ENTREPRENEURSHIP INTENTION AMONG OPEN UNIVERSITY MALAYSIA (OUM) LEARNERS

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ABSTRACT

Entrepreneurship plays an important role in contributing to the nation economic growth and creates job opportunities to the country. Ministry of education in Malaysia has even included entrepreneurship as part of the syllabus in higher learning education in order to foster local entrepreneurs among learners.

Entrepreneurship education has become an important curriculum in the higher education institutions in Malaysia (Ismail et al., 2009) and a core subject for most programmes in Malaysia. A subject by itself, entrepreneurship, has been embedded into the programmes and entrepreneurship is offered as a programme even in several public and private higher education providers, Open University Malaysia (OUM) too has a course under the university compulsory category in the academic for all offered programme in the curriculum called Entrepreneurship with code OUMM2103. This course has become popular and receptive by the undergraduates in OUM. Entrepreneurship education has now become an essential component to cultivate the potential entrepreneurs in the higher learning institutions. According to Ismail et al., (2009), entrepreneurship education is the most effective way to promote the transition of graduates toward the self-employment.

This study aims to investigate the factors which will influence the entrepreneurship intention among OUM learners using structural equation modeling (SEM). The results of the finding shows there are a significant influence of attitude and perceive behavioural control to entrepreneurship intention. However, subjective norms do not significantly influence the entrepreneurship intention among OUM learners. The overall findings of this research have limitations in terms to generalise the results. The results of this study will be able to provide an insight to the educators to help all learners to develop their abilities and skills to produce a higher rate of entrepreneurs in the nation.

Keywords: Entrepreneurship, structural equation modelling (SEM), entrepreneurship intention.

I. INTRODUCTION

Open University Malaysia (OUM) is a private university in Malaysia which upholds the lifelong learning banner adopted blended learning pedagogy and academic quality is assured for its offered programmes. OUM has 7 faculties namely; Faculty of Business and Management (FBM), Faculty of Education & Language (FEL), Faculty of Science & Technology (FST), Faculty of Applied Social Sciences (FASS), Faculty of Nursing & Allied Health Sciences (FONAHS) and Faculty of Information Technology and Multimedia Communications (FITMC). The total number of learners registered every semester in OUM is approximately 25,000 averagely. OUM emphasized on the quality of service delivery in academic and support facilities to its learners. OUM will revised and looked into the academic curriculum regularly to ensure the courses offered in the programmes offered are on the same platform as required by the demand in the market.

There are many policies are set by government to support the entrepreneurs, including funding, physical infrastructure and business advisory services in Malaysia. Although the government is playing an important role in the entrepreneurship development, however, there are many institutions are assisting in developing entrepreneurship skills. For example, MajlisAmanah Rakyat (MARA), is focusing on entrepreneurship training, Ministry of Entrepreneur is coordinating all the matters regarding to entrepreneurship. In addition to the government policies and support through its constitutional bodies, Malaysian government has also revised its education and training component on entrepreneurship as such mechanisms would spur the economic activities and in turn, create employment growth.

Hart and Harrison (1989) have done a study on the tendency of undergraduates in involvement to run their business in Northern Ireland with results showing 47% of students expressed the intention to run their own business. Meanwhile, Salleh (2002), showed that graduates who are associated with entrepreneurship has increased with a small percentage, lower than 0.4%. The purpose of this research is to investigate factors which will influence the entrepreneurship intention among OUM learners. The results of these findings will be able to assist educators to fulfill their responsibilities to help all learners to develop their abilities and skills to produce a higher rate of entrepreneurs in the nation.

II. LITERATURE REVIEW

Entrepreneurship education has become an important curriculum in the higher education institutions in Malaysia (Ismail et al., 2009). Entrepreneurship programs continued to grow and gain legitimacy within the world of academics and undergraduate students have had been

increasing opportunities to study topics related to entrepreneurial career track (Deborah, John &Hovis, 2002).Graduates from different filed are interested to be entrepreneurs and this has proven that entrepreneurship education learnt in their tertiary education provided flexibility to graduates in their future workplace (Deborah et al, 2002).Reynolds et al., (1999) said that education is important to the entrepreneurship because education provides individual with a sense of autonomy, independence and self' confidence, self-awareness, awareness of career choices and broadens the horizons of individuals.

