Limited Research, Rigour, and Comprehensiveness on International Students’ Choice of University, and Analysis of TPB as a Way Forward

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Abstract

Though international students’ choice of universities has become an increasingly important topic, there are a number of gaps still in literature. Most significantly, there is yet to be a rigorous and comprehensive model to help understand and predict international students’ choices of universities. This conceptual paper analyses past literature in both the higher education and consumer behavior research streams to identify limitations, and then considers the appropriateness of the well-established and comprehensive framework of the Theory of Planned Behavior (TPB) as a way forward. It is found that past models in higher education that help predict student choice have been limited to the use of economics-based, practical or statistical frameworks. Previous studies on students’ choice process lack rigor in the sense of not using well-established choice models that use psychological principles as a basis. Additionally past studies indicate a lack of comprehensiveness in that all salient beliefs, subjective norms, and perceived behavioural controls are essentially not covered. The TPB model, a rigorous and comprehensive choice-model, is proposed as way forward to help better understand and predict international students’ university choices.

Keywords: Choice, International students, Theory of Planned Behavior, Higher education

Introduction

The education sector in Australia is ranked as the third largest service export, contributing approximately over $4 billion in revenue to the economy (Nelson 2000). In 2000, revenue from international students accounted for over $805 million of all Australian universities’ income (VAGO 2003). This significant amount makes international students a key source of income to individual universities. With education being the 14th largest export overall (AIEF 2004), the Australian Government is promoting widening participation and asking universities to increase their student intake (DETYA 2001). Overall, the Australian share of the world market for international students is estimated at 7 per cent (VAGO 2003). Although the Australian education industry is competitive internationally especially when comparing the tuition fee structure for selected degrees in Australian universities and those of its main international competitors, there is now substantially increased competition for global market share (AUGGIS 2002). This competition is forcing Australian universities to better understand how students choose. A simple understanding of international student choice behaviour is probably not enough when so many universities are competing for vital revenues and market share. Looked at another way, the competition is increasing “student consumer power” in terms of identifying what they want and delivering it before and better than others. Thus, it has been claimed that “student consumer power” is becoming the dominant driver of developments (DETYA 2001). This growing student consumer power further strengthens the need to understand the process that students go through prior to selecting a university for higher education.
A review of the existing literature suggests a wide gap in the measurement and understanding of international students’ purchase intentions and choice of universities. Several decision-making issues relating to how students choose a university (James, Baldwin and McInnis 1999) have been covered in past literature. However, each past study has measured only a limited part of international students’ choice processes, and very few utilize a rigorous model as their research framework. Generally, past models used in this area have been simple and practical. The primary objective of this paper is to identify and analyze the gaps in the literature; the analysis concludes there is a need for a rigorous and comprehensive choice model such as the Theory of Planned Behavior (TPB) to help better understand and predict international students’ choice of universities. The advantages of the TPB model are presented in a brief literature review of past research and theories in this area. From a managerial perspective, understanding an international student’s choice processes by using a rigorous framework could provide educational marketers with better insights into student choice that lead to more effective recruitment strategies.

**Literature Review**

**International students’ choice processes.**

A number of studies have explored students’ choice processes over the last decade. The different studies have ranged from factors influencing the choice of a university (James, Baldwin and McInnis 1999) to internal postgraduate student satisfaction (Arambewela, Hall and Zuhair 2002). More recently, research in this area has been centered on international students’ reasons for choosing overseas universities and destinations, their perceptions of international university brands (West, Dimitropoulos, Hind and Wilkes 2000; Rees 2002 and Gray, Fam and Llanes 2003), and the service quality dimensions in international tertiary education (Srikatanyoo 2002). A few studies have also covered the reasons why students choose a certain degree (Kim, Markham and Cangelosi 2002). Other general education selection studies have made attempts at identifying students’ university selection criteria. These studies identified quality teaching/majors (Hanson, Norman and Williams 1998; Mulvaney 2000; Lin 1997; Soutar and Turner 2002), ease of entry into the university (James et al. 1999), institution’s reputation (Mulvaney 2000; Soutar and Turner 2002), employment opportunities (Hanson, Norman and Williams 1998; Soutar and Turner 2002), and availability of modern facilities and an international student body (Lin 1997) as the major selection criteria. Research has also been done on the sources of information that university students utilize prior to choosing a university (James, et al 1999) with parents, friends/peers and siblings being the most important influential source (David, Ball, Davies and Reay 2003; Kim et al. 2002; Boatwright and Ching 1992; Mulvaney 2000). All these studies identify some reasons why students select a certain course or major or university, but there is a lack of rigor in terms of pragmatic and statistical approaches with none utilizing well-established choice models with psychological principles as a basis. One wonders why academics have rarely used the most sophisticated consumer behaviour models to study their own consumers’ choice.

