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# THE INFLUENCE OF COGNITIVE VALUES ON ENTREPRENEURIAL INTENTION AMONG POLYTECHNICS STUDENTS IN MALAYSIA

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***Abstract***

*The main objective of this research is to identify the relationship between cognitive values namely personal attraction, social valuation, and entrepreneurial capacity with entrepreneurial intention among students from Polytechnic Malaysia. Besides, this research also aims to identify the differences in the entrepreneurship intention among three categories of polytechnics namely Premier Polytechnics, Conventional Polytechnics, and METrO Polytechnics. A total number of 171 polytechnic students were involved in the quantitative survey, using purposive stratified random sampling method. The survey used entrepreneurship intention model, which is adapted based on Theory of Planned Behavior. The result explains a positive significant relationship between the level of cognitive values and entrepreneurship intention among polytechnic students. Research results also indicated significant differences in the level of entrepreneurship intention among three categories of polytechnics. Thus, this result justify the need for entrepreneurship education through programs, training and events which strengthen the cognitive values as the key factor in the entrepreneurial intention among Polytechnics' students.*

***Keywords***— *Cognitive Values, Entrepreneurial Intention, Polytechnic Students.*

## I. INTRODUCTION

Malaysian Education Framework 2015-2025 (MOHE 2015), the Ministry's aspiration is to establish a higher education system based on the world's leading education system and enable Malaysia to become competitive in the global economy. The ultimate goal is to instil an entrepreneurial mind set throughout the Malaysian higher education system and create a system that produces graduates by driving them to create jobs, not just to get jobs. Align with the national agenda and working towards Industry Revolution 4.0, Department of Polytechnic, and Community College Education (JPPKK) has focused on nurturing entrepreneurship intention through entrepreneurship education among students by providing a structured entrepreneurial ecosystem.

Numerous researchers have highlighted the importance of entrepreneurship education which can enhance the entrepreneurial intention (Ojewumi and Fagbeno, 2019). Some of the researchers have indicated that cognition has the higher potential in making a significant contribution to entrepreneurship research, particularly in promoting entrepreneurship intention. Cognition is a mental act or process of gaining knowledge and understanding through experience, thought, and pleasure. There is paramount of evidences that cognitive values influence individual perceptions towards venturing. In addition, a large group of scholars emphasize the importance of cognitive value in understanding this personal decision to become an entrepreneur (Linan and Chen, 2009). Therefore, this study aims to identify whether entrepreneurship education in polytechnics through activities, programs, and education proactively promotes cognitive processes that encourage individuals to become entrepreneurs.

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The primary aim of this study is to identify the relationship between cognitive values; (1) personal attraction, (2) social valuation, and (3) entrepreneurial capacity with entrepreneurial intention among students at Polytechnics in Malaysia. Besides, this study also identifies the differences in entrepreneurial intention among three categories of polytechnics (Polytechnic Premier, Polytechnic Conventional, and Polytechnic METrO).

## II. RESEARCH BACKGROUND

In Malaysia, graduates are reluctant to engage in entrepreneurship, although entrepreneurship programs and education have been heavily emphasized. Table 1 presented data from the 2010 MOHE Graduate Studies System, where it shows that 1.4% of students (Institution of Higher Learning) choose to work on their own is 1.4%, 1.9% (Polytechnic), 4.7% (Community College), and 1.2% (Private Institution of Higher Learning). These figures indicate that there is a significant practical gap which should be tapped urgently in the implementation of entrepreneurship education and programs in polytechnics in Malaysia. It echoes the imbalance in the entrepreneurial program to produce competitive entrepreneurs among students.

| Employment Status | IPTA | | IPTS | | POLYTECHNICS | | KOLEJ KOMUNITI | | HRD | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| *Permanent* | 29,878 | *61.3* | 15,611 | *70.2* | 6,444 | *48.1* | 1,281 | *37.2* | 56 | *65.9* | 53270 | *60.6* |
| *Contract* | 9,816 | *20.2* | 3,352 | *15.1* | 3,071 | *22.9* | 659 | *19.1* | 24 | *28.2* | 16,922 | *19.3* |
| *Temporary* | 7,855 | *16.1* | 2,711 | *12.2* | 3,307 | *24.7* | 1,236 | *35.9* | 5 | *5.9* | 15,114 | *17.2* |
| Self-Employed | **690** | ***1.4*** | **276** | ***1.2*** | **255** | ***1.9*** | **162** | ***4.7*** | - | | **1,383** | ***1.6*** |
| *Working with Family* | 470 | *1.0* | 299 | *1.3* | 322 | *2.4* | 106 | *3.1* | - | | 1,197 | *1.4* |

