

## **Making sense of higher education: students as consumers and the value of the university experience**

### **Abstract/Summary:**

In the global university sector competitive funding models are progressively becoming the norm, and institutions/courses are frequently now subject to the same kind of consumerist pressures typical of a highly marketised environment. In the United Kingdom, for example, students are increasingly demonstrating customer-like behaviour and are now demanding even more ‘value’ from institutions. Value, though, is a slippery concept and has proven problematic both in terms of its conceptualisation and measurement. This article explores the relationship between student value and higher education and, via study in one United Kingdom business school, suggests how this might be better understood and operationalised. Adopting a combined qualitative/quantitative approach, this article also looks to identify which of the key value drivers has most practical meaning and, coincidentally, identifies a value-related difference between home and international students.

### **Keywords:**

Marketing, higher education; student value; student as consumer; sensemaking

### **Authors:**

Tony Woodall, Alex Hiller, Sheilagh Resnick

*Division of Marketing  
Nottingham Business School  
Nottingham Trent University  
Burton Street  
Nottingham NG1 4BU*

## **Introduction**

Interest in the customer value concept emerged, perhaps, forty years ago (see Monroe, 1973). Since then many attempts have been made to articulate the customer value domain, though with varying degrees of equanimity (see recent meta-analyses: Boksberger and Melsen, 2011; Gallarza, Gil-Saura and Holbrook, 2011; Khalifa, 2004; Sanchez-Fernandez and Iniesta-Bonillo, 2007; Woodall, 2003). Research has accelerated over recent years, driven by the assumptions that, a) customer value is the foundation for all marketing endeavour (Holbrook, 2004) and, b) the discovery of appropriate metrics will help organisations achieve competitive advantage (Lapierre, 1997). More recently, its implication as key market driver in the burgeoning literature on service-dominant logic (Vargo and Lusch, 2004) has provided further evidence of value's critical role in explaining how consumers think and behave.

Customer value has been explored across a wide range of service contexts, including on-line retailing, mobile telephony, hospitality, tourism, finance, and airlines; in fact, almost anywhere that competitive pressures apply. Recently though, even in those countries where a welfare culture has traditionally pertained, these pressures have grown, with healthcare (Propper, Wilson and Burgess, 2006), utilities (Giullietti, Price and Waterson, 2005) and schools (Goldhaber and Eide, 2003) all now increasingly subject to mercantile demands. In the global university sector US-type funding models are increasingly the norm, and in the United Kingdom, for example, a 'new age' of top-up fees has recently emerged (Ng and Forbes, 2009). Given this, and the escalating availability of learning/research opportunities worldwide (Observatory on Borderless Higher Education, 2011) it's no surprise that value is now an issue of increasing student concern (Asthana, 2006).

Whether students, though, can be considered consumers is open to debate, but the insidious incursion of the customer concept (Eagle and Brennan, 2007) and escalating fees (BBC, 2011) suggest British higher education now represents an increasingly relevant context in which to evaluate consumer issues. How, though, might value for students be conceptualised and measured? As implied above, there is little agreement on how demand-side value might be specified, and a recent analysis suggests “*it is evident that the theory of perceived value has a number of different concepts and theories that make up its foundations*” (Boksberger and Melsen, 2011, p. 233). What value is, and what value isn’t, is hard to decipher, and the literature, generally, demonstrates how slippery this is perceived to be, irrespective of context.

Given all the above, therefore, this article has four key aims. Firstly, via a review of the relevant literature, it seeks to identify how higher education and consumer value have been linked. Secondly, it explores, critically, how customer value has been measured thus far and looks to offer a ‘new’ method; one that combines expedience and authenticity, and which relates readily to a higher education context. There has, to date, been no attempt to formally evaluate the comparative relevance of the differing customer value ‘concepts and theories’ (Boksberger and Melsen, 2011) so, thirdly, this article looks to correct that omission. Finally, it seeks to surface the factors important to students at one particular United Kingdom business school (The School) and to explore how value for students might be characterised.

### **Marketing through experience**

Service consumption entails “*immersion in an experiential context*” (Cova and Dall’O, 2009, p. 318) and services are, essentially, experiential and phenomenological (Vargo and Lusch, 2008), lived and recounted, often, in emotionally labyrinthine terms. Higher education is a highly complex service, offering an intense, emergent unstructured, interactional and

uncertain environment (Ng and Forbes, 2009). Students will inevitably experience both highs and lows, and for universities, of course, satisfaction has now assumed substantial importance, not only in the United Kingdom where the national student survey (Higher Education Funding Council for England, 2011) puts a premium on satisfaction (Douglas, Douglas and Barnes, 2006), but in other countries, too, where competition is also growing (e.g. Gruber, *et al*, 2010; Helgesen and Nettet, 2007; Clemes, Gan and Kao, 2007). Clearly, the publication of satisfaction data will impact considerably on aspiring undergraduates and studies directly addressing student satisfaction have increased in recent years (e.g. Gruber, *et al*, 2010, Moro-Egido and Panadés, 2010, and Munteanu, *et al*, 2010).

Others, though, have considered loyalty to be of primary significance (e.g. Hennig-Thurau, Langer and Hansen, 2001; Kenney and Khanfar, 2009; Rojas-Méndez, *et al*, 2009). Loyalty can be conceptualised in different ways, but following Dick and Basu's (1994) seminal typology is now widely accepted as comprising both attitude and behaviour. The former provides the motivation, whilst the latter is manifested negatively as either defection (or attrition) and/or proclivity to complain; and positively as either retention, and/or willingness to recommend. From a wider perspective, therefore, and considering postgraduate/post-experience programmes too – word-of-mouth is now considered key for marketing and sales (Bruce and Edgington, 2008; Prugsamatz and Pentecost and Ofstad, 2006; Patti and Chen, 2009).

Satisfaction and loyalty represent reactions to product-related stimuli and, given the important contributing role of service attributes, studies concerning service quality, using either SERVQUAL (Parasuraman, Zeithaml and Berry, 1988), or SERVQUAL-derived, measures, are also, unsurprisingly, legion (recent articles include Centeno, *et al*, 2008; Nadiri,

Kandampully and Hussain, 2009; and Quinn, *et al*, 2009; but go as far back as Rigotti and Pitt, 1992). Service quality is of interest to service providers as it offers a focus for managerial action based upon clearly defined improvement opportunities. The objective of meeting, or exceeding, customers' expectations, underpins this (Grönroos, 1984) and is consequently key.

Satisfaction and loyalty, though, are initiated by more than service quality alone, and reflect myriad cues including: price; indirect costs, including time and effort (Grönroos, 1997); brand/organisational image (Dodds, Monroe and Grewal, 1991); and a complex web of intrinsic prompts (Holbrook, 1996) that cause consumers to reflect critically on their service encounters. Collectively these provide for a richer and more comprehensive representation of customer concern (Bolton and Drew, 1991) and it is this we refer to as customer value

### **The case for student value**

The word 'value', though, is replete with semantic diversity, and this multiplicity of meaning has been readily transferred into the consumer canon. Different interpretations result in differently operationalised measures, and there is evidence across all literatures – higher education included – of conceptual conflict. Figure 1, below, illustrates the five different ways in which customer value can be conceptualised, and this framework (Woodall, 2003) will be used as a point of reference throughout.

