# Humanika

# Predicting Behavioural Intention to Enrol at a TVET Institution

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Article history: Received:29 August 2023 Received in revised form: 19 October 2023 Accepted: 20 October 2023 Published online: 30 April 2024

#### Abstract

Enrolment into TVET programs is not consistently meeting the desired number at different levels in Malaysia. While much research has examined the attitude and predictors towards various field of studies, not much is known for TVET programs. A survey based on the Theory of Planned Behaviour was developed and administered to secondary school leavers and parents to measure their attitude towards Institut Latihan Kemahiran Belia dan Sukan (ILKBS) as TVET programs provider. The survey reveals almost similar results for school leavers and parents: attitude towards ILKBS is positive and intention to enrol can be predicted by subjective norms and perceived behavioural control. Financial capability is a significant predictor among parents, but not the school leavers. Marketing of TVET programs and institutions could leverage on subjective norms to nudge the intention of school leavers to enrol at TVET institutions.

Keywords: intention to enrol, student enrolment, Theory of Planned Behaviour, TVET programs

#### Abstrak

Pendaftaran ke program TVET tidak menepati jumlah yang diingini secara konsisten di peringkat yang berbeza di Malaysia. Walaupun banyak penyelidikan telah meneliti sikap dan peramal terhadap pelbagai bidang pengajian, tidak banyak yang diketahui untuk program TVET. Satu tinjauan berdasarkan Teori Tingkah Laku Terancang ialah dibangunkan dan ditadbir kepada lepasan sekolah menengah dan ibu bapa untuk mengukur sikap mereka terhadap Institut Latihan Kemahiran Belia dan Sukan (ILKBS) sebagai penyedia program TVET. Tinjauan itu mendedahkan dapatan yang hampir serupa untuk lepasan sekolah dan ibu bapa: sikap terhadap ILKBS adalah positif dan niat untuk mendaftar boleh diramalkan oleh norma subjektif dan kawalan tingkah laku yang dirasakan. Keupayaan kewangan adalah peramal penting dalam kalangan ibu bapa, tetapi bukan untuk lepasan sekolah. Pemasaran program dan institusi TVET boleh memanfaatkan norma subjektif untuk mendorong hasrat lepasan sekolah untuk mendaftar di institusi TVET.

Kata kunci: niat mendaftar, pendaftaran pelajar, Teori Tingkah Laku Terancang, program TVET

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#### **1.0 INTRODUCTION**

There are a total of 1261 TVET providers in Malaysia, consisting of 569 public providers and 692 private providers. The Ministry of Education, Ministry of Higher Education, and several other ministries are involved in providing TVET programmes. Being one of the TVET providers, Ministry of Youth and Sports through its 22 Skills Training Institute of Youth and Sports (ILKBS) institutes have been offering many courses ranging from engineering, personal grooming, information technology to hospitality at both diploma and certificate levels.

In many efforts to strengthen TVET to meet the increasing demand from the industry, the government attempted to elevate TVET image through effective branding and targeted campaigns. This is in line with an immediate effort to increase the numbers of TVET intakes from 194,754 in 2018 to 250,000 in 2025. Annual enrolment growth of 7.8% was set to achieve 53% tertiary enrolment in TVET program by 2025 (Ministry of Education Malaysia, 2015). In moving towards that, many issues, gaps and challenges. Branding issues related to confusion due to various brands, weak images and perceptions towards TVET programmes had been identified as challenges to be met (TVET Coordination Division, Department of Polytechnic and Community College Education, 2019). In Malaysia, under enrolment at the level of programmes and branch campuses (Zan Aizuddin Zainal Abidin, personal communication, 2020). Although market demand is high for graduates of some programmes, their popularity is low among students. Moreover, some ILKBS branch campuses have low enrolment due to their geographical location.

#### **2.0 LITERATURE REVIEW**

To meet the growth of enrolment at TVET institutions, it is imperative to understand educational pathway choices that students make. The literature is limited in explaining the behavioural intention to enrol. Zia et a. (2019) identified three main factors influencing Malaysian secondary school students' choice of educational pathway namely Internal Factors, External Factors' and Social Influence Factors. Additionally, the study also found that Financial Aid sub-criteria is in the top five priorities in choosing their educational pathways. Their study examined educational pathway in general and not referring to TVET programs per se.

