International Marketing of Higher Education: the Case of Taiwan, Australia, UK and USA

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Abstract

The international marketing of higher education is a global phenomenon in which more than 50 countries compete. Australia is now a prominent member of the club holding 6% of the world market with an annual value to the economy in excess of $4 billion. However, it is an area which is under-researched from a marketing perspective. From a consumer behaviour viewpoint this paper explores the behavioural motivations of students using Fishbein and Ajzen’s multi attribute Theory of Planned Behaviour. From a sample of Taiwanese students their intentions to study in Australia, UK and USA are examined. Three hypotheses are developed and two were supported. The research demonstrates the usefulness and the insights that can be gained from the application of the model.

Keywords: Marketing higher education, Taiwan students, Theory of planned behaviour, Theory of reasoned action.

Background

The international movement in higher education is not a recent phenomenon. Students have been travelling internationally to study from 600BC (Altbach, Kelly & Luyat, 1993). The growth in the past has been limited. However, by 1950 there were nearly 100,000 students studying in other countries. Currently there are now over 1.8 million international students hosted by more than 50 different countries (UNESCO 1999; Bohme, Daris, Meares & Pearce, 2002). It is estimated that by 2025 if growth continues the global international student population will increase to 7.2 million (Bohme, et al., 2002). The global distribution of international students is illustrated in figure 1.

Figure 1   Major host countries of international students

From an Australian perspective, sharing 6% of the world market, the growth has been substantial. Up until 1987, with the commencement of the Dawkins Plan in 1988 and in conjunction with full-fee paying open market principles, there were only about 20,000 international students studying in Australia. By 2002 this had increased to nearly 200,000 (Selected Higher Education Statistics 2002). This makes the education sector the eight largest
export earner estimated to be worth in excess of $4illion to the economy (Bohme, 2002). Despite the phenomenal growth the industry is not subjected to substantial research especially from a marketing perspective.

**Research focus**

Although there are substantial research gaps in the arena of marketing higher education the area focused on in this paper is directed to understanding the decision making attitudinal nature of Asian students. The research is directed to Taiwanese students whilst analysing the host countries of USA, UK and Australia being the three largest English speaking destination counties for Taiwanese students. The research is driven by the question of *What are the motivators for Taiwanese students to study higher education in a western society?* The method of enquiry being the Theory of Planned Behaviour is used to test three hypotheses.

**Theory of Planned Behaviour**

There are considerable intervening variables that have been isolated and examined for assisting our understanding of consumer behaviour. Amongst these are included environmental influences (Engel, Blackwell, & Miniard, 1990); social classes (Kindra, Laroche, & Muller, 1994); the family (Hawkins, Neal & Quester, 1994) and consumer resources (Assael, 1987). However, in terms of understanding consumer attitudes and attitudinal links between intention and behaviour Ajzen and Fishbein have pioneered and developed the Theory of Reasoned Action (TRA) and the later more advanced Theory of Planned Behaviour (TPB) (Fishbein & Ajzen, 1995) The TPB, which has been developed and tested over the past two decades, is both descriptive and predictive.

The basic parameter of TPB is that to understand individuals choice behaviour it is essential to examine intention. The prerequisite to understand intention is to examine attitudes. At any given time there are a number of consumer attitudes towards a service or product. This is taken into account in the TPB and hence the concept is often known as a multi-attribute model. However, to aid understanding and to enhance prediction, attitudes can be clustered into three major determining groups. These comprise Attitudes towards Behaviour, Subjective Norms and Perceived Behavioural Control.

Attitudes toward behaviour (AB) refers to the degree to which a person holds an attitude toward a particular behaviour and is represented by a positive or negative belief. It is the outcomes associated with the behaviour and the strength of the association. A belief-based sum measure of AB is estimated through the aggregation method of the expectancy-value model of attitude (Fishbein & Ajzen, 1975). The strength of each attribute or outcome belief (B) is multiplied by the subjective evaluation of the belief’s attribute or outcomes (E) and summed for the number (i) of beliefs. This is usually denoted as $AB \propto \sum BiEi$.