The argument thus far, of course, has relied on the assumption that the consumer concept is relevant to students, and that a marketing discourse is appropriate to their concerns. This point, though, is far from given, and the 'student as customer' metaphor is less than universally acknowledged, especially, perhaps, amongst academics (Lomas, 2007). The

debate emerged in the 1990's (e.g. Baldwin, 1994) with arguments 'against' citing an unwelcome emphasis on managerialism, commodification, commercialisation and instrumentalism, whilst arguments 'for' tend to focus on practical/pragmatic issues concerning institution obligations and student rights (see McCulloch, 2009). Arguments remain active today and are still not resolved (see, for example, Acevedo, 2011 versus Obermiller and Atwood, 2011), but the sense that marketing, and the customer metaphor, marginalise and trivialise core academic principles is never far away.

**Figure 1. The major customer value concepts** (see Woodall, 2003)

1. **Attributes** only – product/service features that consumers find to be of benefit, or value
2. **Outcomes** only – benefits, or value, that consumers derive from their association with an offering
3. **Value for money** - a readily rationalised balance of benefits and sacrifices, usually based on price and attributes (plus the more obvious outcomes).
4. **Net Value** - a complex, intuitively balanced combination of all benefits (outcomes and/or attributes) and all sacrifices (monetary and/or non-monetary) perceived to be associated with a particular offering.
5. **Cheapest option** - bargain, usually focused on minimum possible sacrifice.

This article, though, largely eschews that debate, mainly because there are many contingencies to consider, and we believe that all positions are – to some degree – tenable. We don't claim here, for example, that students are customers but, rather, that they can be customers. And if students do occasionally demonstrate customer-like behaviour; and if – as they manifestly do - university managements construe them collectively as a source of revenue; then 'customer' becomes a legitimate frame of reference and analysis – and value, then, becomes an issue of shared concern.

## Measuring student value

The measurement of student value in higher education began with Webb and Jagun (1997) and LeBlanc and Nguyen (1999). Webb and Jagun (1997) characterised this via just two items, and only Alves and Raposo (2007) have since adopted this measure, adding to it a single ‘value-for-money’ item. Conversely, LeBlanc and Nguyen (1999) is more widely recognised, itself based on Sheth, Newman and Gross (1991). The LeBlanc and Nguyen (1999) construct is of largely ‘net’ form, but is concerned more with attributes than outcomes and takes account, directly, only of price as sacrifice. Both Ledden, Kalafatis and Samouel (2007) and Ledden and Kalafatis (2010) derived their ‘benefits’ items from here and adapted Cronin, *et al*, (1997) as a basis for both (further) monetary, and non-monetary sacrifices (time, effort and perceived risk). Perin, Sampaio and Brei (2007), Petruzzellis and Romanazzi (2010) Relyea, Cocchiara and Studdard (2008) and Schmidt (2002) have used similar elements, albeit differently arranged. Sanchez-Fernandez, *et al* (2010) is an outlier, though, adopting a price/attributes measure obtained from Dodds, Monroe and Grewal (1991) whilst Sumaedi, Bakti and Metasari (2011) consider the independent impacts of both service quality and price, but without directly referencing value.

Other studies have similarly not claimed association with value but, nevertheless, have taken account of a wide range of sacrifice and/or benefit-related characteristics. Authors have often framed these in the context of either service quality (Carter, 2009; and Clewes, 2003) or satisfaction (e.g. Clemes, Gan and Kao, 2007; Paswan and Ganesh, 2009) often with student expectations/perceptions as a focus. Purchase intention has been the source of other multi-factor studies, including Cubillo, Sánchez and Cerviño (2006) and Briggs (2006). Some researchers invoke value but address outcomes only. Here ‘value added’ (or value derived as a result of the student experience) is frequently the focus. Brooks and Everett (2009), Gedye,

Fender and Chalkley (2004), Rodgers (2007) are typical when considering the student view, but other stakeholders (e.g. employers; society) are also considered (see Girot, *et al*, 2006; Kaufman, Villaneuva and Bernádez, 2011; McLung and Werner, 2006). These latter, though, exceed the scope of this present study.

Although not exclusively the case, benefits versus sacrifice studies tend toward the quantitative, whilst benefits-only are mainly qualitative. Voss, Gruber and Smizgin (2007), for example, adopt Gutman's (1982) means-end approach and use laddering techniques to map university attributes to student consequences, or desired end-states (both analogous to outcomes). Value mapping (qualitative) and value scaling (quantitative) represent two distinct traditions of customer value assessment, the key difference being that value mapping/benefits-based approaches seek primarily to identify stakeholder preferences – so as to identify opportunities for improvement - whilst scaling (benefits only, or benefits versus sacrifice) focus mainly on linking product/service properties to consumption-related variables such as satisfaction and loyalty. Here the aim is to surface connections between consumption and the likelihood of re-purchase (in higher education, normally a subsequent course of study), or recommending to others. There are many studies, too, that address specific concerns (e.g. Walsh, 2010, cultural environment; Hallet, 2010, study support; Ginns, Prosser and Barrie, 2007, teaching quality) and on early-years retention/attrition (for which there is an extensive parallel literature); but, again, these exceed the scope of this study.

### **Value measurement to date: critique**

Qualitative outputs are useful but lack predictive power, and represent only a small proportion of the value-related canon. Most studies focus on scale or index development and, following Jarvis, MacKenzie and Podsakoff (2003), a consensus has emerged implying



customer value is a higher-order construct comprising a number of distinct, formative, dimensions which can each be represented reflectively (e.g. Ruiz, *et al*, 2008). Scaling is normally based around ‘good’ empirical protocols (Churchill, 1979; Nunnally, 1978) which assume there is a shared reality ‘out there’ that can be captured, organised and generalised. It has already been demonstrated, though, that customer value is an elusive concept, yet researchers continue to apply logical-positivistic ideals to its specification and measurement. Personifying value thus assumes a level of epistemological conviction that is less than reasonable; and although also pertinent to measurement of other consumption-related phenomena, we identify certainties regarding temporality, parsimony, dynamics, and arrangement to be especially moot.

### ***Temporality***

Scale items are temporally configured (e.g. “*I will learn new things from the course*” Ledden and Kalifatis, 2010; “*I am sure that the university staff were always acting in my best interest*”, Rojas-Méndez, *et al*, 2009), yet how can we know in which direction a respondent’s thoughts might gravitate, and which of these directions is likely to pervade? Bentham’s (1748/1798) hedonic, or felicific, calculus (in the context of moral philosophy) suggests human judgements are multifaceted, combining a range of perspectives – extending from the present, to the near future, and then the far future – and focus on both the likelihood and distributive nature of an experience. Rossiter (2002) argues that past, present and future are highly correlated, but this is far from certain, especially for a complex phenomenon such as value, where a range of cues – memory, experience, hope and expectation – are invoked.

### ***Parsimony***

Diamantopoulos and Siguaw (2006) suggest the key characteristics of scales are content, parsimony and criterion validity. Parsimony arises from balancing validity, simple structure and reliability (deVellis, 2003), and it is generally held that scales should comprise that number of items achieving this in the most economic fashion. Not everyone subscribes to scaling principles, though, and researchers have argued that these inappropriately preference efficiency over effectiveness (see Diamantopoulos, Riefler and Roth, 2008). Value is an especially rich phenomenon and, in its most complex form (see ‘The case for student value’, earlier) challenges conventional principles of synthesis and stucturation.