Meanwhile, there are studies that discussed students' choice, intention, motivation and attitudes towards programmes in other countries for both pre-university and university students. The focus of those studies is narrow in terms of the intended college or university major. For example, it was found that there are no gender differences among Grade 12 Thai students for attitudes and subjective norms (based on the Theory of Reasoned Action) regarding their choice of majoring in IT program (Sathapornvajana et al., 2012). Meanwhile, gender differences among Pakistani high-school students were revealed in a descriptive study on attitude towards science and majoring in different science subjects (Mohammad Iqbal et al., 2010). For example, the study shows more male students preferred chemistry while more females preferred mathematics and biology. For TVET programs, gender differences were also observed for completion of studies at higher levels among vocational students in South Africa (Khuluvhe, & Mathibe, 2021). A higher percentage was found for females students (11.0%) compared to males (6.4%). This finding may be interpreted as more positive attitude among female students towards TVET program.

Gender bias for fields like Computer Science was demonstrated in a study among Greek high school students. It was found that male students are more likely to major in Computer Science than female students (Papastergiou, 2008). Interestingly, the female students were more likely to report external motivation which raises the possibility of subjective norms as a factor influencing their intention and motivation for tertiary level studies. Another undergraduate major that was the focus of a study was Information System. Kuechler et al. (2009) examined gender differences among undergraduate students in the United States using a questionnaire developed along the Theory of Reasoned Action. The analysis was done by reporting percentages of male and females students agreeing to individual statements. Therefore, it is difficult to make a definitive overall gender difference.

Factors influencing enrolment at technical and vocational education institutions include family socioeconomic status, poverty, and lack of financial aid from the government (Mugalo, 2022). In another study done in Kenya among students at technical institutions revealed the highest rate of endorsement for courses offered, adequacy of teaching staff, adequacy of training resources, and students' attitude (Ongulu, 2018). Admittedly, a retrospective rating for the enrolment decision may be heavily biased by the actual experiences of being students in the technical institutions. Additionally, the choice of variables to be included in the studies are not clear and not linked to an explicit theory or model. Thus, interpreting the relative contribution or influence of the variables mentioned in those study is not possible. Moreover, with a descriptive design used in both studies, any conclusion about 'influence' of those variable towards 'intention' to enrol is not tenable. The weaknesses observed in these studies, unfortunately, are also observed in some studies done on Malaysian samples.

The research landscape on factors influencing actual or the intention to enrol into TVET program among Malaysian students is still quite vague. A study among Malaysian parents and teachers highlights the negative stereotypes associated with TVET education (Alavi et al., 2011). Additionally, TVET as a brand has low recognition among parents (Hussin, et al., 2017). Studies like these focuses on the attitudes held by parents towards TVET institutions in general. It is not known how the attitude would play a role in forming a behavioural intention towards encouraging their children to enrol at a TVET institution like ILKBS. Among primary school students, it was found that there were no gender differences for self-reported level of knowledge about and motivation to pursue TVET studies (Omar et al., 2020). Among those already in TVET programmes at Community Colleges, the highest-rated push and pull factors were career prospect and interest respectively (Aziz & Zulkifli, 2020). Similarly, using students currently studying at a TVET institution, Wei and Jamil (2019) identified major factors influencing their educational choices namely students' characteristics, institutional characteristics, decision-making behaviour, and other related factors. It is quite clear that a conclusive and convincing answers about precursors to enrolment at TVET institutions in Malaysia has yet been found.

Thus, to get closer to the desired answers to the research question stated above, the present study aimed to examine the factors that predict the behavioural intention to enrol at ILKBS among school leavers and parents. The chosen framework for the study is Theory of Planned Behaviour (TPB) (Ajzen, 1985, 1991, 2002). The TPB outlined attitude, perceived behavioural control, and perceived social norms are predictors of behavioural intention which in turn predicts actual behaviour. For this study, the actual behaviour is not included due to logistic constraints especially the timing for the release of results for the upper secondary school examinations (Malaysian Certificate of Examination or SPM and Malaysian Vocational Certificate or SVM). This portion of the study was done as part of a larger project which was given a narrow time frame. In recognition of the financial concerns among parents, Financial Capability was added as predictor.

Based on the reviewed materials and the outlined problems, the following are the objectives of the study.

1) To measure the attitude of parents and school leavers on enrolling at ILKBS

2) To examine perceived social norms, attitude, perceived behavioural control, and financial capability as predictors of the behavioural intention to enrol at ILKBS.

