

## STUDENTS' BEHAVIOUR IN DECISION MAKING PROCESS TO ATTEND DISTANCE LEARNING PROGRAMS AT UNIVERSITAS TERBUKA, INDONESIA

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### ABSTRACT

The purpose of the research was to analyse students' behaviour in choosing a distance learning program at Universitas Terbuka (UT), Indonesia, using the theory of planned behaviour model developed by Fishbein and Ajzen (1975). The respondents of the research were 102 students from 3 Regional Offices of Jakarta, Malang and Kupang, representing different area and size.

The structural equation model was used to test models and hypotheses in the study. The findings of the study show significant influence of subjective norm on the students' intentional behaviour to choose distance learning programs. Another important finding of this research is that behavioural norms significantly influence the students' decision making behaviour in choosing distance learning programs.

Findings of this study improve understanding of how distance students make decision in choosing distance learning programs and provide information to distance education institutions on how to best meet the needs and improve services to distance students. It also helps distance education institutions encourage the development of learning communities that can enhance social marketing of distance education programs.

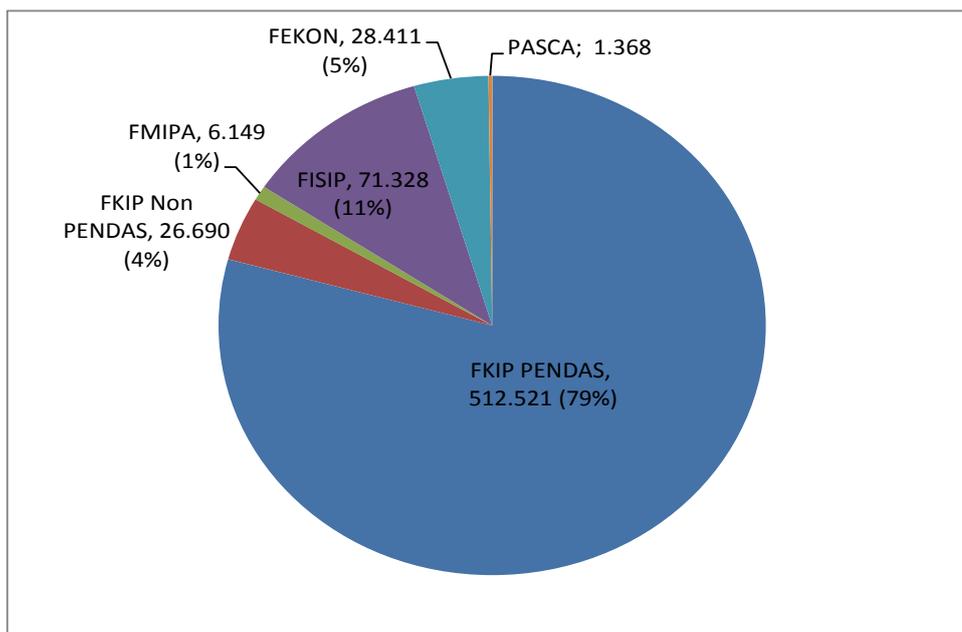
**Keywords:** distance education; consumer behaviour; theory of planned behaviour; Open University; social marketing

### INTRODUCTION

Distance education allows for freedom on the part of the students in terms of learning pace, strategies, autonomy, and prevents them from attending mandatory face-to-face requirements on a regular basis. Distance education system has the capability to accommodate large and diverse groups of student population, and those unable to access the face-to-face mode of higher education, without restriction of age, residential location, as well as social, economic and cultural backgrounds.

In 2010, Universitas Terbuka (UT) accommodates 646,467 distance students living in various parts across Indonesia, and 95% of the students are working adults. UT has a vital role in supplying the needs of human resources for nation building.

Since it was founded in 1984, UT has cumulatively accommodated over 1.5 million students and graduated over 786,404 alumni working in various fields of professions.



**Figure: 1**  
**Number of Universitas Terbuka Students by Faculty**  
 (as of 30 September 2010), Source: UT, 2010.

**Notes:**

**FKIP PENDAS:** Faculty of Teacher Training and Educational Sciences, In-Service Basic Education Teacher Program

**FKIP NON PENDAS:** Faculty of Teacher Training and Educational Sciences, other than In-Service Basic Education Teacher Program

**FMIPA:** Faculty of Mathematics and Natural Sciences

**FEKON:** Faculty of Economics

**FISIP:** Faculty of Social and Political Sciences

**PASCA:** Graduate Program

Education is the basic right of the citizen. The strategic role of education is to develop human resources with the necessary competency and skills needed to be able to compete in the world of work. In marketing term, education can be defined as a *high involvement product*, because it requires careful considerations in terms of finance and time involved, and thus a hasty decision to choose an educational program would be at high risk. Before deciding to choose an educational institution or program, consumers or prospective students will find more detail information and evaluate quality among various educational institutions. One's choice of an educational institution can lead to high risk, especially financial and time risks (Sumardy, 2003).