### ***Dynamics***

Value is dynamic, and a number of studies have addressed this at different points in the educational life-cycle (e.g. Ledden and Kalifatis, 2010; LeBlanc and Nguyen, 1999). Some have sought to compare attitudes of differing student groups, but at more-or-less the same time (e.g. Petruzzellis and Romanazzi, 2010; Relyea, Cocchiara and Studdard, 2008). In each instance researchers have used similar constructs, assuming, implicitly, that students perceive value similarly irrespective of time, place, or location. In reality, different value-related attributes become more, or less, relevant at different times, and we should not suppose, for example, that a scale developed for freshers properly reflects the concerns of students in their final year. Scales are static and are meant for generalisable contexts; yet value submits to neither.

### ***Arrangement***

Scales are arranged to represent the character, weightings, and relationships relevant to specific objects of concern. Often, sub-scales are summated such that the construct score

aggregates contributing scores. This is always questionable, as the true relationship between sub-constructs can never be fully known, but this becomes especially problematic where, as with value, there is frequently both numerator and denominator. There is no consensus regarding how benefits and sacrifices might be expressed; whether attributes, experiences or outcomes are most relevant; how monetary and non-monetary sacrifices might be added; and how the benefit/sacrifice relationship should best be computed. None of this is resolved, yet we still purport to measure value via prescriptive, fixed, scales.

### **An alternative way of operationalising student value**

Heskett, Sasser and Schlesinger's (1997) 'value equation' is a simple, but highly potent representation of how customer value in its most comprehensive 'net' form (see Figure 1) might be characterised. Grönroos (1997), too, developed a similar device. Each is represented as a four-quadrant equation where numerator denotes benefits, and denominator is sacrifices. For both models, benefits comprise outcomes/results plus a theory-specific attribute indicator ('functional quality', and 'additional services' respectively), and sacrifices comprise price plus a theory-specific indirect sacrifice indicator ('acquisition costs' and 'relationship costs'). Neither model is complete in itself, but these can be combined to create a rationalised and more comprehensive framework (Figure 2, below). This model provides an *a priori* perspective on the basic structure of customer value and, coincidentally, also incorporates all elements relevant to the five ways in which this might be construed (see Figure 1). It also has good face validity and can be used as a template on which to project more nuanced profiles of consumer interest.

**Figure 2. Ideal NetValue equation**

<p style="text-align: center;"><b>Results for the Customer</b></p> <p><b>Practical outcomes</b></p> <ul style="list-style-type: none"> <li>• Knowledge/learning</li> <li>• Transferable skills</li> <li>• Business understanding</li> <li>• Time/money management</li> </ul> <p><b>Social outcomes</b></p> <ul style="list-style-type: none"> <li>• Life experience</li> <li>• Friendships</li> <li>• Social status</li> <li>• Familiarity with different cultures</li> </ul> <p><b>Strategic outcomes</b></p> <ul style="list-style-type: none"> <li>• Degree</li> <li>• Employment opportunities</li> <li>• Networking opportunities</li> <li>• Further education opportunities</li> <li>• Corporate pipeline</li> </ul> <p><b>Personal outcomes</b></p> <ul style="list-style-type: none"> <li>• Self-actualisation/fulfilment</li> <li>• Confidence</li> <li>• Independence</li> <li>• Personal development/maturity</li> <li>• Please parents/significant others</li> </ul>	<p style="text-align: center;"><b>Service Attributes</b></p> <p><b>Lifestyle facilitators</b></p> <ul style="list-style-type: none"> <li>• Local sustenance (Cafés, shops)</li> <li>• Local services (Banking, print shop, insurance)</li> <li>• Transport links</li> <li>• Accommodation Office</li> </ul> <p><b>Support services</b></p> <ul style="list-style-type: none"> <li>• Personal counselling</li> <li>• Financial advice</li> <li>• Health centre</li> <li>• Students union</li> <li>• International office</li> </ul> <p><b>Lifestyle enhancers</b></p> <ul style="list-style-type: none"> <li>• City centre campus</li> <li>• City life</li> <li>• Cultural variety</li> <li>• Gym/sports facilities</li> <li>• Personal freedom</li> <li>• Student's Union</li> </ul> <p><b>Academic support</b></p> <ul style="list-style-type: none"> <li>• Library</li> <li>• Language programmes</li> <li>• Internet/pc access</li> <li>• Teaching staff</li> <li>• Administration</li> </ul> <p><b>Career Enhancers</b></p> <ul style="list-style-type: none"> <li>• Placement/internship</li> <li>• University business initiatives</li> <li>• Careers office</li> </ul>
<p style="text-align: center;"><b>Price</b></p> <ul style="list-style-type: none"> <li>• Course/tuition fees</li> </ul>	<p style="text-align: center;"><b>Acquisition and Relationship Costs</b></p> <p><b>Lost opportunity:</b></p> <ul style="list-style-type: none"> <li>• Work experience/wages</li> <li>• Travel/other social and entertainment</li> <li>• Starting family/establishing stable relationships</li> </ul> <p><b>Subsistence:</b></p> <ul style="list-style-type: none"> <li>• Rent</li> <li>• Daily transport</li> <li>• Occasional travel</li> <li>• Utilities</li> <li>• Food and entertainment</li> <li>• Telephone costs</li> </ul> <p><b>Effort</b></p> <ul style="list-style-type: none"> <li>• University work (revision/examinations, coursework)</li> <li>• Loss of home comforts/fending for yourself</li> <li>• Part-time work</li> <li>• Travel between classes/buildings</li> </ul> <p><b>Direct learning costs</b></p> <ul style="list-style-type: none"> <li>• Books</li> <li>• Stationary</li> <li>• Print costs</li> <li>• IT (laptop, etc.)</li> </ul> <p><b>Psychological costs</b></p> <ul style="list-style-type: none"> <li>• Academic stress (workload, deadlines, fear of failure)</li> <li>• Financial worries/debt</li> <li>• Homesickness</li> <li>• Pressure on personal relationships</li> <li>• Weight of expectation from family/friends</li> <li>• Personal expectations</li> <li>• Pressure to socialise</li> </ul> <p><b>Other Acquisition costs</b></p> <ul style="list-style-type: none"> <li>• Pre-course study</li> <li>• Loss of privacy (communal living)</li> <li>• Leaving 'safe'/familiar environment</li> <li>• Crime</li> <li>• Cultural/social prejudice</li> <li>• UK weather</li> </ul>

Our study begins with the assumption that any or all of the five customer value perspectives might be relevant, and that we can't say how contributing quadrants might be weighted or populated for a particular context, time or cohort. Student seminars provided a vehicle for data collection and, in all, there have been 23 separate research events involving 320 students (233 final-year undergraduate and 87 postgraduate) over a period of three years.

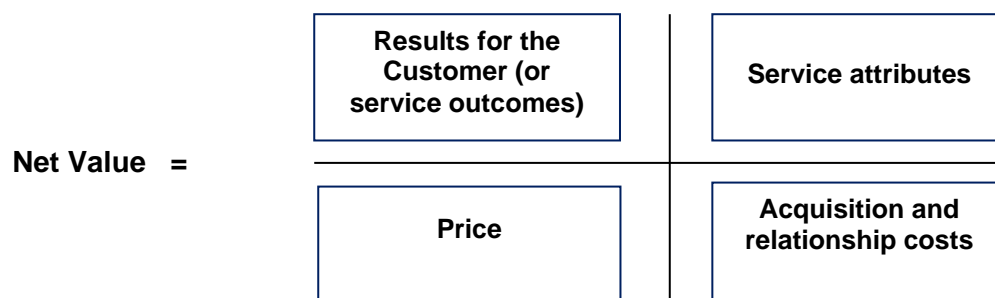
Undergraduates were primarily home-based, whilst postgraduates were largely international (mainly, but not exclusively, from East Asia). Given that study cohorts were broadly typical of those across The School our overriding concern was to obtain the largest practicable sample. Consequently, all students taking services marketing classes over the period were included.