#### **3.0 METHODOLOGY**

Two groups of respondents were identified for this survey: parents and school leavers. The term Parents refers to parents, guardians and siblings of a school leaver (a person who had obtained SPM or SVM results which are equivalent to O Level) and had not registered at any

tertiary institute of education). G\*Power 3.1 calculator recommended a sample size of 53 for linear multiple regression with 0.05 Type I error, 0.95 power,  $R^2$ =.3, and four predictors.

#### 3.1 Instrument

A questionnaire was developed based on the Theory of Planned Behaviour (Ajzen, 2006). Content validation was performed through ratings by seven subject matter experts. The number of experts is within the range of six to ten as recommended by Yusuf (2019). The expert panel comprises four social science researchers who had experiences with TPB instruments, one TVET academician, and two ILKBS Deputy Directors. They were given an online form to rate the items in terms of Relevance (1=not relevant, 4=very relevant) and Clarity (1=not clear, 4=very clear). Based on CVI values and qualitative feedback, the items were improved. The survey was piloted with 10 respondents (SPM/SVM holders) via online administration. None of them indicated that the items are problematic or difficult to answer.

The final survey, as used with the parents and school leavers samples, comprised eight parts: demographic (nine items), attitude (8 agreement items and 5 semantic differential items), subjective norms (6 items), perceived behaviour control (5 items), intention to enrol (2 items), financial capability (4 items), and choices for ILKBS programme (3 items). The last part of the survey is not analysed for this paper.

#### **3.2 Procedures**

The links to the online surveys were distributed social media channels. Voluntary response sampling was used to get a target of 300 respondents for each sample. The criteria for eligibility to participate in the study were stated on the first page of the survey. The criteria stated include being Malaysians, aged 18 and above, not currently enrolled in a post-secondary program (student survey), and having at least one child who had completed SPM but not enrolled in a post-secondary program (parents' survey). Data was analysed using Jasp 0.14.0.0, an open-source statistical analysis software. For the instrument factor structure, sampling adequacy is assessed by KMO (>.5) while factorability is assessed by Bartlett's test of sphericity (p < .05). Identification of factor structure was done using Parallel Analysis with Promax Rotation, Exploratory Factor Analysis (Maximum Likelihood estimation with Promax Rotation). The multiple regression analysis was done after checking the assumptions of significant linear relationship, autocorrelation, multicollinearity, tolerance, normality, and homoscedasticity.

#### 4.0 RESULTS

The student and parent samples (see Table 1) obtained are more than adequate for multiple linear regression analysis.

Student Sample (n	ı=470)		Parent Sample (n=278)			
Characteristics	f	%	Characteristics	f	%	
Ethnicity						
Bumiputera Sabah/Sarawak	1	0.2 %	Bumiputera Sabah/Sarawak	13	4.7 %	
Cina	7	1.5 %	Cina	11	4.0 %	
India	27	5.8 %	India	31	11.2 %	
Melayu	429	92.3 %	Melayu	220	79.4 %	
Indonesia	1	0.2 %	Indonesia	-	-	
Siam	-	-	Siam	1	0.4 %	
Bumiputera Orang Asli	-	-	Bumiputera Orang Asli	1	0.4 %	
State of residence			State of residence			
Johor	21	4.5 %	Johor	11	4.0 %	
Kedah	127	27.0 %	Kedah	63	22.7 %	
Kelantan	62	13.2 %	Kelantan	29	10.4 %	
Melaka	4	0.9 %	Melaka	14	5.0 %	
Negeri Sembilan	6	1.3 %	Negeri Sembilan	9	3.2 %	
Pahang	12	2.6 %	Pahang	11	4.0 %	
Perak	55	11.7 %	Perak	28	10.1 %	
Perlis	11	2.3 %	Perlis	3	1.1 %	
Pulau Pinang	67	14.3 %	Pulau Pinang	39	14.0 %	
Sabah	-	-	Sabah	13	4.7 %	
Sarawak	-	-	Sarawak	1	0.4 %	
Selangor	89	18.9 %	Selangor	52	18.7 %	
WP Kuala Lumpur	15	3.2 %	WP Kuala Lumpur	4	1.4 %	
WP Putrajaya	1	0.2 %	WP Putrajaya	-	-	
Family monthly income			Family monthly income			
≥ RM 10,971	8	1.9 %	$\geq$ RM 10,971	11	4.1 %	
RM 4,851 < x < RM 10,970	50	11.7 %	RM 4,851 < x < RM 10,970	27	10.1 %	
RM 2,501 < x < RM 4,850	80	18.8 %	RM 2,501 < x < RM 4,850	65	24.3 %	
≤ RM 2,500	288	67.6 %	≤ RM 2,500	165	61.6 %	

Table 1 –	Demographic	characteristics	of student and	parent samples

Data from the perception survey were analysed and presented as two separate samples. The analyses performed are (a) descriptive analysis of demographic information, (b) factor analysis of the instruments which include parallel analysis and exploratory factor analysis, (c) descriptive statistics of the study variables (after their factor structures were extracted), and (d) linear regression analysis.