The following table highlights six studies, the models they used, and the limitations and implications of those approaches.
In sum, the literature review suggests a need for trying a more sophisticated psychological choice model to help increase understanding of and prediction of international students’ university choice.

### The Theory of Planned Behavior

The gap in research in this area indicates a need to explore past literature on consumer decision-making models, and a consideration of the classic expectancy-value models. This paper considers, and argues for, the latest version of the expectancy-value model, the Theory of Planned Behavior, as a potential way forward. TPB is well suited for predicting international students’ university choice processes. TPB is a disciplined and comprehensive model that incorporates pragmatic and statistical approaches based on psychological principles, and is comprehensive in that all salient beliefs, subjective norms, and perceived behavioural control are covered in-depth (Ajzen and Fishbein 1991).

The expectancy-value approach has undergone considerable development and improvement since its earliest incarnations. In 1988 the Theory of Planned Behavior was introduced to address the inadequacies that Ajzen and Fishbein had identified through their research using

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<tr>
<th>Student Choice Models</th>
<th>Concept</th>
<th>Boundaries/Limitations</th>
<th>Implications</th>
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<tr>
<td>The Analytical Hierarchy Process (AHP) model (Strasser, Ozgur, and Schroeder 2002)</td>
<td>Economic based model. Analysis of criteria and choice of a business college major</td>
<td>Limited to predicting students’ choice of majors.</td>
<td>Not applicable to use when studying international students’ choice processes</td>
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<td>Model of College Selection (Korczyk 1979)</td>
<td>Economic determinants help govern the choice of enrolment into college</td>
<td>Limited to economic factors and its impacts on choice between enrolment in college and entry into the labor force</td>
<td>Lacks rigor with little insights into international students’ choice behavior.</td>
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<td>“Push-pull” factors model (Mazzarol and Soutar 2002)</td>
<td>A theoretical framework that helps measure and predict the factors that influence international student destination choice</td>
<td>Limited to understanding choice of the host country and motivating factors that “pushes” a student's desire to seek overseas education</td>
<td>Limited comprehensiveness in that all salient beliefs, subjective norms, and perceived behavioural control of international students are not covered.</td>
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<td>The eight-factor model (Fan and Xiao 1998)</td>
<td>Modified model of consumer decision-making styles relying on a statistical framework</td>
<td>Limited to predicting the dimensions of consumer decision-making styles using factors analysis with a lack of integration of psychological tenets explaining students’ choice</td>
<td>Lack of insight into how international students differ in their choice processes</td>
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<td>University choice process models (Hooley and Lynch 1981 and Connolly and Vines 1977)</td>
<td>Modelled the university choice process through the use of conjoint measurement techniques and instrumentality valence models</td>
<td>Limited by the shortcomings of cross sectional and correlational designs and these models that have relied solely on a statistical framework</td>
<td>Insufficient predictive power, no insight into the dynamics of international students’ decision-making process.</td>
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the prior version, Theory of Reasoned Action. As always, a central factor is the individual’s intention to perform a given behavior. Therefore, the stronger the intention to engage in a behavior, the more likely is its performance (Ajzen and Fishbein 1991). Though acceptance of the expectancy-value approach grew, debate regarding the differences between and development of attitude measurement also grew. Questions were asked regarding foundations and conceptualizations of attitudes (Etter 1975; Ahtola 1976; Lutz 1976, Calder and Burnkrant 1977), the validity of the models developed (Wilkie and Pessemier 1973; Ragu, Bhagat et al. 1975; Bettman, Capon and Lutz 1975a), situational influence (Lutz 1977; Glassman and Pieper 1980) and marketing use of multi-attribute models (Wilkie and Pessemier 1973). Fishbein and Middlestadt (1990) rejected these comments, on the basis that the findings may be nothing more than the use of inappropriate predictors and/or criteria (Fishbein and Middlestadt 1990). Fishbein and Middlestadt (1990) further responded to criticisms by looking at additional factors not addressed in their article such as: emphasizing the processes by which noncognitive effects occur (Miniard, Obermiller and Page 1983), affective moderator variables influencing attitude formation and change (Haugtvedt, Smith and Petty 1994), the links between theory and measurement (Haugtvedt et al 1994), individual’s mood at time of judgment (Schwarz 1998), and that some processes may be primarily non-belief based (Priester, Fleming and Godek 2004). Furthermore, there is growing debate of the use of purely cognitive factors of attitude and subjective norm in predicting behavioral intentions, and other limitations of the TPB model such as ambiguity regarding how to define perceived behavioral control (Ajzen and Fishbein 1991 and Bargh and Chartrand 1999). Ajzen and Fishbein (1991) suggested the use of optimal rescaling of expectancy and value measures as a means of dealing with measurement limitations and the possibility of the inclusion of past behavior in the prediction equation as a means of testing the theory’s sufficiency. Though still not perfect, the decades of analysis and advancement for this approach makes it worthy of consideration.