III. THEORY OF PLANNED BEHAVIOUR

Ajzen's (1988) introduced the theory of reasoned action (TRA), indicated thatsocial behaviours are motivated by individual attitudes, and are specifically designed to predict information system (IS) use (Davis, 1989, Davis et al, 1989). Later, the theory of planned behaviour (TPB) extends the TRA to account for conditions where individuals do not have complete control over their behaviour. The TPB postulates that actual usage (AU) is determined by behavioural intention (BI) and perceived behavioural control (PBC). Behavioural intention is determined by three factors: attitude (ATT), subjective norms (SN) and perceived behavioural control (PBC).

Franke and Lutjhe (2004) revealed that students' intention to entrepreneurship is directly influenced by their perception towards entrepreneurship enablers and obstacles. Results showed that students have lower entrepreneurial intentions because they perceived that higher education does not have enough support in providing knowledge and experience to start a business. The subjective norm (SN) refers to the perceived social pressure to perform or to not perform the behaviour (Fishbein&Ajzein, 1975).Gelderen et al., (2008) revealed that parents, peers, and others would affect a person's intention to be an entrepreneur. The first hypothesis would be:H1: There is significant influence of subjective norm to entrepreneurship intention

Attitude towards behaviour is positive or negative evaluation of a person on the performance of certain behaviour. This variable is influenced by the total behavioural beliefs. Gelderen et al. (2008) identified five attitudes toward behaviours that affect a person's intention to entrepreneurship, namely, independence, challenge, the accumulation of wealth, while lack of income security and high workload were perceived as uninteresting aspects to be entrepreneur. Davidsson (1995) found that attitudes toward achievement and toward change explained entrepreneurial intention. The second hypothesis would be: H2:There is significant influence of attitude to entrepreneurship intention

Perceived behavioural control is an individual's perception about the difficulty level for starting behaviour; it is assumed that this variable is influenced by control beliefs. Gelderen et al., (2008) discovered the factors within this variable, namely perseverance, creativity, entrepreneurial alertness, and self-efficacy. The

third hypothesis would be: H3:There is significant influence of perceived behavioural control to entrepreneurship intention

3.1. Conceptual Framework

Refer to Figure 1 for the conceptual framework adopted from Theory of Planned Behavioural Model to analyse the entrepreneurship intention among OUM learners.
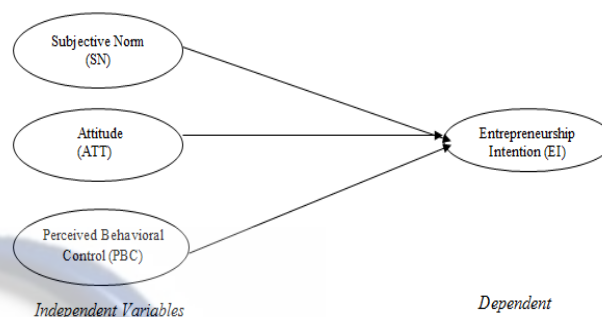

Figure1
Theory of Planned Behavioural Model

3.2 Questions

The research questions for this study are as follows:
1) Is there significant influence of subjective norm to entrepreneurship intention?
2) Is there significant influence of attitude to entrepreneurship intention?
3) Is there significant influence of perceived behavioural control to entrepreneurship intention?