At each event classes were split into groups of 4/5 students and each was asked to focus on one of the three non-price factors ('Price' is pre-identified as 'course fees'), and to populate flip chart sheets with 'objects' they believed to be relevant to it. These were then arranged on a class room wall, organised to replicate Figure 2, and further discussion was encouraged with 'objects' being added/ removed as necessary. Students had all attended earlier customer value lectures and group discussion further acted to normalise understanding. Our major objective here was to minimise the potential for item ambiguity in subsequent, survey-based, stages of the study, so as to avoid random or inappropriately systematic responses (Podsakoff, MacKenzie, Lee and Podsakoff, 2003).

Figure 3 is an 'ideal' representation of student value, identifying the most frequently occurring 'objects' across all 23 research events and demonstrating that each of the value quadrants can be further sub-divided (for illustrative purposes only) to explain the nature and complexity of the construct. For 'Results for the Customer' data is organised using a generic

model from Woodall (2003) but for Service Attributes and Acquisition/Relationship Costs a context-specific structure is deemed more appropriate. Outputs from different events were similar but distinctive by collection year and cohort. For example, in early events undergraduates were concerned by print quota costs, whilst Asian postgraduates complained of dry atmosphere and the impact on their skin; and both would have appeared in relevant analyses. Neither issue, however, emerged subsequently. For each event, therefore, the general notion of student value is the same, but its composition varies to reflect contemporary concerns, and each student can establish his/her own ‘evoked set’ of issues to reflect upon. In this way we have captured value’s dynamic character.

**Figure 3: Adapted value equation** (based upon Heskett, Sasser and Schlesinger, 1997; and Grönroos, 1997)



### Measuring student value

Thus far we have described a relatively conventional qualitative data collection process. Were the study to be continued this way then analysis could be extended by using a prioritisation scheme to identify those ‘objects’ having the largest positive/negative student impact (e.g. Briggs, 2006; McKnight, 2009). This would provide a basis for identifying detailed improvement opportunities – something that scale-based methodologies cannot achieve because of their inherent parsimony. Conversely, though, this would not offer

benchmarking opportunities, nor the facility to allow student value to be associated with other key metrics (e.g. satisfaction or loyalty).

As a second research stage, therefore, we surveyed students - but rather than employing parsimonious/fixed-structure scales, we used our populated flip-charts as a focus for response. We developed a range of five questions, each to be measured via the Satmetrix (2006) Netpromoter technique using 0-10 point Likert scales, to assess these. The first four questions were chosen to represent each of the first four of the value conceptualisations given at Figure 1. The fifth conceptualisation (cheapest available) was not used, as this is mostly relevant to pre-, rather than post-, purchase evaluation. Coincidentally, these same questions were also considered representative of four of the five elements of our rationalised value equation (Figure 2). A further question was added to represent the fifth element, Acquisition and Relationship Costs. Table 1 identifies the five questions and suggested relationships. This is effectively a short index of formative measures (Diamantopoulos and Winklhofer, 2001).

**Table 1. Research questions and associated constructs**

<b>Value-based research questions</b>	<b>Value conceptualisation</b>	<b>Value equation element</b>	<b>Name</b>
1. <i>Does The School represent 'good value'?</i>	Net Value	Net Value	NetV
2. <i>Are 'Results for the Customer' all you could wish them to be?</i>	Outcomes	Results for the customer	Results
3. <i>Are 'Service Attributes' as good as you would like them to be?</i>	Attributes	Service attributes	Attributes
4. <i>Considering what you get from The School, is the 'Price' fair?</i>	Value for money	Price	Price

5. Putting 'Price' to one side, are 'Acquisition and Psychological Costs' worth expending for the benefits you receive?	n/a	Acquisition and relationship costs	AcPsych
---	-----	------------------------------------	---------

The efficacy of single-item indicators has long been challenged (e.g. Churchill, 1979; Keiningham, *et al*, 2007) though Bergkvist and Rossiter (2007) suggest these can be valid provided the attribute in question is sufficiently well described. Our logic, though, reflects the belief that we were, in fact, asking an infinite number of questions rather than one. Effectively, each question was a prompt for students to 'make sense' (Weick, 1995) of the completed value equation before them (see Figure 3) in the context of their own experiences, hopes, fears and aspirations. Sense-making, a motivated, continuous, effort to understand connections between people, places and events (Klein, Moon and Hoffman, 2006) facilitates the creation of situational awareness and understanding, and helps subjects resolve ambiguity/uncertainty. Although most frequently associated organisation studies, Mathing, Sandon and Edvardsson (2004) point out that customers have sense-making capabilities too, and our methods conform to Garcia-Murillo and Annabi's (2002) four-step process of gathering customer-focused interactional knowledge, and accede to the principle of collaborative learning (Selnes and Sallis, 2003) where researcher, research subject, and research instrument interact.

For calibration purposes (one week before each research event) we also posed two further single questions - Reichheld's (2003) 'ultimate question', '*How likely is it that you would recommend (The School) to a friend, family member, or acquaintance?*' ('Recommend' in tables below), and a single satisfaction-related question, '*Please tell us how satisfied you are, generally, with The School*' (Satisfaction). In early events we also posed a re-purchase question but subsequently abandoned this after it became clear that contributing factors were



largely outside The School's sphere of influence. It is also excluded from later stages of our analysis.

## **Results and discussion**

### *Analysis of means*

Results were considered on a pair-wise basis to minimise the impact of missing data (occasionally, students answering satisfaction and recommend questions weren't present to answer value questions, and *vice versa*) and respondent numbers consequently vary across the analysis (see Table 2). Demographic profiling was purposely kept to a minimum, but we did, though, feel that some financial factors might impact results, so students were asked whether they were home or international (fees are substantially different) and whether they worked to support their studies. Consequently, it was possible for us to consider students both collectively and as three distinct categorical dyads – undergraduate/postgraduate, home/international and work/not work: a 3 x 2 factorial design. To ascertain if any of these dyads characterised our population we ran a MANCOVA (general linear model) to test for differences within and between categorical pairs. Dependent variables were Satisfaction, Re-purchase and Recommend; co-variants were NetV, Results, Attributes, Price and AcPsych.

The Wilks' Lambda multivariate test of overall differences among groups was significant ( $p < 0.05$ ) both for home/international ( $F = 4.18$ ) and for the undergraduate/postgraduate to home/international interaction ( $F = 3.33$ ). Tests of between-subjects effects involving all dyads were significant for the full corrected model ( $p < 0.05$ ) in respect of all three dependent variables and for both undergraduate/postgraduate ( $F = 4.84$ ) and home/international ( $F = 10.172$ ) for satisfy. Home/international was significant for Re-purchase ( $F = 3.80$ ) implying, generally, that this was the most discriminating of the category dyads. Given that

multivariate test outcomes are susceptible Type 2 error we also undertook *post hoc* univariate ‘t’ tests - wary, though, of the potential for Type 1 error. Initially confirming equality of variances via Levene’s test, we conducted tests for equality of means across the all students and for all categorical dyads (see Table 2, below); descriptive statistics were also recorded.