#### 4.1 Student Sample

From 494 responses obtained, 470 were deemed suitable for analysis. The age of the respondent ranges from 17 to 28, with M = 19.7 and SD = 1.8. The majority of the respondents are male, Malay, SPM holders, and with a family earning less than RM2,500 per month. There are respondents from all states except for Labuan, Sabah, Sarawak and Terengganu. This sample does not represent the population at the national level.

The data was suitable for factor analysis. Table 2 shows that the sample size is adequate, and the data do not form an identify matrix. Each of the measures were subjected to Parallel Analysis using Promax rotation and Exploratory Factor Analysis (EFA) using Promax rotation and Maximum Likelihood Estimation (MLE) extraction method. Parallel Analyses suggest that only one factor can be extracted beyond chance level for all measures. This finding is also supported by the EFA. All items were retained except for Item 4 from the Financial Capability measure. The factor loading from the MLE extraction for all measures are in Tables 3. All measures also have good to excellent internal consistency (see Table 4). The separate measures of Attitude were found to form a single factor when combined. Therefore, for subsequent analyses, the two measures of attitudes are combined to produce a single attitude score.

Table 2 - Measure of sampling adequacy and factorability of the measures

Measures	KMO	Bartlett's X <sup>2</sup> (df)	р
Attitude	.923	2,800 (28)	<.001
Attitude (semantic differentials)	.891	2,493 (10)	<.001
Combined Attitude items	.948	5,848 (78)	<.001
Subjective Norm	.880	2,412 (15)	<.001
Perceived Behavioural Control	.864	1,860 (6)	<.001
Financial Capability	.653	787 (6)	<.001

Table 3 - Factor Loadings of items for four measures

Attitude			Subjective Norms		Perceived Behavioral Control			Financial Capability			
Item	Student	Parent	Item	Student	Parent	Item	Student	Parent	Item	Student	Parent
AT5	0.839	0.908	NS1	0.815	0.895	PBC1	0.898	0.938	FIN1	0.921	0.956
AT4	0.882	0.910	NS2	0.894	0.899	PBC2	0.933	0.955	FIN2	0.927	0.926
AT3	0.867	0.928	NS3	0.901	0.903	PBC3	0.928	0.915	FIN3	0.580	0.530
AT2	0.885	0.913	NS4	0.858	0.904	PBC4	0.859	0.906	FIN4	-	-
AT1	0.861	0.921	NS5	0.761	0.928						
<b>S</b> 8	0.742	0.860	NS6	0.79	0.905						
S7	0.742	0.874									
S6	0.781	0.786									
S5	0.765	0.861									
S4	0.751	0.813									
S3	0.773	0.870									
S3	0.766	0.871									
<b>S</b> 1	0.710	0.853									

Note: AT = Attitude items with Semantic differential scale, S=attitude items with 7-point rating scale. Factor loading lower than 3 is not shown.

Table 4 shows that the level of attitude towards ILKBS is on the positive side. Out of a maximum mean score of 7, Attitude is the highest among the study variables. No respondents have unfavourable attitude towards ILKBS: the worst score was 3.31. With a mean of 5.93, attitude is considered high among the respondents, though not fully favourable.

Table 4 - Descriptive statistics of the study variables (student sample).

Variable	М	Median	SD	Min	Max	a
Attitude	5.93	6.08	0.89	3.31	7	.958
Subjective Norm	5.66	6.00	1.05	2.17	7	.933
PBČ	5.39	5.75	1.36	1.00	7	.947
Financial Capability	5.15	5.00	1.28	1.00	7	.843
Intention	5.41	6.00	1.55	1.00	7	n.a.

A multiple regression analysis was performed with Attitude, Perceived Behavioural Control, and Subjective Norms as predictors of Intention to Enrol at ILKBS. Regression was run based on the averaged scores for each measure.