The proof of TPB’s usefulness would be that it has been applied and empirically tested in a vast number of (non-higher education) areas including weight loss behaviors (Schiffter and Ajzen 1985), attending and obtaining high grades in a course (Ajzen and Madden 1986), voting behavior (Netemeyer and Burton 1990), attending training sessions (Fishbein and Stasson 1990), participating in cancer screening (DeVillis, Blalock and Sandler 1990), ethical decisions in the medical profession (Randall et al. 1991), leisure choice (Azjen and Driver 1992), intention to commit driving violations (Parker, Manstead, Stradling, Stephen, Reason and Baxter 1992), investment decisions (East 1993), conservation technology adoption decisions (Gray, Fam and Llanes 2003), career self-efficacy (Giles and Rea 1999), consumption of chocolate (Januszewska and Viana 2001), drivers' compliance with speed limits (Elliott, Armitage and Bauhan 2003), and understanding IT adoption decisions in small business (Riemenschneider, Harrison and Mykytn 2003).

Ironically, though, in the area of higher education, the use of TPB has been limited to predicting the choice of accounting as a major (Cohen and Hanno 1993) and why students take elective business ethics courses (Randall 1994). Thus there has yet to an application of TPB for university choice, and therefore there has been none for studying international students’ university choice.

Research Agenda

Why would TPB be suitable in the present context? Since TPB is a choice model, research based on international students’ choice processes would seem ideal. Through a great many
tests and applications, as mentioned, attitudes toward the behavior, subjective norms with respect to the behavior, and perceived control over the behavior have been found to predict behavioral intentions with a high degree of accuracy (Ajzen and Fishbein 1991). This indicates that the TPB model could be applied to international students’ behavior as students do form attitudes about universities and their choices are influenced by others (for instance many international students are influenced by their families, friends or even recruitments agents). Their choice is also constrained by perceived control. For example, when a student perceives that he/she cannot get into Harvard University nor could his/her family afford it, his/her intention to enrol at Harvard generally is very small or nonexistent, even though his/her attitude toward Harvard University may still be very positive.

The next step would be to test the applicability of the TPB in the area of higher education marketing. Does TPB successfully model international students’ higher education choice? Will it demonstrate advantages over prior research? What are the salient attributes, belief strengths, norms and perceived behavioural control factors that arise in an actual application of TPB? Will these include all of currently identified reasons for choice; will there be additional attributes (i.e. a finding that prior research was incomplete)? What is the relative importance of the various attributes founds to be relevant in prior research, when all are considered at once? What is the relative importance of the components of subjective norms and perceived behavioural control versus traditional attitude toward the behaviour? Finally the model would need to be tested for its ability to prescribe ways to change international students’ attitudes.

**Theoretical and Managerial Contributions**

The use of comprehensive and strong theoretical frameworks help better understand and predict international students’ choice processes is vital for marketing educators in this increasingly competitive sector. Over the last decade, the global education market has experienced phenomenal growth. Students usually compare several different university brands (many times across several countries) before deciding which option to purchase (Soutar and Turner 2002). Universities will need to be effective at recruiting students to win their share of needed international student revenue. It is not beyond possibility that the international student market will shrink somewhat in coming years, which would make competition between universities more intense, as many universities have grown dependent on these revenues.

The major contribution that the TPB would make is providing higher education marketers a potentially effective instrument (a rigorous and comprehensive theoretical framework) in understanding and predicting the processes international students go through prior to making a choice. Furthermore, the application of TPB in the area of higher education research provides a theoretical contribution as past research indicates a lack of application or extension of this model in the area of higher education marketing. A number of issues with regard to the application of TPB in the context of higher education could be addressed (see questions raised above). In sum, applying TPB to understanding and predicting international student choice of universities could prove to be a significant and unique contribution to both marketing theory and higher education practice.
References