Being a *high involvement product*, consumers' decision to purchase an educational program is affected by internal and external factors. Research on student behaviour in higher education, among others, can be seen from the students' attitudes, subjective norms or views and experiences of others, and how students evaluate their learning process. An analysis of consumer attitudes can yield useful diagnostic or predictive findings. Identifying a receptive market, evaluating the current marketing activities and potentials, and predicting future behaviour are some of the methods of indicating how attitudes can help marketing decision making (Dharmmesta, 1998). Educational institutions need to know the consumers' behavioural patterns that can form and influence the decision to purchase particular products or services.

Researching consumer behaviour patterns of distance education is important to understand the interests of prospective students to continue their studies. One of the research designs to examine consumer attitudes towards consumer product portfolio with respect to the attributes of service products is a model of *Theory of Planned Behaviour*, developed by Fishbein and Ajzen (1975). According to Ajzen and Fishbein (1975), a person's behaviour depends on the intention, whereas intention to behave is highly dependent on the attitude toward behaviour, subjective norm and perceived behavioural control. The attitudes of individuals are formed from the combination of beliefs and evaluation of consumer confidence. While the subjective norm is determined by the confidence and motivation that another important person believes he or she should implement or not the behaviour.

Belief indicates one's information about an object, and based on the information, attitudes or behaviours toward an object are favourable or adverse selection (Ajzen and Fishbein, 1975). Aspects of knowledge that affect attitudes can be positive or negative. Subjective norms contain individual decision made after considering the views of people who influence the subjective norm concerning a specific behaviour. Ajzen and Fishbein's theory of planned behaviour (1975), which has been modified by Assael (1998), explains that the evaluation of product attributes influence perceived behavioural control. Overall evaluation of an action affects the intention to decide to choose the product or service and ultimately affect a person's decision to make a purchase.

This study analyses students' behaviour in choosing study programs in distance learning based on the *Theory of Planned Behaviour approach*. It attempts to describe the following aspects:

- the influence of attitude toward behaviour, subjective norm and perceived behavioural control on the intention to select distance learning;
- the effect of control perceived behavioural decision on choosing distance learning; and
- the effect of intentions on the decision to choose distance learning.

The findings of the research are expected to reveal distance students' intention so that they may help a distance education institution in formulating appropriate marketing policies and strategies.

## LITERATURE REVIEW

This study uses *Theory of Planned Behaviour*, which is the development of the *Theory of Reasoned Action*, as research framework. This theory explains attitudes toward behaviour, subjective norm and perceived behavioural control variables that precede the intentions and behaviour (Dharmmesta, 1998). The main idea of the *Theory of Planned Behaviour* is the intention of a person to perform behaviour, because the intention is intervening variable that causes behaviour of attitudes and other variables. Intention is a mediating influence of various motivational factors that impact on a behaviour.- In addition, the intention also shows how hard a person attempts to perform behaviour, or how much effort is planned to act and the intention is most influential to subsequent behaviour (Ajzen, 1991). Dharmmesta (1998) describes more specifically *Theory of Planned Behaviour* and suggests the existence of three independent determinants of interest conceptually as the following.

- Attitude toward the behaviour, which indicates the degree to which a person has judgement about certain behaviours.

- Subjective norms, as social factors that indicate the perceived social pressure to act or not to act certain behaviours.
- Perceived behavioural control, a variable that does not exist in the *Theory of Reasoned Action*; this variable indicates the level of decision making based on past experience.

*Theory of Planned Behaviour* explains that consumer behaviour and behavioural intention are not only influenced by the attitude and subjective norms but also are influenced by a person's control over behaviour.

Perceived behavioural control is a reflection of what is felt by consumers, including barriers experienced by consumers. Perceived behavioural control serves as the controlling variable of intentions and actions of individual behaviour that complements the attitude toward behaviour and subjective norm.

Perceived behavioural control states the ease or difficulty experienced by the individual at the time of performing the behaviour or after the act of behaviour.