#### Table 5 - Correlation matrix (student sample)

	1	2	3	4
Intention	_			
Subjective Norm	0.769***			
PBČ	0.748***	0.730***		
Attitude	0.703***	0.862***	0.691***	
Financial Capability	0.550***	0.552***	0.642***	0.522**

Note: \*\*\* p< .001

Assumption checks show that the data is suitable for linear regression.

- 1. The measures are significantly correlated in the expected direction (see Table 5)
- 2. The measures are linearly correlated (based on Table 5 and a visual examination of the scatter plots)
- 3. Durbin-Watson test indicates that autocorrelation among measures is not significant, auto-correlation = 0.041, d = 1.91, p = 0.280.
- 4. There is no evidence of multicollinearity as the Tolerance values are bigger than 0.1 (0.222 for subjective norm, 0.453 for PBC, and 0.248 for Attitude) and VIF are less than 5 (4.51 for subjective norm, 2.21 for PBC, and 4.03 for Attitude)
- 5. Assumption of normal distribution of data is however not met, Shapiro-Wilk = 0.920, p < .001. However, given the big sample size, a violation of this assumption may be acceptable.
- 6. Q-Q plot does not indicate non-normal distribution of the residuals i.e. no serious issue with homoscedasticity.

The regression model is significant, F(3, 466) = 310, p < .001 and explains 66.6% of the variances in Intention which can be considered as a large effect (see Table 4). Subjective Norm is the strongest predictor (standardized  $\beta = .427$ , t=7.52, p<.001) followed by Perceived Behavioural Control (standardized  $\beta = .391$ ., t=9.83, p<.001). Attitude is not a significant predictor (standardized  $\beta = .065$ , t=1.21, p=.065). With Financial Capability added to the model, the change in R<sup>2</sup> value is 0.002 and is not statistically significant, F(1, 465)=2.105, p=.148. Financial Capability is not a significant predictor of Intention, standardized  $\beta = .051$ , t=1.45, p=.148).

#### 4.2 Parent Sample

From 292 responses obtained, 278 were deemed suitable for analysis. The age of the respondents ranges from 19 to 71, with M = 37.2 and SD = 15.7. There were slightly more male (n=147, 52.9%) than female (n = 131, 47.1%) respondents. The majority of the respondents are Malay (79.4%), earning less than RM2,500 (61.6%) and have a child with SPM (97.1%). There are respondents from all states except for Labuan and Terengganu. This sample does not accurately represent the population at the national level.

The same procedures applied to students' data were used with the parents' data. The findings are similar in terms of sampling adequacy (see Table 6), factorability, unidimensional factor structure (See Table 3), and removal of one Financial Capability item.

	КМО	Bartlett's X <sup>2</sup> (df)	р
Attitude	.932	2,361 (28)	<.001
Attitude (semantic differentials)	.920	1,846 (10)	<.001
Combined Attitude items	.964	4,684 (78)	<.001
Subjective Norm	.922	1,857 (15)	<.001
Perceived Behavioural Control	.865	1,315 (6)	<.001
Financial Capability	.643	522 (6)	<.001

Table 6 - KMO and Bartlett's tests for the instruments

The levels of measured variables among parents' mimic those observed among school leavers. Table 7 shows that the level of attitude towards ILKBS is on the positive side. Out of a maximum score of 7, Attitude is the highest among the study variables. No respondents have unfavourable attitude towards ILKBS: the worst score was 2.38. With a mean of 5.78, attitude is considered high among the respondents, though not fully favourable.

	М	Median	SD	Min	Max	α
Attitude	5.78	6.00	1.02	2.38	7	.977
Subjective Norm	5.58	5.83	1.13	2.33	7	.960
Perceived Behavioural Control	5.44	5.50	1.28	1.50	7	.961
Financial Capability	5.29	5.33	1.15	2.00	7	.831
Intention	5.48	5.75	1.37	1.00	7	n.a.

A multiple regression analysis was performed with Attitude, Perceived Behavioural Control, and Subjective Norms as predictors of Intention to Enrol at ILKBS. Regression was run based on the averaged scores for each measure.

#### Table 8 - Correlation matrix (parent sample)

	1	2	3	4
1. Intention	_			
2. Subjective Norm	0.798***	_		
3. PBČ	0.702***	0.807***		
4. Attitude	0.732***	0.867***	0.747***	
5. Financial Capability	0.642***	0.658***	0.690***	0.566***
	• Nat	a * * * n < 0.01		

Assumption checks show that the data is suitable for linear regression.