Table 1: Employment Status and Sectors of Local Graduate Respondents by HIE, 2010

Based on this scenario, we need to tap the existing gap by focusing more on factors that influence the entrepreneurial intention that seems to be important to increase the entrepreneurial intention among the students and indirectly increase the number of vibrant entrepreneurs in Malaysia. Recently, National Entrepreneurship Policy have been launched by Prime Minister, TunDato' Seri Dr. Mahathir bin Mohamad, with an overriding objective which is to turn Malaysia into a true entrepreneurial nation by 2030, and to create a holistic and conducive entrepreneurial ecosystem to support an inclusive, balanced and sustainable economic development agenda (Malaymail, 11 July 2019). Besides that, polytechnics are also focusing in the entrepreneurship development. This is proven according to the data from the Education Ministry's Malaysia Education Blueprint (Higher Education) that forecast on the demand of an additional 1.3 million additional Technical and Vocational Education and Training (TVET) workers by 2020.

Therefore, to tap the existing issues and expectations, the education industry has to play vital role, to cultivate the entrepreneurial intention among students at very early stage. In the entrepreneurship education context, career selections, is literally planned, which involves cognitive processes (Wan, 2015), where sequences of events such as entrepreneurial education, programs and activities influence the entrepreneurship ability and lead to entrepreneurship intention among students. Jamaluddin et. al. (2019) and Hussain and Norashidah (2015) have yielded that entrepreneurship education have been identified as determinants on entrepreneurship intentions and outcomes. Besides, Haynie et. al., 2010 have mentioned that entrepreneurial education and programs have its' cognitive origin which can shape the individual skill and knowledge, and it lead to be one of the main factor leverage the entrepreneurial intention.

Liñán and colleagues (2011) state that the model presented by Shapero and Sokol (1982) focuses on the phenomena that occur during entrepreneurial activity, and Ajzen's (1991) model describes how cultural and social environments influence human behavior. Ajzen's (1991) Theory of Planned Behaviour have been used as one of the widespread models to analyse entrepreneurial intention and it

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provides a significant result in in various fields including professional career options (Passaro et. al., 2018). Therefore, this research has employed Ajzen's Theory of Planned Behavior (TPB), which was integrated in the Entrepreneurial Intention Model (Linan and Chen, 2011) to identify the relationship of cognitive values with entrepreneurial intention among Polytechnic students in Malaysia.

## III. RESEARCH OBJECTIVES

There are three research objectives of this research:

i. To analyse the relationship between personal attraction and entrepreneurial intention among students in Polytechnic Malaysia,

ii. To analyse the relationship between social valuation and entrepreneurial intention among students in Polytechnic Malaysia,

iii. To analyse the relationship between entrepreneurial capacity and entrepreneurial intention among students in Polytechnic Malaysia, and

iv. To identify the differences in entrepreneurial intention among three categories of polytechnics (Polytechnic Premier, Polytechnic Conventional, and Polytechnic METrO).

## IV. METHODOLOGY

This research has been carried out using a descriptive survey method to analyse entrepreneurial intention among Malaysian Polytechnic students. The target population for this study was the diploma students from three categories of polytechnic in Malaysia (Premier, Conventional, and METrO). Purposive sampling was used where the questionnaires were distributed through google form to all the students. A total of 171 students responded to the survey. This model and survey of questionnaire were adapted from Linan and Chen (2011), according to the condition prevailing to local environment. This study employ cognitive values, through the application of an Entrepreneurial Intention Model. A five-point likert scale questionnaires were designed which comprises four variables; personal attraction, social valuation, entrepreneurial capacity, and entrepreneurial intention.