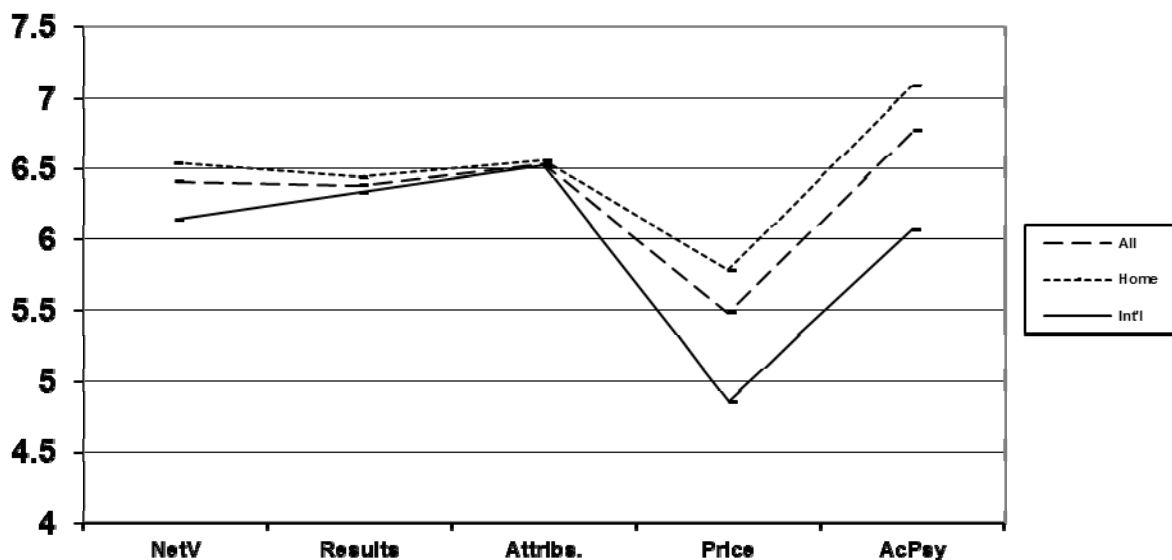
**Table 2. Descriptive statistics/independent samples test**

Variable		Demographic Category						t-test for equality of means		
		Work			Not Work					
		N	Mean	SD	N	Mean	SD	t	df	Sig (2 tail)
Dep.	Recommend	107	7.03	1.42	186	6.90	1.44	0.75	291	0.45
	Satisfy	106	3.80	0.61	186	3.80	0.64	0.08	290	0.94
	Repurchase	48	4.94	1.25	83	4.70	1.31	1.02	129	0.31
Indep.	NetV	108	6.42	1.48	195	6.42	1.54	-0.02	301	0.98
	Results	108	6.52	1.66	192	6.34	1.57	0.96	298	0.34
	Attributes	108	6.58	1.82	191	6.53	1.54	0.29	297	0.77
	Price	108	5.42	2.02	191	5.55	1.94	-0.59	297	0.56
	AcPsych	107	6.97	1.64	190	6.68	1.74	1.43	295	0.16
		<b>Home</b>			<b>International</b>					
Dep.	Recommend	207	7.18	1.32	86	6.37	1.52	<b>4.58</b>	<b>291</b>	<b>0.00</b>
	Satisfy	206	3.87	0.63	86	3.67	0.60	<b>3.03</b>	<b>290</b>	<b>0.00</b>
	Repurchase	99	4.98	1.29	32	4.19	1.12	<b>3.12</b>	<b>129</b>	<b>0.00</b>
Indep.	NetV	213	6.54	1.36	90	6.14	1.81	<b>2.06</b>	<b>301</b>	<b>0.04</b>
	Results	210	6.44	1.52	90	6.33	1.79	0.51	298	0.61
	Attributes	209	6.56	1.64	90	6.52	1.65	0.21	297	0.83
	Price	209	5.78	1.90	90	4.86	1.96	<b>3.83</b>	<b>297</b>	<b>0.00</b>
	AcPsych	209	7.09	1.54	90	6.07	1.85	<b>4.93</b>	<b>295</b>	<b>0.00</b>
		<b>Undergraduate</b>			<b>Postgraduate</b>					
Dep.	Recommend	217	7.13	1.34	77	6.33	1.54	<b>4.58</b>	<b>302</b>	<b>0.00</b>
	Satisfy	216	3.84	0.60	77	3.70	0.68	1.72	301	0.09
	Repurchase	107	4.81	1.33	35	4.49	1.20	1.30	140	0.20
Indep.	NetV	233	6.52	1.41	80	6.08	1.72	<b>2.29</b>	<b>311</b>	<b>0.02</b>
	Results	230	6.43	1.56	80	6.23	1.73	1.00	308	0.32
	Attributes	229	6.61	1.63	80	6.28	1.63	1.60	307	0.11
	Price	229	5.71	1.95	80	4.81	1.99	3.51	<b>307</b>	<b>0.00</b>
	AcPsych	228	7.07	1.56	79	5.90	1.81	5.50	<b>307</b>	<b>0.00</b>

There were no differences in respect of work/not work, but for home/international differences were apparent for all dependent variables with home students more positive throughout. Significant differences were also apparent for sacrifices (Price and AcPsych), but not for benefits (Results and Attributes) – though a difference was noted for NetV which is clearly impacted by both. All three dependent variables were significant. For the undergraduate/postgraduate dyad significant differences were again apparent for both

sacrifice-related independent variables (and on NetV), but this time only for the dependent variable, Recommend. Univariate and multivariate tests were thus in accord, suggesting that home/international and undergraduate/postgraduate dyads, only, were significant - but that the first of these was key. Subsequent analyses, therefore, compare home with international students, though results for all students ('All' in Figure 4 and Tables 3-5) are shown, also, for comparison.

**Figure 4. Analysis of means, independent variables**



Comparison of means for dependent variables shows that international students are less positive about their university experience than are their home counterparts. Figure 4, above, compares means for independent variables diagrammatically. For both international and home students Price was most negatively perceived, with international students more extreme in their judgements. The other factor for which a significant difference between category means was noted – AcPsych – was, in comparison with benefit categories, viewed relatively positively by home students, and relatively negatively by international students. For