- 1. The measures are significantly correlated in the expected direction (see Table 8)
- 2. The measures are linearly correlated (based Table 8 and an examination of the scatter plots)
- 3. Durbin-Watson test indicates that autocorrelation among measures is not significant, auto-correlation = 0.05, d = 1.90, p = 0.342.
- 4. There is no evidence of multicollinearity as the Tolerance values are bigger than 0.1 (0.185 for subjective norm, 0.361 for PBC, and 0.210 for Attitude) and VIF are less than 5 except for subjective norm (5.40 for subjective norm, 2.77 for PBC, and 4.76 for Attitude). This finding corroborates the acceptance of a VIF value marginally above 5 found with the parents' sample.
- 5. Assumption of normal distribution of data is not met, Shapiro-Wilk = 0.853, p < .001. However, given the fixed range of the averaged scores (1 to 7) and a big sample size, a violation of this assumption may be acceptable.

The regression model is significant, F(3, 274) = 170, p < .001 and explains 65.1% of the variances in Intention which can be considered as a large effect (see Table 4). Subjective Norm is the strongest predictor (standardized  $\beta = .562$ , t=6.882, p < .001) followed by Perceived Behavioural Control (standardized  $\beta = .147$ ., t=2.391, p=.017). Attitude is not a significant predictor (standardized  $\beta = .136$ , t=1.87, p=.062). With Financial Capability added to the model, the change in R<sup>2</sup> value is 0.018 and it is statistically significant, F(1, 273)=14.999, p < .001. Additionally, Financial Capability is a significant predictor of Intention, standardized  $\beta = .192$ , t=3.87, p=<.001.

## **5.0 DISCUSSION AND RECOMMENDATION**

The study was able to measure attitude towards ILKBS by using a newly developed questionnaire. The attitude among parents and school leavers are positive; however, the attitude does not influence the behavioural intention to enrol. This finding corroborates a survey done with ILKBS instructors themselves. According to the instructors, social perception (attitude towards TVET programmes) is the least important factor for students' tendencies to choose TVET education (Hong et al., 2021). In this study, the students and school leavers confirmed the instructors' perception regarding the link between attitude and enrolment.

The role of subjective norms is more prominent compared to other TPB variables in predicting the behavioural intention among both students and parents. Reviews of the literature show that the TPB constructs predicting behavioural intention may differ by the target behaviour. For example, with regards to making a choice of travel destination, the cumulative evidence is mixed (Yuzhanin, & Fisher, 2016). Meanwhile, attitude is a single strongest predictor of organic food purchase (Iwaya & Steil, 2019). A possible explanation for the difference is the frequency of the behaviour. Enrolling at a tertiary educational program is, for many people, a once in a lifetime experience. The opportunity to exhibit the behaviour is low compared to travelling and purchasing food.

Financial capability was found to be a significant, albeit weak, predictor of behavioural intention among parents. Perhaps parents are more aware of the financial burden associated with tertiary education, especially if they are the one paying for it. Additionally, the students may not have look ahead far enough to appreciate the financial cost. This is consistent with the findings that survey respondents without post-secondary education show a tendency for a short-term orientation in making a financial decision (Park, 2019).

It is clear that both school leaver and parent samples are not representative of the Malaysian population. Therefore, the findings from this survey could not be generalised to the Malaysian population. Having said that, the sample may be more accurately representing the current population of ILKBS students. For example, M40 and T20 families (middle 40% and top 20% of household based on monthly income) are less likely to consider ILKBS as an option for their children. Having them in the sample may produce irrelevant results because they have academic aspirations that are not aligned with TVET programmes.

The aspirations to strengthen labour market by increasing the number of TVET graduates may be hindered by low enrolment figures. Employers are finding it difficult to find suitable graduates with the right skills (Ahmad & Bon, 2023). Clearly this will have a negative effect on firms' ability to be productive and competitive. The investment made by the government to provide high quality TVET training institution will take much longer to see a positive return if the programmes continue to be under-enrolled. Thus, continued efforts in terms of practice and research on TVET enrolment need to be supported.

A limitation of the study is that data collection was done during Covid-19 pandemic where attendance and enrolment at higher education institutions are negatively affected. The pandemic could have attenuated the behavioural intention to enrol at any institution. Future studies, re-examine the behavioural intention when school leavers are free to attend educational institutions as pre-pandemic times.