Several researches showed the influence of attitude, subjective norm and behavioural control on the intention and its relation to the decision to purchase and the variation of the relationship. The research findings of Sulisty and Cahyono (2001) show that partial intention is determined by the consequences of consumer felt behaviour, but the attitude toward behaviour, subjective norms and perceived consequences simultaneously affect consumer behaviour intentions.

Another study by Sihombing (2003) shows partially that intention is determined by consumer's attitudes toward behaviour, subjective norm and perceived consequences. Consumer purchasing intentions determine consumer buying behaviour, and frequency of purchase is also a predictor of consumer purchase intentions.

Meanwhile, Denny (2006) shows partially that the intention of consumer behaviour is determined by attitude toward behaviour, subjective norms and perceived consequences. Furthermore, consumer purchasing intentions determine consumer buying behaviour, subjective norms and the dominant factor influencing the intention to buy, whereas purchasing behaviour is also determined by the consequences perceived by consumers.

Riana et. al. (2006) show that the existence of a number of factors relating to peers' experience becomes an important motivating factor to decide distance learning in a distance education institution. Another research finding by Riana et. al. (2006) is the presence of younger age groups with different motivations in deciding distance learning. Distance students of younger age group pay more attention to factors relating to status with college education compared to older age groups. Flexibility of distance learning is considered the most important criteria in deciding college education. While the source of information in deciding college education is based on the sources of impersonal information, such as institution brochures and websites.

## RESEARCH METHOD

This study uses the framework of *Theory of Planned Behaviour*. Factors measured are antecedent factors that is the attitude toward behaviour, subjective norm and behavioural control, while the consequence factors are consumer purchase intentions and purchase decisions. Intention to behave is determined by attitude toward behaviour, subjective norm and felt behavioural control. Indirect purchasing

behaviour is also determined by the perceived behavioural control, and is directly determined by the intention to behave.

Thus the hypotheses are as follows.

- H1: Attitude toward behaviour, subjective norm and perceived behavioural control do not influence intentions of students' decision making in distance learning.
- H2: Perceived behavioural control does not influence the decision of studying at a distance.
- H3: Students' intention to choose distance study does not affect the decision of studying in a distance education institution.

As in the *Theory of Reasoned Action*, each of behavioural beliefs links the behaviour to particular results or other attributes, such as commitment to perform such behaviour. Subjective value of these results later contributes to variable attitude toward behaviour that is directly proportional to the strength of belief, namely the subjective probability that the execution of that behaviour will lead to the results in question. A questionnaire was used to reveal students' attitude toward behaviour, subjective norm, perceived behavioural control, purchase intentions and purchase behaviour. Respondents were asked to rate the statement of confidence in their behaviour in 5 scale, from "strongly agree" (5) to "strongly disagree" (1).

#### **Attitude Toward Behaviour**

The attitude toward behaviour is measured using specific questions about trust and evaluation of behaviour in choosing distance learning courses that give the attribute of *sallent beliefs*. These attitudes are measured by the following indicators:

- attitude toward the cost of distance education,
- attitude toward academic administration services in distance education,
- confidence in getting quality education,
- belief in the availability of learning support services throughout the learning process, and
- belief in continuing their studies without disturbing other activities or studying without leaving work.

#### **Subjective Norm**

Subjective norms are measured by specific questions about the normative beliefs and motivation by personal recommendation or reference groups to choose distance study. Subjective norms are measured by indicators:

- motivation in itself,
- advice from family members (parents, brothers, sisters, spouse, and others),
- information from promotion or advertising (newspapers, TV, radio, leaflets, exhibition, etc.),
- advice from close friends (co-workers, friends, and others), and (5) advice from neighbours.

#### **Perceived Behavioural Control**

Perceived behavioural control is measured by specific questions about the *control belief strength* and *control belief power* in choosing distance study. Perceived behavioural control is measured by the following indicators:

- complete information about selecting distance learning courses,
- capability for independent study,
- availability of facilities and infrastructure in distance study,
- capability to manage time for independent study, and

- readiness and funding support.

### Purchase Intention

Purchase intention is to what extent the buyer makes choice in distance study. Purchase intention is measured by indicators:

- plan for distance study,
- possibility to decide distance study,
- efforts for distance study,
- immediate plan for distance study, and
- immediate intention to distance study (Dharmmesta, 1998).

### Buying Behaviour

Buying behaviour is a specific action which decides choice in distance study. Purchasing decision is measured by indicators:

- decision to choose distance study,
- performing initial registration,
- meeting the requirements to become a distance student, and
- action to re-register in the following semester until graduation (Dharmmesta, 1998).