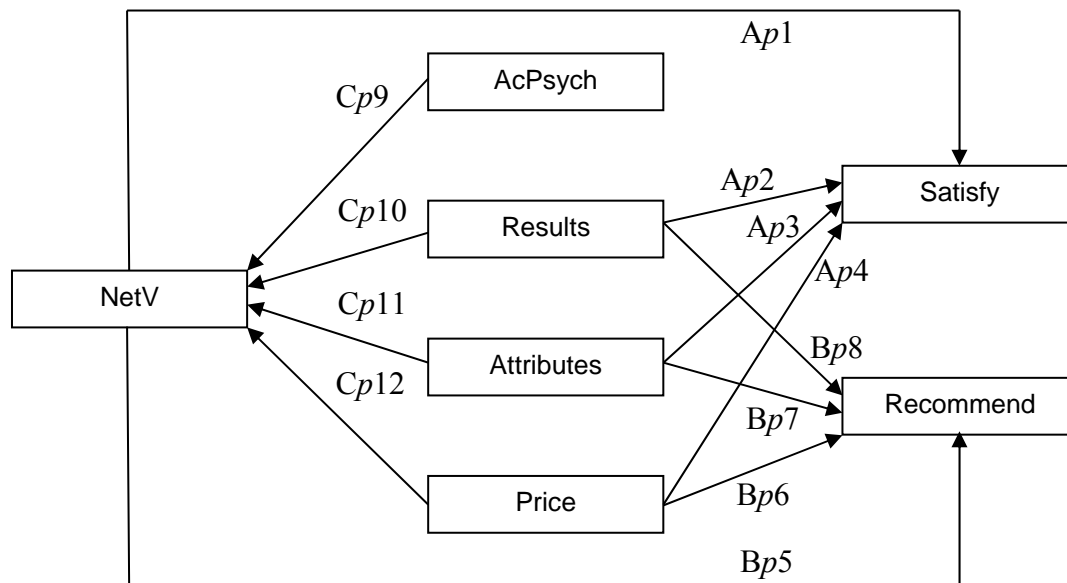
international students sacrifices in all areas were considered of more weight and likely explained the difference in sentiment between the two groups.

### *Structural associations*

Note that four of the five questions (excluding Q5) can be interpreted as representing components of Net Value but, also, as different customer value concepts (see Figure 1). NetV, therefore, can be considered both a dependent and an independent variable. With NetV considered an independent variable we looked to establish the relationship between different customer value concepts and key attitude indicators, satisfaction and willingness to recommend. With NetV as a dependent variable we looked to establish the relationship between it and its constituent elements.

Note that we have not attempted to measure individual sub-dimensions of the various NetV elements (e.g. Practical, Strategic, Personal, Social Outcomes, as sub-sets of ‘Results’ – see Appendix 1) as we believe this has no practical benefit. Once beyond the first level of abstraction value should be considered qualitatively to capture its full range and scope. Determining that Strategic Outcomes are more important than, say, Social Outcomes, in terms of Recommend has no practical use, as Strategic and Social Outcomes are both abstract ideas with no independent actionable existence. Conversely – and working in this same value quadrant (see Appendix 1) – understanding, for example, attitude to enhanced employment/earning opportunities and social status/credibility, has; and this can be determined more effectively by qualitative prioritisation mechanisms. Scaling beyond the first level of abstraction is little more than an exercise in statistical modelling and has limited practical use.

**Figure 5. Regression paths for ‘first level’ characteristics**



A, Satisfy =  $x_1$ NetV +  $x_2$ Results +  $x_3$ Attributes +  $x_4$ Price +  $e_1$   
 B, Recommend =  $x_1$ NetV +  $x_2$ Attributes +  $x_3$ Attributes +  $x_4$ Price +  $e_1$   
 C, NetV =  $x_1$ AcPsych +  $x_2$ Results +  $x_3$ Attributes +  $x_4$ Price +  $e_1$

Figure 5, above, identifies the paths we analysed in respect of, a) NetV’s first level structure, and b) the differing value concepts. A structural equation-type model has been used, but with single item values replacing reflective item aggregates. Tables 3, 4 and 5 show the results of three separate analyses. Two have NetV as an independent variable - one with Recommend as the dependent variable (paths *Ap1*, *Ap2*, *Ap3* and *Ap4*) and another with Satisfaction as the dependent variable (paths *Bp5*, *Bp6*, *Bp7* and *Bp8*). AcPsych is not included as it does not represent a *type* of customer value. The third analysis considers Results, Attributes, Price and AcPsych to be elements of NetV (Note: for Figure 5 we were undecided whether to identify variables as exogenous or endogenous. From one perspective each is characterised by just one item, but each actually represents an infinite number of cues that can be interpreted by respondents in a unique, personally meaningful, way).

**Table 3. Dependent variable = Satisfy**

Independent variable		All			Home			International		
Path	Name	$\beta$	$T$	Sig	$B$	$T$	Sig	$\beta$	$t$	Sig
$p5$	Results	0.140	2.123	0.035	0.111	1.458	0.146	0.209	1.576	0.119
$p6$	Attributes	0.134	2.071	0.039	0.176	2.227	0.027	0.077	0.678	0.500
$p7$	Price	-0.023	-0.357	0.722	-0.128	-1.545	0.124	0.118	1.101	0.274
$p8$	NetV	0.340	5.038	0.000	0.326	3.916	0.000	0.364	3.159	0.002

**Table 4. Dependent variable = Recommend**

Independent variable		All			Home			International		
Path	Name	$\beta$	$T$	Sig	$\beta$	$t$	Sig	$\beta$	$t$	Sig
$p1$	Results	0.128	1.935	0.046	0.127	1.705	0.090	0.207	1.390	0.168
$p2$	Attributes	0.095	1.463	0.144	0.142	1.846	0.066	0.054	0.417	0.678
$p3$	Price	0.061	0.927	0.355	-0.018	-0.223	0.824	0.064	0.530	0.598
$p4$	NetV	0.310	4.586	0.000	0.324	3.985	0.000	0.276	2.124	0.037

**Table 5. Dependent variable = NetV**

Independent variable		All			Home			International		
Path	Name	$\beta$	$T$	Sig	$\beta$	$t$	Sig	$\beta$	$t$	Sig
$p1$	Results	0.179	3.208	0.001	0.109	1.695	0.092	0.348	2.929	0.004
$p2$	Attributes	0.144	2.664	0.008	0.148	2.249	0.026	0.092	0.889	0.377
$p3$	Price	0.345	6.350	0.000	0.452	7.067	0.000	0.127	1.237	0.220
$p4$	AcPsych	0.171	3.248	0.001	0.097	1.607	0.110	0.262	2.475	0.015

### *Discussion*

Results give rise to a number of interesting implications. Firstly, referring to Tables 3 and 4, it is apparent that of the four customer value types considered, only NetV has a strong co-relational association with Recommend and/or overall Satisfaction ( $p = 0.05$ ). Considering different cohorts, Attributes are significant for home students in respect of Satisfaction, but

no other significant relationships exist. This appears to demonstrate that a full consideration of all value-determining factors is necessary to maximise understanding of the relationship between student value and key attitude indicators, Satisfaction and Recommend. Although a review of the literature suggests the majority of extant value measures are either ‘value for money’ or ‘attributes’ dominant, and that the canonical service-dominant logic literature (e.g. Vargo and Lusch, 2004, 2008) invokes a benefits-dominant view on value, our research implies that a more comprehensive perspective - taking more account of both outcomes, and acquisition and relationship costs (addressed only rarely in academic research) – is more appropriate.

Given that a comprehensive view on student value appears to provide a better guide to attitude than other, partial, constructs we were interested to discover which of the four NetV elements had the greatest impact (see Table 5). When considering all students, all factors appeared significant ( $p = 0.05$ ) using  $\beta$  as an indicator, but with Price dominating. After Price was Results, then AcPsych - with Attributes the least influential, implying the relative importance of both outcomes and indirect sacrifices, and the relative *non*-importance of service attributes. When considering students as two groups, though - and as with Figure 4 and Table 2 - results were much different. For home students Price remained key, but for international students Results was most important, with AcPsych also well-represented. For this group Attributes, again, were of least importance and Price, too, appeared not central to concerns. Interestingly, though, for home students Attributes were of secondary importance whilst neither Results nor AcPsych were significant. This implies a substantive difference in the way the two groups construe value.