### *A. Personal Attraction*

Professional attraction arrests respondents' career plans, the types of professions they choose based on their external environment from a medium to long term perspective and whether they are attractive entrepreneurs.

### *B. Social Valuation*

Social assessment targets to determine whether an entrepreneur is valued more than other professions and careers in the respondent's social network. Moreover, he is trying to discover how it can be accepted by the community to become an entrepreneur.

### *C. Entrepreneurial Capacity*

The entrepreneurial ability highlights the capability of respondents to start any entrepreneurial project or firm. In addition, it calls for the potential to correctly manage and screen projects. Hence, an individual characteristic such as opportunity recognition, communications, creativity, innovation, problem solving, and networks are being analysed.

### *D. Entrepreneurial Intention*

Entrepreneurial intention is the designation of owning a business or being yourself (an entrepreneurial intention by establishing an existing firm or acquiring an existing one), as a broader set of orientations, desires, dispositions, or personal interests that may lead to creative endeavours, as well as entrepreneurship arises including those who are only thinking about setting up their own business and those who have taken more specific steps towards it.

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## V. RESULT AND DISCUSSION

Respondents' demographic profiles contained their personal information and questions related to their behavior. Questions related to respondents' behavior were intended to assess their ability to retrieve such information (Bryman, 2012).

Table 2: Profile of Respondents (N=171)

| Demography | | Frequency | Percentage |
|---|---|---|---|
| Gender | Male<br>Female | 47<br>124 | 27.5<br>72.5 |
| Age group | 18 – 20<br>21 - 22 | 158<br>13 | 92.4<br>7.6 |
| Type of Polytechnic | Premier<br>Conventional<br>Metro | 54<br>69<br>48 | 31.6<br>40.4<br>28.1 |
| Working Experience | Yes<br>No | 77<br>94 | 45.0<br>55.0 |
| Self-Employed | Yes<br>No | 61<br>110 | 35.7<br>64.3 |
| Family Business Background | Yes<br>No | 57<br>114 | 33.3<br>66.7 |

Table 2 demonstrations the profile of respondents. From the table, there were 47 (72.5%) male respondents while 124 (72.5%) were female respondents. According to the age group, most of the respondents were from the age group between 18-20 and a total of 158 (92.4%) respondents. This was followed by respondents of the age group of 21 - 22 years with a total of 13 respondents (7.6%). According to the polytechnic type, there were 54 (31.6%) respondents who came from the Polytechnic. This was followed by 69 (40.4%) of respondents from conventional polytechnics. The remaining 48 (28.1%) respondents were from Polytechnic Metro. For work experience, 77 (45.0%) respondents had work experience while 94 (55.0%) respondents had no work experience while 94 (55.0%) respondents have no working experience. As for self-employment experience, 61 (35.7%) respondents have self-employment experience while 110 (64.3%) respondents have no self-employment experience. As for family business background, 57 (33.3%) respondents have family business background while 114 (66.7%) respondents have no family business background.

Descriptive statistics were also calculated using SPSS for each construct in order to identify their level of mean among respondents. The three categories by mean consist of low (1.00 - 2.33), medium (2.34 -3.67) and high (3.68 - 5.00). (MohdNajibAbdGhafar, 2003).

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Table 3: Descriptive Statistics of Research Finding

| Variables | Mean | SD | Level |
|---|---|---|---|
| Professional Attraction | 3.8326 | .56898 | High |
| Social Valuation | 3.6901 | .40029 | High |
| Entrepreneurial Capacity | 3.8713 | .58272 | High |
| Entrepreneurial Intention | 4.1559 | .58666 | High |

Table 3 displays descriptive statistics for the variables. Overall all variables and sub variables showed high levels of agreement. It was concluded that Entrepreneurial Capability had the highest level of agreement (Mean = 3.87), followed by Professional Attraction (Mean=3.83) and Social Valuation (Mean=3.69) among the three independent variables. These findings indicate that the salary is not the main attraction to be an entrepreneur, while data shows entrepreneurial capacity and personal attraction has more influence on the entrepreneurial intention among polytechnic students. Besides, the finding shows that the students are surrounded with people who has a positive perception on entrepreneurship. Polytechnics need to bring successful and vibrant entrepreneurs to provide motivation or self-development to their students over time. In addition, industrial visits to reputable companies will expose them more to the profession as well.