### Construction of Research Model

Structural relationship between the variables in this research is shown in the following model equations.

*Endogenous variable = Exogenous variable + error*

$$Y1 = a + \beta1X1 + \beta2X2 + \beta3X3 + Z$$

$$Y2 = a + \beta1Y1 + Z$$

$$Y2 = a + \beta3X3 + Z$$

Description:

Y1 = Intention to choose distance study

Y2 = Behaviour to choose distance study

X1 = Attitude toward behaviour

X2 = Subjective norm

X3 = Perceived behavioural control

$\beta$  = Regression weight

Z = Disturbance term (confounding variables)

### METHODS OF DATA COLLECTION AND ANALYSIS

The analysis used is the structural equation model (SEM), a statistical technique to build and test a statistical model, which is a comparative model of a causal relationship using the program AMOS 4.0. The research uses primary data, using a questionnaire. The questionnaire consists of 36 questions.

Ensuring validity of instrument is done by using the Product Moment Correlation, involving 30 respondents. Using the *product moment* correlation, the results of item validity tests on attitude toward behaviour, subjective norm, perceived behavioural control, intention to select, and buying behaviour variable are greater than 0.5, and thus the instrument is valid for use in the research.

Population of this study was students of Universitas Terbuka (UT), Indonesia. Multistage random sampling techniques were used in which samples were taken

based on the address list of students, representing 3 Regional Offices of UT in small, medium and large size respectively.

Data collection was conducted by distributing questionnaires to 250 students by post and online in 3 Regional Offices of Jakarta, Malang, and Kupang, and as many as 102 responses were processed. *Semi-structured* interviews were followed to identify and clarify the respondents' responses.

## RESULTS AND DISCUSSION

### Respondent Profile

In general, the respondents' profile in this research was 47% male and 53% female. The occupations of respondents were civil servants (30%), private sector employees (20%), and unemployed (26%). Respondents were from the UT 4 Faculties and Graduate Program, namely Faculty of Teacher Training and Educational Sciences (46%), followed by Graduate Program (27%), Faculty of Social and Political Sciences (12%), Faculty of Economics (11%), and Faculty of Mathematics and Natural Sciences (5%). Respondents came from Regional Offices of Malang (44%), Jakarta (42%), and Kupang (12%) respectively.

### Test of Convergent Validity

The measurement of convergent validity is conducted using structural equation models. Data obtained from measurement of each variable model are used to determine the validity of each indicator. To be valid, each indicator has a value of *critical ratio* greater than twice the standard error, or  $CR > 2 \cdot SE$  ( $P < 0.05$ ) (Ferdinand, 2002). The value of the regression weights showed that the value of *critical ratio* is greater than twice the standard error,  $CR > 2 \cdot SE$  ( $P < 0.05$ ), as seen in Table 1.

Table: 1  
Convergent Validity Test Results

Relationship between Variables			Estimate	SE	CR	P
X11	<input type="checkbox"/>	Perceived behavioural control	1.000			
X12	<input type="checkbox"/>	Perceived behavioural control	0.889	.057	15.721	***
X13	<input type="checkbox"/>	Perceived behavioural control	.999	.064	15.647	***
X14	<input type="checkbox"/>	Perceived behavioural control	.729	.046	15.893	***
X15	<input type="checkbox"/>	Perceived behavioural control	1.000			
X6	<input type="checkbox"/>	Subjective norm	1.000			
X7	<input type="checkbox"/>	Subjective norm	.783	.064	12.245	***
X8	<input type="checkbox"/>	Subjective norm	0.864	.077	11.825	***
X9	<input type="checkbox"/>	Subjective norm	0.442	.066	6.740	***
X10	<input type="checkbox"/>	Subjective norm	.792	.071	11.118	***
X1		Attitude toward	1.000			

	<input type="checkbox"/>	behaviour				
X2	<input type="checkbox"/>	Attitude toward behaviour	.583	.060	9.677	
X3	<input type="checkbox"/>	Attitude toward behaviour	.855	.061	13.946	***
X4	<input type="checkbox"/>	Attitude toward behaviour	.638	.052	12.201	***
X5	<input type="checkbox"/>	Attitude toward behaviour	.471	.069	6.063	***
Y6	<input type="checkbox"/>	Behaviour to choose UT	1.122	.109	10.307	***
Y7	<input type="checkbox"/>	Behaviour to choose UT	0.969	.130	7.465	***
Y8	<input type="checkbox"/>	Behaviour to choose UT	.283	.112	11.462	***
Y9	<input type="checkbox"/>	Behaviour to choose UT	1.000			
Y1	<input type="checkbox"/>	Intention to choose UT	1.000			
Y2	<input type="checkbox"/>	Intention to choose UT	1.286	.100	12.876	***
Y3	<input type="checkbox"/>	Intention to choose UT	1.454	.116	12.552	***
Y4	<input type="checkbox"/>	Intention to choose UT	.929	.137	6.777	***
Y5	<input type="checkbox"/>	Intention to choose UT	.655	.131	5.011	***