Many other researchers have looked to find a causal and/or relational link between value and satisfaction and/or loyalty. Results have been mixed; primarily because both dependent and independent variables tend to be specified differently (particularly value), or because there are conditional/contingent variations in context, time, response group, or study objectives. Consequently, between-study comparisons are not easy to make. For example, Alves and Raposo (2007) – in a study of undergraduate students in Portugal - established a  $\beta$  of 0.16 between a global measure of value and word of mouth (analogous to ‘Recommend’) and 0.42 between value and satisfaction. Their student value measure was uni-dimensional (but less content rich than our NetV measure) and, thus, did not distinguish between components of value and satisfaction and/or loyalty. By contrast, in the context of British postgraduate business students, Ledden and Kalafatis (2010) investigated relationships between student value and satisfaction (only) but across a wide range of value facets; they did not, though, utilise a global measure.  $\beta$ 's varied between -0.230 (monetary sacrifice) and 0.42 (emotional benefits) causing the authors to emphasise the ‘idiosyncratic’ nature of student value and the need for this to be evaluated at a ‘disaggregated’ level. Our study confirms that different value components (and in our case, different conceptualisations, too) impact outcomes differently, but also demonstrates that an aggregated/global measure is the most reliable of all indicators, provided (and only when) it is comprehensively specified.

Comparison between our results and others concerning the home/international dyad proved similarly problematic. We encountered studies addressing international students in numerous contexts but, as with Paswan and Ganesh (2009); Cubillo, Sánchez and Cerviño (2006); and Arambawela, Hall and Zuhair (2006) home students were not assessed. Evidence from comparative studies in other non-marketing fields, though, suggest that a relatively hostile and/or challenging environment exists for international students. Homesickness (Poyrazli



and Lopez, 2007), lack of social support (Leder and Forgasz, 2004; Grayson, 2008), and language (Rangvid, 2010; Tian and Lowe, 2009) - particularly for Asian students who, according to Morrison, *et al* (2005) perform less well (at least in the UK) than students from other backgrounds - are dominant themes, and those objects occurring in the right-hand column of the Acquisition and Relationship Cost quadrant at Figure 3 tend to loom large; for home students, though, this applies far less. These studies also imply that outcomes (especially those in the right-hand column of our Results quadrant) have high relative importance for international students, and our empirical results support this.

## **Conclusions**

This article contributes to knowledge in a number of ways. Firstly, following a comprehensive literature review concerning student sentiment and the university experience, we found that the same degree of theoretical and operational diversity encountered in other competitive contexts applies also in higher education. We noted, too, how associated constructs - primarily service quality and satisfaction – are frequently conflated within the value domain.

Secondly, following a discussion of extant approaches to customer value measurement we proposed a novel alternative, beginning with a simple, but all-encompassing, model that characterised value (at the first level of abstraction) as a function of Results for the Customer, Service Attributes, Price and Acquisition and Relationship Costs. Coincidentally, this also allowed us to consider the relevance of different customer value concepts, consistent with Woodall (2003). For the next level of abstraction we eschewed the conventions of establishing factor/item structure via reflective indicators and, instead, allowed students to embody their own value perspectives in a dynamic and self-representing way. We

operationalised this quantitatively via single-item measures, using Reichheld's (2003) 'one question' approach, and caused students to 'make sense' of value, free of temporal and content constraints. This provided for a unique combination of parsimony at the first level of abstraction (facilitating performance benchmarking on key/meaningful value indicators: value for money, outcomes, attributes, acquisition and relationship costs, and also global/net value), and richness/complexity at subsequent levels of abstraction (for identifying actionable improvement opportunities). Our technique delivers both qualitative *and* quantitative outputs, and requires minimal advance preparation. Uniquely, it provides for the evaluation of value perspectives that are coincidentally customised, expeditious, authentic *and* comprehensive.

Initially this method allowed us to identify 'objects', both benefits and sacrifices, that were important to students – both in an 'ideal' but, more importantly, cohort-specific manner.

Thirdly, therefore, our study highlights the range and diversity of student concerns that apply in a highly complex service context (see Figure 3) and demonstrates how the full panoply of objects likely to influence student value might be surfaced. We recommend the use of a simple 'value equation' approach for other contexts within the highly diverse higher education sector – and, indeed, for other complex services too.

Fourthly, our results show that different student value concepts provide for different readings of student sentiment, but that it is the most comprehensively inclusive of these (net value) that offers the best potential for benchmarking. We have found no other study (in higher education, or any other service context) providing similar comparisons, and this is therefore a significant new finding. Our study suggests that full representation of both sacrifice and benefit are important to a meaningful understanding of customer/student value and that, in higher education at least, sacrifice is perhaps more influential than its counterpart. As most

experience-related study tends to focus on benefits this is also an important finding, and confirms Grönroos' (1997) belief that negative aspects of value demand, perhaps, the greatest attention.

Finally, we found that home and international students construe value in distinctly different ways; for home students Net Value was primarily a trade off between Price and Attributes, whilst for international students a balance of Results for the Customer (outcomes) and acquisition/relationship costs was of more relevance. We found, too, that international students found less 'value' than home students, generally, in their study environment, but, also, that it was largely too much sacrifice, rather than a lack of benefits, that mattered. Studies comparing home and international students are rare in the higher education marketing field though our results confirm, empirically, implications from other fields.

### **Limitations, and directions for further research**

Our study contributes to understanding in both higher education and marketing, but we recognise limitations in both process and outcome. Firstly, although we believe our 'one question' approach provides for a more dynamic and authentic evaluation of student value than does conventional scaling, this is yet to be verified empirically. It is perhaps unlikely we could draw any absolute conclusions about the relative merits of the two, though, as overall objectives – flexibility versus consistency – differ; but empirical comparison would be useful. We would still maintain, though, that quantitative methods are less effective at identifying improvement opportunities than are qualitative techniques.

It would also, clearly, be useful to repeat our study in other institutions to ascertain whether outcomes hold beyond The School; it would also be useful to establish whether, in our own

context, further segmentation of either the home or international groups might reveal further cultural or socio-economic insights – or, even, suggest some bias in our results. It is worth noting, too, that our study focused entirely on intra/post consumption experiences and that it was also undertaken before variable tuition fees were introduced into the United Kingdom. Student value is now an even more complex phenomenon, and perspectives that directly invoke considerations of price, and the various ways in which this might be construed will, undoubtedly, have a greater impact - on both intention to purchase (not fully considered in this study) and intention to recommend - than previously understood. There will, consequently, be even more incentive for both Vice Chancellors and academics to re-consider the appropriateness of using the ‘student as consumer’ metaphor, and for researchers to find out more about its relevance to the field of higher education.