Subjective Norm (SN) refers to the perceived social pressure associated with behaviour. It is a function of referent belief, that is, what 'important others' think is important. ‘Important others’ might include a person’s parents, close friends, doctors, and religious organisations. A belief-based measure of Subjective Norm is obtained by summing the multiplied values of the strength of each normative belief (N) by the person’s motivation to comply with the referent other (M) to get the number (i) of beliefs. This is usually denoted as $SN \propto \sum NiMi$. 


Perceived Behavioural Control (PBC) is understood to be an individual’s perception of the ease of performing the behaviour in question. These beliefs are called control beliefs. If individuals believe that they do not have sufficient resources or opportunities to do so, they are not likely to form a strong intention to perform such behaviour - the opposite holds true. A belief-based sum measure of PBC is gained by using the aggregation method in which the strength of each control belief ‘C’ is multiplied by the perceived likelihood of the control factor (P) and summed for number (k) of beliefs. This is usually denoted as PBC $\propto \sum C_kP_k$.

The above inter-relationship is illustrated in figure 2.

**Figure 2** The relationship of components in the Theory of Planned Behaviour

Methodology

To establish the independent variables contained in each of the three constructs a series of in depth interviews was conducted with 12 Taiwanese students studying at Taiwan who had the intention of studying overseas. The interview language was Mandarin and the interviews were conducted by a native speaker. Interviews averaged 35 minutes. A textual analysis of the interviews revealed 24 separate variables of which 15 were identified in the literature. An expert panel of 7 individuals, who were senior academics and senior university marketing officers familiar with Chinese culture and marketing, was assembled to screen the selection and to cluster the variables into AB, PBC and SN. Through an iterative process the variables were reduced to 20 elements and assigned to their appropriate clusters.

A questionnaire was constructed using a seven point likert scale format to measure the 20 variables and their perceived strength. The questionnaire was back translated, tested, modified and administered to students in Taiwan in a series of different regions. A paper-based questionnaire was provided for 80% of the sample and the balance was offered via the internet. The sample collected was 700 which was reduced to 518 cases by eliminating incomplete responses or those with extraneous outliers. The final sample size adequately covered the minimum sample size required with each variable exceeding the 5 case lower limit (Tabachnick & Fidell, 2001).

The data was subjected to a factor analysis of the 20 variables and their perceived strength.
The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was shown to be significantly large (0.893) and Bartlett’s Test of Sphericity was significant (p<0.01), which indicated that factor analysis was appropriate for these data. The analysis yielded a three-factor solution after oblique rotation which accounted for 44% of the variance. The lower cut-off for interpreting factor loading was set at 0.30 (Alpha=0.05; power=80%), which is recommended for sample sizes greater than 350 (Hair, Anderson, Tatham, & Black, 1998). Most questions loaded substantially on only one component indicating that the analysis confirmed that the relationships were consistent with the questionnaire design and Theory of Planned Behaviour. A reliability test was undertaken and the questionnaire Alpha results showed that AB was 0.934, SN 0.870 and PBC 0.727. The alpha values for all the constructs surpass 0.7 levels and thus all were considered acceptable.

**Hypotheses Tests**

**Hypothesis 1**: The theoretical structure of the TPB model was sound for use in the application of measuring motivations of Taiwanese students in seeking to study overseas in the countries of Australia, UK and USA.

The hypothesis was supported from the factor analysis and other data as indicated above.

**Hypothesis 2**: AB, SN & PBC will contribute to the prediction of intention.

Multiple regression was performed with AB, SN and PBC scores as predictor variables with the intention of studying overseas scores the dependent variable. For AB the β value was 0.285 with a t value of 6.866, SN had a β value of 0.239 and a t value of 5.473 and PC had a β value of 0.185 with a t value of 4.507. The regression coefficient R was 0.549. All values obtained were significant at the alpha .05 level. The three predictor variables accounted for 30% of the variance.

Examination of β weights indicate support for the second hypothesis is supported.