3.3 Research Design

A total of 109 questionnaires were distributed to learners who are currently undertaking their tertiary education in OUM to express their views on factors that will influence their entrepreneurship intention. The questionnaires were distributed to learners who are currently pursuing their final year in OUM. Data were collected from OUM learners using questionnaire and the questionnaire consists of two sections. Section A of the questionnaire gathered information pertaining to learners' profile such as gender, age, educational level, marital status and learners' undertaking programmes. In Section B, the questionnaire consisted of three items that measure the subjective norm (SN), five items to measure the attitude (ATT), and six items to measure perceived behaviour control (PBC) on entrepreneurship intention, respectively. Respondents were requested to respond on a seven-point Likert-type scale, with "1" being "strong disagree" and "7" being "strongly agree.

IV. RESULT ANALYSIS

The data obtained from the questionnaires were analysed using the structural equation modelling (SEM) approach. Following the two-stage model-building process for applying SEM suggested by Hair et.al (1998), the

measurement model was estimated using confirmatory factor analysis (CFA) to test reliability and validity of the measurement model, and the structural model also was analysed to examine the model fit results of the proposed theoretical model (Theory of Planned Behaviour model).

Demographic Analysis

Table 1
Demographic statistics of the respondents

Item	Frequency	Percent (%)	Cumulative (%)
Gender			
Male	49	44.95	44.95
Female	60	55.05	100.00
Age			
less than 25	19	17.43	17.43
In between 26-34	53	48.62	66.05
Above 35	37	33.95	100.00
Education Level			
Diploma	49	44.95	44.95
Bachelor Degree	60	55.05	100.00
Major			
Business	73	66.98	66.98
IT	20	18.34	85.31
Science&Tech	16	14.68	100.00
Marital Status			
Married	49	44.95	44.95
Single	60	55.05	100.00

Table 1 summarizes the demographic profile and descriptive statistics of the respondents. From the total sample of 109 respondents, majority of the respondents are female, with 55.05% whereas male respondents are 44.95% only. Meanwhile, 17.43% of the respondents are aged below 25, 48.62% respondents are aged between 26 to 34 years old, and 33.95% are aged 35 and above. Most of the respondents are currently pursuing Bachelor Degree, 55.05%, followed byDiploma level with 44.95%.

Measurement Reliability and Validity
Table 2
Results of CFA for Measurement Model

Construct	Items	Cronbach Alpha	Convergent validity		
			Load	Composite reliability	Average Variance Extracted
Subjective Norm	SN2	0.870	0.915	0.871	0.772
	SN3		0.841		
Attitude	ATT1	0.866	0.753	0.865	0.617
	ATT2		0.843		
	ATT3		0.769		
	ATT4		0.773		
Perceived Behaviour Control	PBC4	0.870	0.832	0.878	0.709
	PBC5		0.968		
	PBC6		0.706		
Entrepreneur intention	EI1	0.941	0.819	0.940	0.724
	EI2		0.779		
	EI3		0.911		
	EI4		0.902		
	EI5		0.857		
	EI6		0.828		

The research instrument used confirmatory factor analysis (CFA) to examine the reliability and validity. Table 2 above summarized the results of reliability and convergent validity for constructs. A reliability analysis using the measure of Cronbach's alpha was used to estimate the reliability of the factors. From Table 2 above, the reliability result generated in this study is ranged from 0.866 to 0.941. According to Hair et al. (1998), an academic research with Alpha value above 0.7 is generally accepted and this study showed the reliability of the factors is above the accepted threshold.

Convergent validity is the degree to which multiple attempts to measure the same concept in agreement. Convergent validity was assessed based on factor loading, composite reliabilities, and variances extracted (Hair et al, 1998). The results of the convergent validity are shown in Table 2. To investigate the underlying structure of a twenty items questionnaire assessing the factors influence entrepreneurship intention among OUM learners, data collected from 109 respondents were subjected to factor loading analysis. Four factors (with factor loading exceeded 0.7) were identified as underlying the twenty questionnaire items. However, some items were deleted from the core construct. According to Comrey and Lee (1992), loadings in excess of 0.71 are considered excellent, 0.63 very good, 0.55 good, 0.45 fair. The factor loadings in Table 2 above show all variable loadings exceeded 0.7 which reached an acceptable standard. Composite reliability values, which depict the degree to which the construct indicators indicate the latent construct, range from 0.865 to 0.940. The composite reliability of all latent constructs exceeded recommended level of 0.7 as suggested by Hair et al (1998). The average variances

extracted, which reflect the overall amount of variance in the indicators accounted for by the latent construct, were in the range between 0.617 and 0.772. The average variances extracted of all latent constructs exceeded recommended level of 0.5 by Hair et al (1998).