### Suitability Test Model

In this study, the model was first tested through conformance test models. Test results and the suitability of the model estimate of value can be seen in Figure: 2, indicating visible structural relationship of each construct.

Chi-square = 684.786  
 df = 248  
 prob = .000

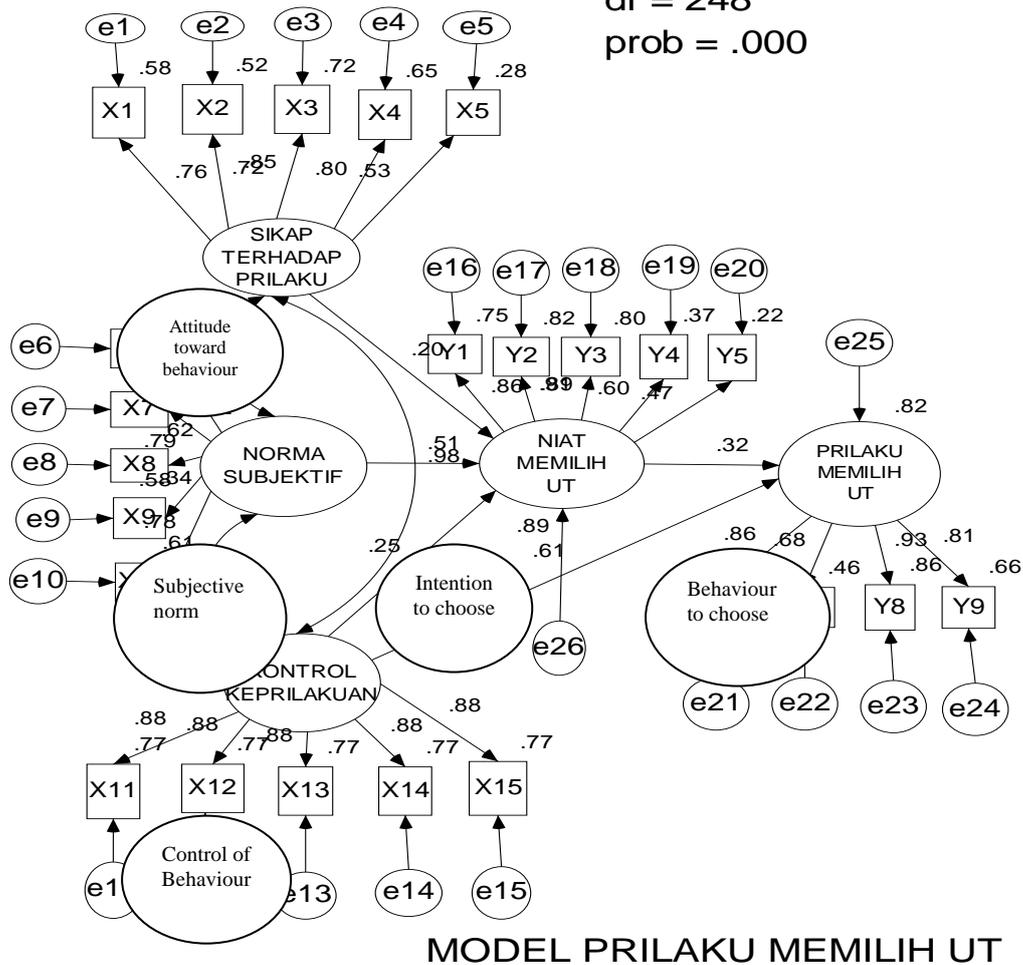


Figure: 2  
 Structural Relations Model Clause

**Where:**

- X1 = Attitude toward cost of education
- X2 = Attitude toward academic administration services
- X3 = Confidence in getting quality education
- X4 = Confidence in getting
- X5 = Confidence in contri  
 (learning while working)
- X6 = Self-motivation
- X7 = Advice from family members (parents, brothers, sisters, spouse, and others)
- X8 = Information through promotion/advertisement (newspapers, TV, radio, leaflets, exhibitions, etc)
- X9 = Advice from close friends (co-workers, friends, and others)
- X10 = Advice from close neighbours
- X11 = Having complete information for selecting distance courses
- X12 = Having ability to learn independently
- X13 = Availability of infrastructure and learning facilities
- X14 = Ability to allocate time for independent study
- X15 = Readiness and financial support
- Y1 = Having a plan for distance study
- Y2 = Likelihood to decide distance study
- Y3 = Efforts for distance study
- Y4 = Having a plan for distance study immediately