**Hypothesis 3**: Perceived Behavioural Control will a better predictor of behaviour than AB and SN in the countries of Australia, USA and UK.

The literature suggests that due to Chinese family Confucian principles that PBC would be considered to be a stronger predictor than AB and SN in each of the countries of Australia, USA and UK. To test this multiple regression analyses was performed on each sub-group. The results are indicated in table 1.

**Table 1 Relationship between PBC as a significant predictor compared to AB and SN**

<table>
<thead>
<tr>
<th>First choice of country</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>Australia</td>
<td></td>
<td></td>
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<tr>
<td>Attitude toward Behaviour</td>
<td>.326</td>
<td>3.831</td>
<td>.000</td>
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<tr>
<td>Subjective Norm</td>
<td>.224</td>
<td>2.493</td>
<td>.014</td>
</tr>
<tr>
<td>Perceived Behavioural Control</td>
<td>.184</td>
<td>2.101</td>
<td>.038</td>
</tr>
<tr>
<td>UK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude toward Behaviour</td>
<td>.273</td>
<td>3.627</td>
<td>.000</td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>.201</td>
<td>2.549</td>
<td>.012</td>
</tr>
<tr>
<td>Perceived Behavioural Control</td>
<td>.202</td>
<td>2.666</td>
<td>.008</td>
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<tr>
<td>USA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude toward Behaviour</td>
<td>.237</td>
<td>3.745</td>
<td>.000</td>
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<tr>
<td>Subjective Norm</td>
<td>Perceived Behavioural Control</td>
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<td>288</td>
<td>192</td>
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<tr>
<td>4.406</td>
<td>3.189</td>
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<td>0.000</td>
<td>0.002</td>
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Examination of β weights indicate that PBC was not the most important predictor of Taiwanese students’ intention to study in Australia, UK and USA. Hence, hypothesis 3 was not supported.

### Discussion and conclusions

This study represents a first step in using the TPB in understanding the motivations of Taiwanese international students. It has been shown to be able to provide useful insights into student motivations and how this reflects in behavioural outcomes. The application of this research is extensive but only a brief examination of the elements are provided here which are restricted to the Australian context.

The research reveals that AB plays the most vital role in students’ intention to study in Australia. Thus, marketing efforts should emphasise elements of this aspect. From the student in-depth interviews it was indicated that students had very little prior knowledge about the life in Australia and its higher education institutions. Australia rarely features in the Taiwanese news. A strongly Australian focus needs to be driven by the Australia Education International and the International Development Program who are the Federal Government sponsored organisations responsible for promoting Australia’s higher education. Thus, it is suggested they spend more time and resources to find appropriate and effective marketing channels to deliver effective marketing communication to the potential students and parents in Taiwan.

With respect to SN, although slightly less important component than AB, it is still an important predictor of behaviour. From an operational practical standpoint it is suggested institutions could gain by making more effective use marketing through word-of-mouth from alumni and local migrants. The opinions from referent experienced people have a powerful influence on the decision-making processes of potential students.

In terms of PBC, the research revealed that academic and English skills are one of the major constraints to Taiwanese students. However, other countries for example the British government, require GRE or GMAT test scores for its international students. Thus the Australian government should promote the advantage of higher educational services. In addition, Australia is now generally recognised as a low cost country and is relatively close compared with USA and the UK. These factors should provide a distinctive competitive advantage to Australian education institutions. However they need imbedding in the marketing practices of organisations.

In conclusion, as Australia enters as a global player in the international market place it will become increasingly important to engage in extensive consumer behaviour research. There is a call to make more extensive use of marketing theory to expand the arena. To date little research has been undertaken using the Theory of Planned Behaviour in exploring students attitudes towards country of choice. The research has demonstrated the validity and usefulness of the TPB and has indicated how the research can be used to assist marketers in their practice to gain strategic advantages.

This research is a first attempt at using TPB in a higher education marketing consumer
context using one target country and three host countries. Extension and replication is called for.

References


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