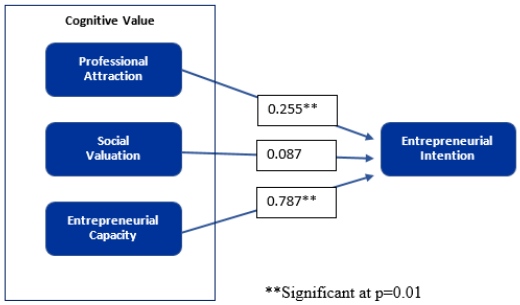


**Figure 1: Entrepreneurial Intention Model**

Figure 1 presents the correlation between independent which comprises Entrepreneurial Capability, Social Valuation, and Entrepreneurial Capacity and dependent variables which is Entrepreneurial Intention. Overall, all variables showed significant positive relationship with entrepreneurial intentions except Social Valuation which indicated no significant relationship. The level of relationship between the entrepreneurial capacity and entrepreneurial intention indicate a strong relationship meanwhile between Professional Attraction indicate a very weak relationship (Chua, 2013). This result shows that students with strong entrepreneurial capacity give a stronger attitude towards being entrepreneur in future. These findings suggest that entrepreneurial intentions are influenced by individual cognitive values. In this study, students' personal interests in entrepreneurship, past experience, and exposure to participation in entrepreneurship programs at Polytechnic Malaysia, or related business and knowledge gained from previous courses and training have a significant impact on their intentions to be entrepreneur. These findings are in line with previous studies by Tshikovhi and Shambare (2015), Matlay (2008), Noorkartina et al. (2015), and Jamaluddin et. al. (2019).

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An ANOVA test was conducted to investigate the differences in entrepreneurial intention between three categories of polytechnics (Polytechnic Premier, Polytechnic Conventional, and Polytechnic METrO). Below are the result of the ANOVA test:-

Table 4: ANOVA Test (Entrepreneurial Intention)

| Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|
| **12.270** | 2 | 6.135 | 22.291 | .000 |
| **46.238** | 168 | .275 | | |
| **58.508** | 170 | | | |

Post Hoc Turkey HSD

| Polytechnic | N | Subset for alpha = 0.05 | |
|---|---|---|---|
| | | 1 | 2 |
| Conventional | 69 | 3.9565 | |
| Metro | 48 | 4.0000 | |
| Premier | 54 | | 4.5494 |
| Sig. | | .900 | 1.000 |

Table 4 shows the result of ANOVA test for the difference between types of polytechnics for entrepreneurial intention. The test shows that there is significant differences between the polytechnics ($F=22.291, p<0.000$). Analysis shows that there is significant differences between students from Polytechnic METRO, Polytechnic Premier, and Polytechnic Conventional in the degree of entrepreneurship intention among students. Post Hoc test indicates the Premier Polytechnics have significantly higher intention than Conventional and Metro Polytechnics. Thus, it can be assumed that students in Premier Polytechnics are given more knowledge and skills which will directly influence their decision to become an entrepreneur. This shows that education enhances self-confidence by providing training to control and change behaviors through knowledge and skills that lead to higher intention. In addition, students should be invigorated to play a vital role in more national and international contest related to entrepreneurship. They need to be exposed to contemporary business models such as business model canvas (BMC) or Lean Canvas.

## VI. CONCLUSION

This study has successfully generated new insight regarding cognitive value's elements in predicting the entrepreneurship intention among students in Polytechnics in Malaysia. The finding drew a conclusion that appropriate educational intervention has the potential to create students love their entrepreneurial career. This view is started to be accepted and academics are beginning to focus on the role that education play in the process of facilitating the entrepreneurship intention among students. Besides, the finding highlighted the importance of entrepreneurship education, training, and program which aim to strengthen the entrepreneurship intention among students. Furthermore, these results are also promising, as they reveal the potential for investment in entrepreneurship education at a given time, which may have an impact on polytechnic prosperity. Future research should explore on the technology knowledge among students in influencing to an entrepreneur.

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