Table 3
Discriminant Validity of Construct

Construct	(1)	(2)	(3)	(4)
(1) Entrepreneur Intention	0.851			
(2) Perceived Behaviour Control	0.626	0.842		
(3) Attitude	0.773	0.349	0.785	
(4) Subjective Norm	0.302	0.192	0.335	0.879

Discriminant validity is the degree to which the measures of different concepts are distinct. Discriminant validity can be examined by comparing the squared correlations between constructs and variance extracted for a construct (Fornell&Larcker 1981). In this analysis, the correlations between constructs and square root of variance extracted for a construct were compared. The analysis results showed that the correlations for each construct is lesser than the square root of average variance extracted by the indicators measuring that construct, as shown in Table 3. It indicates the measure has adequately discriminant validity. In summary, the measurement model demonstrated adequate reliability, convergent validity and discriminant validity.

4.1 Structural Model Results

A structural model was performed through AMOS to determine the goodness of fit of the hypothesized model in Figure 1 below.
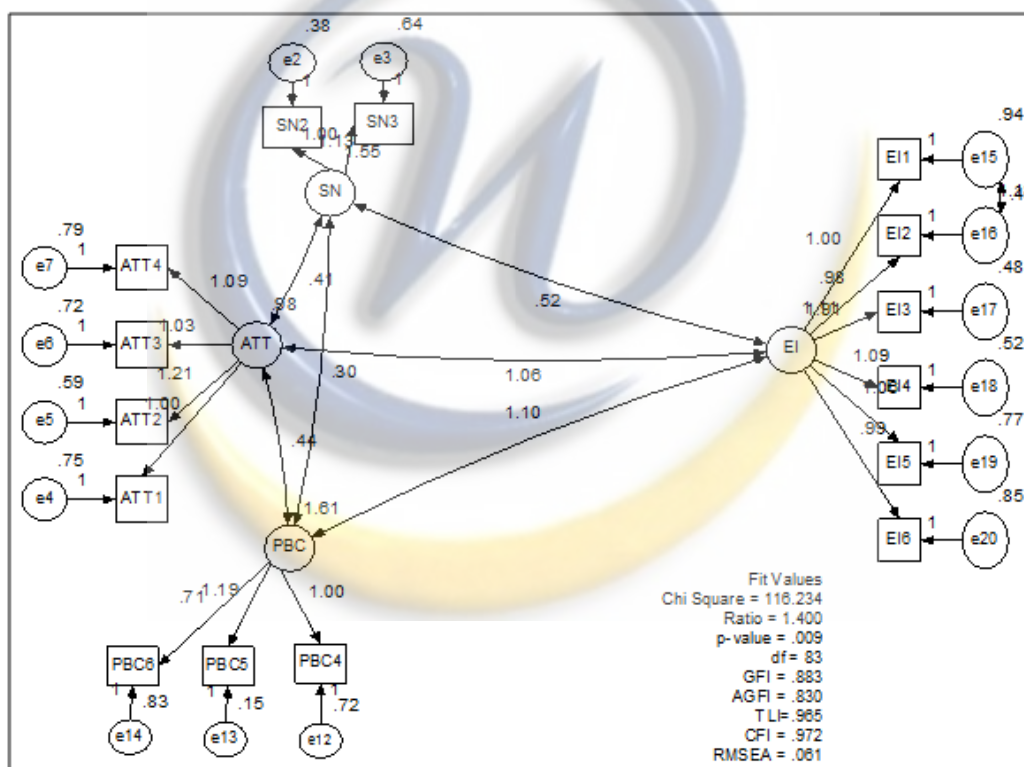