Given the scope of the study, and the timing of the administration of the survey (which was severely affected by the Covid-19 pandemic), it was not possible to examine the relationship between behavioural intention and the actual behaviour of applying to enrol at an ILKBS. As found in systematic reviews, while the TPB can be used to predict behavioural intention, it might not predict the actual behaviour (Opoku et al., 2020). Thus, future study should be done to track the behavioural intention and the actual enrolment.

### 6.0 CONCLUSION

In conclusion, this study adds to the TVET literature by introducing a newly developed measure based on TPB specifically for enrolling at a TVET institution. The questionnaire could easily be adapted to other TVET institution by replacing ILKBS with another institutions' name. The questionnaire could also be used for TVET institutions in general. Secondly, the study highlighted the relative importance of perceived subjective norms in shaping the behavioural intention. Thirdly, differences between school leavers and parents regarding financial capability was revealed. These findings may help in the design of marketing and promotional materials to attract more candidates for TVET programmes.

#### Acknowledgement

The authors warmly acknowledge the contribution of Malaysian Productivity Corporation for their financial sponsorship, the Ministry of Youth and Sports for their input and access to the TVET institution, and Unit Perundingan Universiti Malaya for their administrative support for this project.

#### References

- Ahmad, M.F., & Bon, A. T. (2023). TVET mampu bantu graduan peroleh gaji progresif. Bernama. http://www.bernama.com/bm/tintaminda/news.php?id=2197333 Retrieved on 3 March 2021
- Ajzen, I. (1985). From intentions to actions: A theory of planned behaviour. In J. Kuhl & J. Beckmann (Eds.), Action control: From cognition to behaviour. 11-39. Berlin, Heidelber, New York: Springer-Verlag.
- Ajzen, I. (1991). The theory of planned behaviour. Organizational Behavior & Human Decision Processes, 50(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T
- Ajzen, I. (2002). Perceived behavioural control, self-efficacy, locus of control, and the theory of planned behavior. Journal of Applied Social Psychology, 32(4), 665–683. DOI: 10.1111/j.1559-1816.2002.tb00236.x
- Ajzen, I. (2006). Constructing a TPB Questionnaire: Conceptual and Methodological Considerations. Available at http://www.people.umass.edu/aizen/pdf/tpb.measurement.pdf. Retrieved on 1 March 2021
- Alavi, K., Md Sail, R., & Awang, A. H. (2011). Work esteem and re-branding of technical education and vocational training from the perspective of parents, teachers and apprentice. *Journal of Technical Education and Training*, 3(2) 1-17. https://publisher.uthm.edu.my/ojs/index.php/JTET/article/view/337
- Aziz, S. N. B. A., & Zulkifli, N. (2020). Pull and push factors of students' enrolment in the TVET programme at Community College in Malaysia. Journal of Technical Education and Training, 12(1), 68-75
- Hong, C. M., Ch'ng, C. K., & Roslan, T. R. N. (2021). Students' tendencies in choosing technical and vocational education and training (TVET): Analysis of the influential factors using analytic hierarchy process. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(3), 2608-2615. DOI: 10.17762/turcomat.v12i3.1262
- Hussin, A., Mohamad, M., Hassan, R., & Omar, A. J. (2017). Technical vocational education training branding from perspective of stakeholder (parent) in Malaysia. Advanced Science Letters, 23(2), 1216-1219. DOI 10.1166/asl.2017.7543
- Iwaya, G. H., & Steil, A. V. (2019). Intenção de Compra de Alimentos Orgânicos: Revisão Sistemática dos Preditores Utilizados em Extensões da Teoria do Comportamento Planejado. Revista Administração em Diálogo-RAD, 21(3), 23-48. DOI:10.23925/2178-0080.2019v21i3.40454
- Khuluvhe, M., & Mathibe, R. (2021). Throughput rate of TVET college students (National Certificate Vocational) for the period 2016 to 2018. Department of Higher Education and Training.
- Khuluvhe, M., & Mathibe, R. (2021). Throughput rate of TVET college students (National Certificate Vocational) for the period 2016 to 2018. Department of Higher Education and Training.
- Kuechler, W., McLeod, A., & Simkin, M. G. (2009). Filling the pipeline for IS professionals: What can IS faculty do? Journal of Information Systems Education, 20(4), 407. Corpus ID: 143356231
- Mahatanankoon, P., Watanapa, B., & Sathapornvajana, S. (2012). Gender gap in information technology (it) majors: a preliminary study on cross-cultural perspective. PACIS 2012 Proceedings. 153. https://aisel.aisnet.org/pacis2012/15
- Ministry of Education Malaysia. (2015). Malaysia education blueprint 2015-2025 (higher education). Kementerian Pendidikan Malaysia. https://www.um.edu.my/docs/um-magazine/4-executive-summary-pppm-2015-2025.pdf
- Mohammad Iqbal, H., Shahzad, S., & Sohail, S. (2010). Gender differences in Pakistani high school students' views about science. Procedia Social and Behavioural Sciences, 2(2), 4689-4694. DOI:10.1016/j.sbspro.2010.03.751.
- Mugalo, A. (2022). Influence of Socio-economic Factors on Students' Enrollment Rates in Public Technical and Vocational Education Institutions in Kilifi County, Kenya. (Doctoral dissertation, University of Nairobi).
- Mugalo, A. (2022). Influence of Socio-economic Factors on Students' Enrollment Rates in Public Technical and Vocational Education Institutions in Kilifi County, Kenya. (Doctoral dissertation, University of Nairobi).
- Omar, M. K., Rauf, M. A., Ismail, N., Rashid, A. M., Puad, H. M., & Zakaria, A. (2020). Factors on deciding TVET for first choice educational journey among presecondary school student. European Journal of Molecular & Clinical Medicine, 7(3), 609-627.
- Omar, M. K., Rauf, M. A., Ismail, N., Rashid, A. M., Puad, H. M., & Zakaria, A. (2020). Factors on deciding TVET for first choice educational journey among presecondary school student. European Journal of Molecular & Clinical Medicine, 7(3), 609-627.
- Ongulu, M. (2018). Factors influencing students' enrolment in Technical, Vocational Education and Training institutions in Butula sub-county, Busia county (Doctoral dissertation, University of Nairobi).
- Ongulu, M. (2018). Factors influencing students' enrolment in Technical, Vocational Education and Training institutions in Butula sub-county, Busia county (Doctoral dissertation, University of Nairobi).
- Opoku, M. P., Cuskelly, M., Pedersen, S. J., & Rayner, C. S. (2020). Applying the theory of planned behaviour in assessments of teachers' intentions towards practicing inclusive education: A scoping review. European Journal of Special Needs Education. 1-16. DOI:10.1080/08856257.2020.1779979
- Papastergiou, M. (2008). Are computer science and information technology still masculine fields? High school students' perceptions and career choices. Computers & Education, (51)2, 594-608. DOI: 10.1016/j.compedu.2007.06.009.

