

The intention of Malaysian private university students to enrol in Master degree courses: TPB approach

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Abstract

There is no doubt that intention underpins human actions. In this study the Theory of Planned Behaviour (TPB) was applied to examine its relevancy for intention to progress into postgraduate level among Malaysian undergraduate student in private universities. This topic was not properly investigated in Malaysia. Our sample consists of 185 Students. The study model includes TPB's three antecedent factors (attitudes, subjective norms and behavioural control) as factors that relates positively to intention. Using multiple regression analysis, we found that attitudes and behavioural control have significantly positive relationship with intention while subjective norms had no significant relationship with intention. Further to this, Mann-Whitney test was performed to assess group differences in intention based on gender (Male and female students) and type of study program (diploma students versus degree students). The result showed no significant differences between males and females and also no significant differences between diploma students and degree students despite slight differences in mean ranks.

Key words: intention, TPB, master, undergraduate, students, university.

Introduction

Intention plays important role in shaping human behaviours. It has been argued that individual's intentions are crucial in predicting the planned behavior (Alharbi et al., 2018). Researcher have extensively examined intention and how it effect human behaviors in many fields. Among the theories that explain intention there is the well-known Theory of Planned Behavior (TPB) as well as the Theory of Reasoned Action (TRA) and Technology Acceptance Model (TAM).

In relation to the topic of this study, there are various factors behind undergraduate students' decision to progress into postgraduate level. Sometimes students' progress to a higher level of study because of passion for knowledge, in other instances they want to specialize in research or academia. Under other conditions, university student further their studies because they are influenced by their universities' marketing efforts and perhaps also couldn't find job after graduation. In the latter case, there are evidence showing that undergraduate students often do not display intention for post-graduation early but their intention occurs later at some stage throughout the undergraduate degree (Jepson and Neumann, 2010). In case of job search, student may be influenced by the belief that post-graduation will equip them with better knowledge and thus it increases their chances for jobs; yet better jobs.

According to Jepson and Neumann (2010) and Jepson and Verhegyi (2011), there is limited number of studies on the intention of undergraduate students to pursue postgraduate studies. Specifically, in Malaysia which represents the context of the current study, scholars have investigated intention mostly in terms to entrepreneurship (Al-Jubari et al., 2018, Al-Jubari, 2019; Al-Jubari et al., 2019). Entrepreneurship and small businesses are crucial to the socio-economic life in every country especially in today's rapidly globalizing economies (Mosbah & Debili, 2014). Intention research in Malaysia was also conducted in fields like; travel (Som et al., 2012), internet and online use (Delafrooz, 2011), and purchasing (Ling et al., 2011). The next section summarizes previous studies the findings of the existing literature of intention as explored in Malaysia higher education level.

Literature Review

Research on intention in Malaysia's higher education sector

In general, there is a limited number of studies on students' intention in higher education in Malaysian. The following table summarizes the available studies and highlight their application. As we can see, a good deal of these studies focused on the online mode of study and the use of learning technologies. The fact that progression to higher level of study haven't received good attention is not much surprising. Many disciplines in Malaysia need further or proper investigation (Mosbah et al., 2017; Mosbah et al., 2018; Mosbah & Wahab, 2018; Mosbah et al., 2019). In this study we aim to explore willingness to progress into a postgraduate study and provide new

evidence. Insights related to the intention of Malaysian graduate students to progress into postgraduate level may differ from the global literature insights simply because of socio-economic and cultural differences among countries.

Table 1: Summary of research on intention in Malaysia higher education level

Authors	Application
Mahmod et al (2005)	Adoption of e-MBA Program
Ramayah (2006)	Use of online library
Luan and Teo (2009), Teo et al (2009), Wong et al (2013)	Use technology
Ramayah et al. (2010)	Continuation of e-learning use
Letchumanan & Tarmizi, (2011)	Use of e-books
Ibrahim et al (2011)	Educational games
Koe & Saring (2012)	Foreign undergraduates' intention to study in Malaysian universities
Abdelaziz et al. (2013)	Use of computer and internet
Jambulingam (2013)	Adoption of mobile technology
Bakar et al. (2013)	Continuance to use student portal
Krishnan & Sajilan (2014)	Social media effect on the intention to select private universities
Najib et al. (2015)	Housing and personal attainment
Shahijan et al. (2016)	International students' behavioural intention

Source: combined by authors

The literature on intention to progress to postgraduate study: TPB applied

The Theory of Planned Behaviour developed by Ajzen (1991) predicts the intention that precede behaviours. TPB explains the factors that lead to the formation of intentions which then lead to actions. These factors are classified into three: (1) attitudes towards the behaviour, (2) subjective norms and (3) perceived behavioural control. What the theory says is that the positive attitudes of an individual towards performing a certain behaviour, together with levels of social pressure, and his perceived control over his actions influence his intention or interest to engage in the behaviour.