Figure 1
Structural Equation Model for Entrepreneurship Intention among OUM learners

The results of the model fit were derived and the indices assessed the overall model fit including Chi-square (χ^2), goodness of fit index (GFI), adjusted goodness of fit index (AGFI), Tucker Louise Index (TLI), comparative fit index (CFI) and root mean square error of approximation (RMSEA). A summary of the fit indexes is presented in Table 4 below:

Table 4
Fit Indexes Structural Model

Fit Index	Value	Recomended Criteria
df	83	
χ^2/df	1.400	$\Box$ 3
GFI	0.883	$\Box$ 0.9
AGFI	0.830	$\Box$ 0.80
TLI	0.965	>0.95
CFI	0.972	$\Box$ 0.90
RMSEA	0.061	$\Box$ 0.10

The observed normed χ^2 for measurement model was 1.400 (χ^2 = 116.234, df = 83) which is smaller than 3 recommended by Bagozzi and Yi(1988). Other fit indexes also show good fit for the measurement model. The adjusted goodness-of-fit index (AGFI) is 0.830, which exceeds the recommended cut-off level of 0.8 by Chau and Hu (2001). The comparative fit index (CFI) is 0.972, greater than the 0.9 recommended by Bagozzi and Yi(1988). The root mean square error of approximation (RMSEA) is 0.061, lower than the recommended cut-off level of 0.10 recommended by Browne and Cudeck (1993). Overall, the three structural models displayed a good fit with the data, compared with the suggested fit criteria.

A summary of the hypothesis testing results is shown in Table 5 below.

Table 5
Hypothesis Testing Results

Hypotheses No	Hypothesized Path			Path coefficient	t-value	P Value	Decision
H1	EI	<---	SN	0.014	0.201	0.841	Reject
H2	EI	<---	ATT	0.628	6.316	***	Accept
H3	EI	<---	PBC	0.405	5.33	***	Accept

*** *Significant at 1%*

The results of the finding show attitude (ATT) (t =6.316; ρ<0.001) and perceived behaviour control (PBC) (t=5.33; ρ<0.001) are significantly related to entrepreneurship intention behaviour (EI), but subjective norms (SN) (t=0.201; ρ>0.001) are not.

V. CONCLUSIONS

The results of the finding shows that attitude (ATT) (t =6.316; ρ<0.001) and perceived behaviour control (PBC) (t=5.33; ρ<0.001) are significantly related to entrepreneurship intention behaviour (EI), but subjective norms (SN) (t=0.201; ρ>0.001) are not. As a conclusion, there is a significant influence of attitude and perceive behavioural control to entrepreneurship intention. However, subjective norms do not significantly influence the entrepreneurship intention among OUM learners. However, the overall findings of this research have limitations in terms to generalise the results. The results of these findings will be able to assist educators to fulfill their responsibilities to help learners to develop their abilities and skills to produce a higher rate of entrepreneurs in the nation. Educators will be able to review the course curriculum to enhance graduates' ability to create wealth.

REFERENCES

[1]. Bagozzi, R. P., & Yi, Y. (1988).On the evaluation of structural equation models.*Journal of the academy of marketing science*, *16*(1), 74-94.

[2]. Bible, D., & Hill, K. (2007). Discrimination: women in business. *Journal of Organizational Culture, Communication and Conflict*, *11*(1), 65-76.

[3]. Browne, M. Y. C., &Cudeck, R. R.(1993). Alternative ways of assessing model fit. *Testing structural equation models*, 136-162.

[4]. Chau, P. Y., & Hu, P. J. H. (2001). Information technology acceptance by individual professionals: A model comparison approach*. *Decision Sciences*, *32*(4), 699-719.

[5]. Comrey, A. L., & Lee, H. B. (1992).*A first course in factor analysis* (2nded.). Hillsdale, NJ: Lawrence Erlbaum.