- Y5 = Intention for distance study immediately
- Y6 = Having decision to choose distance study
- Y7 = Perform initial registration
- Y8 = Action to meet requirements for distance study
- Y9 = Action to do re-registration for the following semester(s) in distance study up to graduation
- e1...n = Estimate

Students' intention to choose distance study is expected to contribute to behaviour to choose. Attitude toward behaviour, subjective norm and the control of behaviour contribute to intention of the students to choose. Control of behaviour also contributes directly to the behaviour to choose distance study.

Attitude toward behaviour is manifest variables measured by proxy of attitude toward cost of education (X1), attitude toward academic administrative services (X2), confidence in getting quality education (X3), confidence in the availability of learning support services throughout the learning process (X4), and confidence in continuing studies without being disturbed by other activities or learning while working (X5). Subjective norm was measured with a proxy of self motivation (X6), advice from family members (X7), information from promotion/advertisement (X8), advice from close friends (X9), and advice from close neighbours (X10).

**Table: 2**  
**Results Suitability Model (Goodness of Fit) Measurement Model**

Index	Critical Value (Cut of Value)	Result	Evaluation Model
Chi-Square	Approaching 0	684.786	Marginal
Significant Probability	≥ 0.05	0.000	Marginal
RMSEA (The Root Mean Square Error of Approximation)	≤ <u>0.08</u>	0.08	A Very Good Fit (very good)
GFI (Goodness of Fit Index)	≥ 0.90	0.821	Better fit (good)
AGFI (Adjusted Goodness of Fit Index)	≥ 0.90	0.744	Better fit (good)
CMIN/DF (Minimum Sample Discrepancy Function Divided with Degree of Freedom)	≤ <u>3.00</u>	1.794	A Very Good Fit (very good)
TLI (Tucker Lewis Index)	≥ 0.90	0.784	Better fit (good)
CFI (Comparative Fit Index)	≥ 0.90	0.841	Better fit (good)

Control of behaviour is manifest variables measured on the basis of having complete information for selecting distance learning courses (X11), having ability to learn independently (X12), availability of infrastructure and facilities (X13), ability to allocate time for independent learning (X14), and readiness and financial support (X15). Purchase intention or intention to choose distance study was measured by proxy of having a plan for distance study (Y1); likelihood to decide distance study (Y2), efforts to distance study (Y3), having immediate plan for distance study (Y4), and intention to distance study immediately (Y5).

Behaviour to choose was measured by proxy of having decision to choose distance study (Y6), perform initial registration (Y7), action to meet requirements for distance study (Y8), and action do re-registration for the following semesters up to graduation

(Y8). Model evaluation is conducted using goodness of fit and statistical tests. In the structural equation model, there is no single statistical tool to measure or test the model hypothesis; rather it uses various statistical tools, namely: Chi-Square, CMIN/DF, GFI, AGFI, RMSEA, TLI, and CFI. Detail suitability test results of the models are described in the following table and explanation.

#### Chi-square

One method of measuring the overall fit is the likelihood ratio of chi-square statistics. The tested model is considered good when the value of Chi-Square is low. The lower the value of Chi-Square the better model based on the probability with the cut of value for  $P > 0.05$  or  $P > 0.10$  (Ferdinand, 2000). In this study, Chi-Square value is obtained at 684.786 with  $p = 0.000$ , meaning that the probability value  $< 0.04$ , so this model is categorized as lack of fit (marginal) in terms of likelihood ratio chi-square statistics.

#### RMSEA (The Root Mean Square Error of Approximation)

RMSEA is another testing test to indicate the goodness of fit that can be expected when the model is estimated in the population (Ferdinand, 2000). RMSEA value of less than or equal to 0.08 is an accepted index of the model which shows a close fit of the model based on the degrees of freedom (Ferdinand, 2000). In this study, the RMSEA value of 0.08, this means a very good fit.