TPB has been widely used. Its application covers a wide range of fields. The literature shows that, generally, the three factors tend to have positive relationship with intention. Armitage and Conner (2001) conducted a meta-analysis study of TPB and reported that when behaviour is measured through self-reports of respondents, the TPB has additional 11% of the variance in behaviour compared to objective or observed measurements. They also found that among the three antecedent factors however, it has been observed that subjective norms generally have weaker relationship in

predicting intention compared to attitudes and perceived control. In the case of post-graduation intention this is perhaps because parents, friends and other parties in the social circle are just minor sources of information related to postgraduate options (Jepson and Vehegyi, 2011)

The following studies applied TPB in the study of intention in Malaysia and also confirmed the association of the three factors with intention. (1) for attitude: Letchumanan and Tarmizi (2011), Othman and Mansor (2012), Mokhtar and Zainuddin (2012), Ibrahim et al. (2011), Kim-soon et al. (2016), Trivedi (2017). (2) For subjective norms: Mokhtar (2012), Othman and Mansor (2012), Mokhtar and Zainuddin (2012), Kim-soon et al. (2016). (3) For perceived control: Trivedi (2017), Ibrahim et al (2011); Mokhtar and Zainuddin (2012). Therefore, based on the above discussions, the following hypotheses are formulated:

H1: Attitude has significant positive relationship with intention to pursue postgraduate studies.

H2: Subjective norms have significant positive relationship with intention to pursue postgraduate studies.

H3: Perceived behavioural control has significant positive relationship with intention to pursue postgraduate studies.

Differences between males and females in the intention to progress to postgraduate study are found in some studies (e.g. Wegner, 1969; Ball, 2016). In specific, Wegner (1969) found that men's intention was impacted by academic ability while women built interest for postgraduate course via higher academic aptitude, low socioeconomic status and late marriage. Recently, the results of Ball (2016) brought support to these differences. Men had lower odds of intending to pursue postgraduate study compared to women. In Malaysia, there seem to be gender differences on choices of program, involvement and intention among university students. For example, it has been noticed that statistics shows more female students involved at undergraduate programs compared to male. The numbers fall at the postgraduate level. While this observation implies gender variations in terms of intention for postgraduate, two reasons may explain it. First, female students might be satisfied on the types of jobs that do not require postgraduate certificates. Second, family roles after marriage may also hinder progression into postgraduate programs. Abbas (2015), on the other hand, realized the existence of differences in the four constructs of the TPB between male and female students.

H4: There are gender difference in students' intention for enrolment in postgraduate studies.

In the study we argue that students' undergraduate type of program also is also a reason for differences in their intention for enrolment in postgraduate study program. Although the scope of this study is to know whether there are differences rather than who among the two groups have higher intention, diploma students may perceive postgraduate level as relatively farther in time

frame. Thus, the concern of these students may be centred around their ability to progress into a degree program. This being the case however, their intention for progression into postgraduate can never be dismissed.

H5: Diploma students and degree students are different in their intention for enrolment in postgraduate studies.

Methods

A total of 181 undergraduate students from private universities in Malaysia were used as a sample of this study. Most of the respondents in the sample were females: 102 (56.4%) while males represented 79 (43.6%). In terms of race, Malays constituted 136 (75.1%), followed by Indians 27 (15%) then Chinese 16 (8.8%). Besides, degree students represented the majority 153 (84.5%) compared to 28 (15.5%) diploma students. Table 1 summarizes demographic characteristics of the sample.

The measures used in this study were adapted from the study of Liñán & Chen (2009) which applied them in the field of entrepreneurship. Each variable was measured by 5 items. These items followed a five-point Likert scale and ranged from totally disagree (1) to strongly agree (5).

Table 1: Sample Characteristics

Characteristics	Categories	Frequency	Percentage
Gender	Male	79	43.6
	Female	102	56.4
	Total	181	100
Level of study	Diploma	28	15.5
	Degree	153	84.5
	Total	181	100
Race	Malay	136	75.1
	Chinese	16	8.8
	Indian	27	14.9
	Others	2	1.1
	Total	181	100

Data Analysis and Results

Multiple regression assumptions

SPSS (V.25) was used to assess regression assumptions and analyse data for hypotheses testing purpose. Multicollinearity was not an issue as the values of tolerance and VIF for each were within the accepted range; above .2 and less than 5 respectively. There has been also independence of

observations because Durbin-Watson statistic was close to 2 (DW= 1.78). Besides, the visual representation of the Normal P-P plot and the Shapiro-Wilk test have confirmed data linearity and normality assumptions. Shapiro-Wilk test of the standardized residuals was insignificant at .818; indicating non violation to normality.