[6]. C. Fornell, D.F. Larcker, Evaluating structural equation models with unobservable variables and measurement error, Journal of Marketing Research 18 (1) (1981) 39–50.

[7]. Davis, F.D. (1989), "Perceived Usefulness, Perceived Ease of Use,and User Acceptanceof Information Technology,"MIS Quarterly,13(3):319-339

[8]. Davis, F.D., R.Bagozzi&P.R. Warshaw (1989),"User Acceptance of Computer Technology: A comparison of Two Theoretical Models,"Management Science, 35(8):982-1003

[9]. Davidsson, P. (1995), Determinants of entrepreneurial intentions, RENT (ResearchinENTrepreneurship) Conference, IX, Piacenza, 23-24 November, also Work-ing Paper Series 1995-1, Jonkoping International Business School, Jonkoping.

[10]. Deborah.SH.H., John,J.P., &Hovis,K (2002) University-wide Entrepreneurship Education:

[11]. Alternative Models and Current Trends. *Working paper.*http://purl.umn.edu/127271

[12]. Fishbein, M., and Ajzen, I. (1991), The Theory of Planned Behavior, Organiza-tional Behavior and Human Decision Process , 50

[13]. Fornell, C., &Larcker, D. F. (1981).Evaluating structural equation models with unobservable variables and measurement error.*Journal of marketing research*, 39-50.

[14]. Franke, N. and Luthje, C. (2004), Entrepreneurial Intentions of Business Students: A Benchmarking Study, International Journal of Innovation and Technology Management, 1(3), 269-88.

[15]. Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998).Multivariate analysis.*Englewood: Prentice Hall International*.

[16]. Harrison, R. and Hart, M. (1989), "Factors influencing new business formation: a case study of Northern Ireland", *Environment and Planning*, Vol. 15 No.10, pp.1395-412.

[17]. I.Ajzen, Attitudes, Personality and Behavior, Open University Press,Milton Keynes, 1988.

[18]. I.Ajzen, The theory of planned behavior, Organizational Behavior and Human Decision Processes 50 (2) (1991) 179–211.

[19]. Ismail, M; Khalid, S.A; Othman, M; Jusoff, K; Abdul Rahman, N; Mohammed, K.M &Shekh, R.Z. (2009). Entrepreneurial intention among Malaysian undergraduates.*International Journal of Business and Management*, Vol. 4, No. 10, pp 54-60

[20]. J.F. Hair, R.L. Anderson, W.C. Tatham, Multivariate Data Analysis with Reading, Prentice-Hall, Upper Saddle River, NJ, 1998.

[21]. Muhammad, Anees. (2010) Explaining UK Gender Pay Differentials: Evidence from the BHPS 1995. Available at SSRN: http://ssrn.com/abstract=1550023

[22]. M.W. Browne, R. Cudeck, Alternative Ways of Assessing Model Fit,Sage Publications, Newbury Park, 1993.

[23]. Ngo, H. Y., Foley, S., Wong, A., &Loi, R. (2003). Who gets more of the pie? Predictors of perceived gender inequity at work.*Journal of Business Ethics*, *45*(3), 227-241.

[24]. P.Y.K. Chau, P.J.H. Hu, Information technology acceptance by individual professional: a model comparison approach, Decision Sciences 32 (4) (2001) 699–719.

[25]. Reynolds, P. D., Hay, M., & Camp, S. M. (1999). Global Entrepreneurship Monitor: 1999 Executive Report. Kansas, MO.: Kauffman Foundation.

[26]. R.P. Bagozzi, Y. Yi, On the evaluation of structural equation model, Journal of Academy of Marketing Science 16 (1) (1988) 74–94.

[27]. Russell, D. W. (2002). In search of underlying dimensions: The use (and abuse) of factor analysis in Personality and Social Psychology Bulletin. *Personality and social psychology bulletin*, *28*(12), 1629-1646.

[28]. Tabachnick, B. G., Fidell, L. S., &Osterlind, S. J. (2001). Using multivariate statistics