*GFI (Goodness of Fit Index)*. GFI is a non-statistical measure which has a range of values between 0 (poor fit) to 1.0 (perfect fit). High scores in this index shows a better fit, and a very good model has the value greater than or equal to 0.90. The GFI value in this study is 0.821, which is in the marginal category, but can be included in the better fit model.

#### AGFI (Adjusted Goodness of Fit Index)

The recommended level of acceptance is when AGFI has a value greater than 0.90. The AGFI value in this study is 0.744, which is marginal, since only nearly 0.90, and can be categorised as better fit.

*CMIN/DF (Minimum Sample Discrepancy Function Divided with Degree of Freedom)*. CMIN/DF is one indicator to measure the level of fit of a model (Ferdinand, 2000:55), or the Chi-Square relative, that is Chi-Square statistics divided by DF. Chi-Square value relative to less than 2.0 or less than 3.0 is indicative of acceptable fit between model and data. The CMIND/DF value of the model in this research is at 1.794, which is considered as very good fit.

#### TLI (Tucker Lewis Index)

TLI is an alternative incremental fit index that compares a tested model against the baseline model (Ferdinand, 2000). The TLI value greater than 0.95 indicates a very good fit. The TLI value in this research is 0.784, which means better fit.

#### CFI (Comparative Fit Index)

The value of this index is within the range of 0 (poor fit) to 1.0 (perfect fit), in which the value of more or equal to 0.95 indicates the highest level of concordance (a very good fit) (Ferdinand, 2000). The CFI value in this study 0.841 is marginal or is included better fit.

Based on the results of suitability analysis, it can be seen that the proposed model can be said to be fit (RMSEA, GFI, AGFI, CMIND/DF, TLI and CFI), because the test results meet the requirements of the reference values of the structural equation models. The results of suitability tests indicates that it is a good model, with the value of p-value Chi-Square was  $0.000 < 0.05$ . Test suitability of the model showed that the model is worth further analysis. The overall conclusion that can be drawn is

*confirmatory factor analysis* measurement model above shows that the model is acceptable and can produce good confirmation of the dimensions of factors and causal relationships among factors.

### Causality Test Model

Using the statistical program AMOS 7.0, analysis and calculation of regression weight results among latent variables were done and to refer to as the estimated *loading factors or lambda value*.

Besides the degree of freedom (DF) of CR values or t-count can also be known. Based on the significance of the t-count with a probability value (p) = 0.05, the yield of causality test regression models can be seen in Table 3.

Table: 3  
Regression Weights Causality Test Evaluation

Variable		Hypoth esis	CR	P	Information
Attitude toward behaviour	<input type="checkbox"/> Intention to choose UT	H1a	0181	0.857	Accepted
Subjective norm	<input type="checkbox"/> Intention to choose UT	H1b	1.722	0004	Denied
Perceived behavioural control	<input type="checkbox"/> Intention to choose UT	H1c	0.341	0.733	Be Accepted
Intention to Choose UT	<input type="checkbox"/> Behaviour to choose UT	H3	1.807	0002	Denied
Perceived behavioural control	<input type="checkbox"/> Behaviour to choose UT	H2	3.391	***	Denied

### Hypothesis Testing

*Test of hypothesis 1a: There is no relationship between dimension of attitude toward behaviour and intention to choose distance study.*

Attitude toward behaviour variables do not affect intention to choose distance study significantly because of the significance of the t-count (0.857) is greater than the probability value > 0.05. It is also found out that with 5% significance level and degrees of freedom of 248, it is obtained the t-table value of  $\pm 1.645$ . The value of *critical ratio* or t-count results of the AMOS 4 is 0.181 smaller than the t-table value, therefore H1a is accepted on alpha = 5%, which means that attitude has no significant impact on intention to choose distance study.

*Test of hypothesis 1b: There is no relationship between dimension of subjective norm and intention to choose distance study.*

Subjective norm variables affect intention to choose distance study significantly at the significance level of t-count 0.004 which is smaller than the probability value >0.05. It is also found out with 5% significance level and degrees of freedom 248; it is obtained the value of  $\pm$  t-table 1.645. The value of *critical ratio* or t-count result of the AMOS 4 is 1.722, or greater than the value of t-table, so H1b is rejected at alpha =5%, which means that subjective norm significantly influences the intention to choose distance study.

*Test of hypothesis 1c: There is no relationship between dimension of perceived behavioural control and intention to choose distance study.*

Behavioural control variables did not affect intention to choose distance study significantly because of the significance of the t-count (0.733), which is greater than the probability value  $> 0.05$ . It is also found out that with the significance level 5% and degrees of freedom 248, it is obtained the value of t-table  $\pm 1.645$ . The value of *critical ratio* or t-count results of the AMOS 4 is 0.341, or smaller than the value of t-table. So H1c is accepted at  $\alpha = 5\%$ , which means that perceived behavioural control did not significantly influence intention to choose distance study.