Park, N. Y. (2019). Patience in financial decisions and post-secondary education. Finance Research Letters, 31, 185-194. DOI: 10.1016/j.frl.2018.12.003

- Sathapornvajana, S., & Watanapa, B. (2012). Factors affecting student's intention to choose an IT program. Procedia Computer Science, 13, 60 67. ISSN 1877-0509, https://doi.org/10.1016/j.procs.2012.09.114.
- TVET Coordination Division, Department of Polytechnic and Community College Education. (2019). 12th Malaysian Plan Strategy Paper TWG TVET. Ministry of Education Malaysia, Putrajaya. https://www.epu.gov.my/sites/default/files/2021-05/Strategy%20Paper%2009.pdf
- Wei, F. J., & Jamil, H. (2019). TVET educational choice of Malaysian polytechnic students. Jurnal Pendidikan Malaysia, 44(1), 65-76.

Wei, F. J., & Jamil, H. (2019). TVET educational choice of Malaysian polytechnic students. Jurnal Pendidikan Malaysia, 44(1), 65-76.

Yusoff, M. S. B. (2019). ABC of content validation and content validity index calculation. Education in Medicine Journal, 11(2), 49-54.

- Yuzhanin, S., & Fisher, D. (2016). The efficacy of the theory of planned behavior for predicting intentions to choose a travel destination: a review. *Tourism Review*, 71(2),135-147. DOI 10.1108/TR-11-2015-0055
- Zia, A., Tan, P.L., & Subraniam, G. (2019). Criteria and priorities of secondary school students in choosing their educational pathway: A selection process by analytic hierarchy process. *Malaysian Journal of Consumer and Family Economics*, 22(S2), 233-247. https://majcafe-com.bsenetwork.biz/wpcontent/uploads/2019/10/2019-Vol-22-S2-Article-14.pdf