic on labour market with their venture and becoming independent entrepreneurs. The new start-ups will have a vital role to grow human capital as a way to revamp the nation economics. It is recommended that the existing entrepreneurship courses to be made fully integrated with all TVET programs comprising the Engineering Technology students to boost their entrepreneurial intention. For further research, suggestions are to include more variables, to take bigger sample size, to consider lecturers qualifications, and to run quantitative analysis with scales measured by suitable statistical software.

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