*Test of hypothesis 2: There is no relationship between perceived control behaviour and behaviour in choosing distance study.*

Behavioural control variables affected behaviour in choosing distance study significantly because the significance of the t-count (0.000) is smaller than the probability value  $> 0.05$ . It is also found out that with the 5% significance level and degrees of freedom 248, the value of t-table  $\pm 1.645$  is obtained. The value of *critical ratio* or t-count results of the AMOS 4 is 3.391, or greater than the price of t-table. The H2 is rejected at  $\alpha = 5\%$ , which means that perceived behavioural control of students had significant influence on the behaviour to choose distance study.

*Test of hypothesis 3: There is no relationship between intention to choose distance study and behaviour in choosing distance study.*

Intention to choose distance study variable affected behaviour in choosing distance study significantly because of the significance of the t-count (0.002), which is smaller than the probability value  $> 0.05$ . It was also found out that with 5% significance level and degrees of freedom 248, the value of t-table  $\pm 1.645$  is obtained. The value of *critical ratio* or t-count results of the AMOS 4 is 1.807, or greater than the price of t-table. So H1b is rejected at  $\alpha = 5\%$ , which means that the intention of choosing distance study significantly influence the behaviour in choosing distance study.

### **Summary of Findings**

*It is found that there is causal relationship among variables of student behaviour in choosing distance study, with explanation follow:*

- Relationship between subjective norm and intention to choose distance study is linear. Students are interested to choose distance study because of their own interests, advice from family members, information obtained from promotion/ advertisement, advice from close friends and neighbours. These variables influence intention to choose distance study reflected on planning for distance study, continuing study at a distance, making effort to attend distance study, planning to enrol in distance study, and having intention to distance study.
- Relationship between perceived behavioural control and behaviour in choosing distance study is proportional. Behaviour in choosing distance study is influenced by variables such as information to choose distance study, independent learning ability, infrastructure and facilities to support learning process, time allocation ability, readiness for funding. These variables affect the behaviour in choosing distance study with confidence, paying registration fees, meeting the requirements as distance students, and continuously re-registering in the following semesters.
- Intention to choose distance study is proportional to behaviour in choosing distance study, with influencing variables include plans for distance study, willingness to continue distance study, effort in distance study, plan to register in distance study, and intention to distance study. These variables influence the behaviour of students in choosing distance study confidently so that students pay registration fees, meet requirements as distance students, and continue re-registration in the following semesters.

*There is no causal relationship among variables of student behaviour in choosing distance study.* The attitude toward behaviour variables, namely affordable tuition fees of distance study, flexible learning system, access to quality education, support services for workplace learning, do not have influence on intention to choose distance study. The perceived behavioural control variables, i.e., information to choose distance study, ability to learn independently, availability of infrastructure and facilities to support learning process, ability to allocate time, and availability of funds, do not affect intention to choose distance study.

## CONCLUSIONS

Several conclusions can be drawn as the following. Subjective norm affects the intention of students to choose distance study. This may indicate that the subjective norm factor becomes an important incentive for the students to intend to choose distance study. The intention to choose distance study also affects the students' behaviour in choosing distance study. Intention can be viewed as a determinant variable for the actual behaviour, that is, the stronger the intention to behave, the greater the predictive success of buying behaviour. Perceived behavioural control affects the behaviour in choosing distance study. Attitude and behavioural control did not have influence on students' intention in choosing distance study. A distance education institution needs to consider the behaviour of students in choosing distance study in its marketing strategy, particularly addressing the subjective norm through a *below the line* strategy focused on the establishment of the study groups. Such groups will provide benefits, especially in creating *word of mouth* on distance study. *Word of mouth* is effective because the recommendations from a trusted source can directly affect a person's decision to select a product or service. This is due to the subjective norms that affect the intention to choose distance study is influenced by nearby sources such as family members and friends.

Viewed from the role of intention to choose distance study, a distance education institution needs to establish the image of quality provision of flexible higher education accessible by students. In terms of behavioural control that influences the behaviour in choosing distance study, a distance education institution should be able to convince the clients of quality services. Distance students must be well informed about the requirements of distance study, which relies on independent learning. Distance students must also be informed about the availability of infrastructure and facilities to support distance learning.

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