Descriptive statistics, correlation and reliability

Table 2 presents the descriptive statistics of the variables. The mean values range from 3.6 to 3.9. The Pearson correlations analysis indicates that all the study variable has significant associations with the intention. Correlation values were strong in the case of attitudes (r = .743) and perceived behavioural control (r = .775) but moderate in the case of subjective norms (r = .444).

Table 2: Descriptive statistics, correlation and reliability

Variable	Attitude	SN	PBC	Intention
Mean	3.84	3.66	3.78	3.84
Standard deviation	0.796	0.782	0.787	0.821
Cronbach Alpha	.910	.823	.892	.916
Pearson correlation with “intention”	.743	.444	.775	

** P < .01.

The results of the **multiple regression** analysis indicated interesting facts. ANOVA table showed that the overall model is significant at P < .01. The value of R², on the other hand, was .632; indicating that 63% of the variance in intention was explained by the proximal factors of the TPB. However, out of the three factors, only Attitudes and perceived behavioural control had their established effect on intention. Their beta values were respectively positive: .336 and .562. Subjective norms had no significant effect.

Table 3: Coefficients and hypotheses status

		Coefficients				Hypotheses	
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		B	Std. Error	Beta			
1	(Constant)	.662	.207		3.204	.002	/
	Attitude	.336	.088	.326	3.823	.000	Supported
	Subjective norms	-.065	.060	-.062	-1.083	.280	Not supported
	Perceived behavioral control	.562	.090	.539	6.217	.000	Supported

Therefore, the regression equation to predict the students' intention to progress into postgraduate studies will be written as follow:

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \dots \beta_kx_k + e$$

$$\text{Intention} = .662 + .336 (\text{attitude}) + .562 (\text{perceived behavioral control}) + e$$

Mann-Whitney test for group differences

Mann-Whitney test was used instead of the independent t-test to assess differences in the intention in the case of gender and type of study program. We used Mann-Whitney because the normality assumptions of the distributions were not established. Both Shapiro-Wilk test and visualization of the plots indicated violation of normality. The findings show no much differences in the mean ranking of each group in each model. No differences were observed in both cases of gender and type of study program because P values were above .05. For gender, U = 3734, P = .397. For type of study program, U= 2108, P = .895. Table 4 summaries all the Mann-Whitney test findings.

Table 4: Summary of Mann-Whitney test results

Groups		Mean rank	U value	Asymp. Sig. (2-tailed)
Model 1 (Gender)	Male	87.27	3734	.397
	Female	93.89		
Model 2 (Program)	Diploma students	92.20	2108	.895
	Degree students	90.78		

Conclusion

This study aimed at applying the theory of planned behaviour through its three determinants (attitude, subjective norms, and perceived behavioural control) to investigate intention of Malaysia private university undergraduate students to progress into master degree course. The study also aimed to see whether or not there are differences in intention based on gender and type of study program. The results were as follow. First, multiple regression analysis indicated that attitudes and behavioural control have significantly positive relationship with intention while subjective norms had no significant relationship with intention. The three determinants explained 63 per cent of the variance in attention. Among the three determinants, the level of student's perception over the behaviour control was.... Its shared influence with attitude support the previous findings in the field of intention (e.g., Al-Jubari et al., 2017; Almobaireek & Manolova, 2012; Liñán & Chen, 2009; Alharbi et al, 2018).

Second, Mann-Whitney test showed no significant differences between males and females and also no significant differences between diploma students and degree students despite slight differences in mean ranks. Since there are no significant group differences, it might be of good

interest to discuss the observed differences in the mean ranks. Female students' intention maybe more likely to be driven by their academic achievements. Given the lower mean of degree students, this might be either because these students spent more years at campus which may comparatively make them less interested for further study, or may be because diploma students are enjoying at the program due to favourable curriculum.

This study has suffered few limitations, first, its sample size was not large enough. Second, it only relied on the theory of planned behaviour. We recommend future researcher on student's intention for progress to rely on larger samples while also trying to include other variables of important to students and their behaviours. Wise also if other social and/or academic theories will be merged together with the TPB.

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