## References

- Acevedo, A. 2011. Business ethics 101: the student is not a customer. *International Journal of Management Education* 9, no. 3: 1-11
- Alves, H. and Raposo, M. 2007. Student satisfaction index in Portuguese public higher education. *The Service Industries Journal* 27, no. 6: 795-808.
- Angell, R. J., Heffernan, T. W. and Megicks, P. 2008. Service quality in postgraduate education. *Quality Assurance in Education* 16, no. 3: 236 – 254.
- Arambawela, R., Hall, J and Zuhair, S. 2006. Postgraduate international students from Asia: factors influencing satisfaction. *Journal of Marketing for Higher Education* 15, no. 2: 105-127.
- Asthana, A. 2006. Angry students demand value for fee money. *The Observer*, Sunday, November 19<sup>th</sup>. Guardian online.  
<http://www.guardian.co.uk/uk/2006/nov/19/highereducation.students>.
- Baldwin, G. 1994. The student as customer: the discourse of “quality” in higher education. *Journal of Tertiary Educational Administration* 16, no. 1: 125-133.
- BBC 2011. University tuition fees: full list. <http://www.bbc.co.uk/news/education-12880840>.
- Bentham, J. 1948/1798. *An Introduction to the Principles of Morals and Legislation*. New York: Hefner.
- Bergkvist, L. and Rossiter, J. R. 2007. The predictive validity of multiple-item versus single-item measures of the same constructs. *Journal of marketing Research* 44, no. 2: 175-184.
- Boksberger, P. E. and Melsen, L. 2011. Perceived value: a critical examination of definitions, concepts and measures for the service industry. *Journal of Services Marketing* 25, no. 3: 229-240.
- Bolton, R. N. and Drew, J. H. 1991. A multi-stage model of consumers’ assessments of service quality and value. *Journal of Consumer Research* 17, no. 4: 375-384.
- Briggs, S. 2006. An exploratory study of the factors influencing undergraduate student choice: the case of higher education in Scotland. *Studies in Higher Education* 31, no. 6: 705-722.
- Brooks, R. and Everett, G. 2009. Post-graduation reflections on the value of a degree. *British Educational Research Journal* 35, no. 3: 333-349.
- Bruce, G. D. 2010. Exploring the value of MBA degrees: students’ experiences in full-time, part-time and executive MBA programs. *Journal of Education for Business* 85: 38-44.
- Bruce, G. D. and Edgington, R. 2008. Factors influencing word of mouth recommendations by MBA students: an examination of school quality, educational outcomes and value of the MBA. *Journal of Marketing for Higher Education* 18, no. 1: 79-101.

Carter, R. E. 2009. The impact of perceived service quality on MBA student satisfaction and recommendations: do expectations matter? *Services Marketing Quarterly* 30: 234-248.

Centeno, E., Harker, M. J., Ibrahim, E. B. and Wang, L-W. 2008. What is postgraduate marketing education for? Observations from the UK. *European Business Review* 20, no. 6: 547-566.

Churchill, G. A., Jr. 1979. A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research* 16, no. 1: 64-73.

Clemes, M. D., Gan, C. E. C. and Kao, T-H. 2007. University student satisfaction: and empirical analysis. *Journal of Marketing for Higher Education* 17, no. 2: 292-325.

Clewes, D. 2003. A student-centred conceptual model of service quality in higher education. *Quality in Higher Education* 9, no. 1: 69-85.

Cova, B. and Dalli, D. 2009. Working consumers: the next step in marketing theory? *Marketing Theory* 9, no. 3: 315-339.

Cronin Jr., J. J., Brady, M. K., Broad, R. R., Hightour Jr., R and Shemwell, D. J. 1997. A cross-sectional test of the effect and conceptualisation of service value. *Journal of Services Marketing* 11, no. 16: 375-391.

Cubillo, J. M., Sánchez, J. and Cerviño, J. 2006. International students' decision making process. *International Journal of Educational Management* 20, no. 2: 101-115.

DeVellis, R. F. 2003. *Scale Development: Theory and Applications (2nd ed.)*. London: Sage.

Diamantopoulos, A., Riefler, P. and Roth, K. P. 2008. Advancing formative measurement models. *Journal of Business Research* 61, no. 12: 1203-1218.

Diamantopoulos, A. and Siguaw, J. A. 2006. Formative versus reflective indicators in organisational measure development: a comparison and empirical illustration. *British Journal of Management* 17, no. 4: 263-282.

Diamantopolous, A. and Winklhofer, H. 2001. Index construction with formative indicators: an alternative to scale development. *Journal of Marketing Research* 38: 269-277.

Dick, A. S. and Basu, K., 1994. Customer loyalty: towards an integrated conceptual framework. *Journal of the Academy of Marketing Science* 22: no. 2: 99-113.

Dodds, W. B., Monroe, K. B. and Grewal, D. 1991. Effects of price, brand and store information on buyers' product evaluations. *Journal of Marketing Research* 28, August: 307-319.

Douglas, J., Douglas, A. and Barnes, B. 2006. Measuring student satisfaction at a UK university. *Quality Assurance in Education* 14, no. 3: 251-267.

Eagle, L. and Brennan, R. 2007. Are students customers? TQM and marketing perspectives. *Quality Assurance in Education* 15, no. 1: 44-60.

Gallarza, M. G., Gil-Saura, I. and Holbrook, M. B. 2011. The value of value: further excursions on the meaning and role of customer value. *Journal of Consumer Behaviour* 10: 179-191,

Gedye, S., Fender, E. and Chalkley, B. 2004. Students' undergraduate expectations and post-graduation experiences of the value of a degree. *Journal of Geography in Higher Education* 28, no. 3: 381-396.

Ginns, P., Prosser, M. and Barrie, S. 2007. Students' perception of teaching quality in higher education: the perspective of currently enrolled students. *Studies in Higher Education* 32, no. 5: 603-615.

Girof, E., Miers, M., Coles, J. and Wilkinson, G. 2006. An exploration of the 'value-added' of higher education for the health and social care workforce: the lecturers' perspective. *Assessment and Evaluation in Higher Education* 31, no. 1: 121-133.

Giullietti, M., Price, C. W. and Waterson, P. 2005. Consumer choice and competition policy: a study of UK energy markets. *Economics Journal* 115, no. 506: 949-968

Goldhaber, D. D. and Eide, E. R. 2003. Methodological thoughts on measuring the impact of private sector competition on the educational marketplace. *Educational Evaluation and Policy Analysis* 25, no. 2: 217-233.

Grayson, J. P. 2008. The experiences and outcomes of domestic and international students at four Canadian universities. *Higher Education Research and Development* 27, no. 3: 215-230.

Grönroos, C. 1984. A service quality model and its marketing implications. *European Journal of Marketing* 4: 36-44.

Grönroos, C. 1997. Value-driven relationship marketing: from products to resources and competencies. *Journal of Marketing Management* 13: 407-419.

Gruber, T., Fuß, S., Voss, R. and Gläser-Zikudu, M. 2010. Examining student satisfaction with higher education services. *International Journal of Public Sector Management* 23, no. 2: 105-123.

Gutman, J. 1982. A means-end chain model based on consumer categorisation processes. *Journal of Marketing* 46, Spring: 60-72.

Hallet, F. 2010. The postgraduate student experience of study support: a phenomenographic analysis. *Studies in Higher Education* 35, no. 2: 225-238.

Helgesen, O. and Nettet, E. 2007. Images, satisfaction and antecedents: drivers of student loyalty? A case study of a Norwegian university college. *Corporate Reputation Review*, 10, no.1: 38-59.

Hennig-Thurau, T., Langer, M. and Hansen, U. 2001. Modeling and managing student loyalty. *Journal of Service Research* 3, no. 4: 331-344.

Heskett, J. L., Sasser, W. E., Jr., and Schlesinger, L. A. 1997. *The Service Profit Chain*. New York: The Free Press.

Higher Education Funding Council for England 2011. National Student Survey. <http://www.hefce.ac.uk/learning/nss/>

Holbrook, M. B. 1996. Special session summary – Customer value: a framework for analysis and research. *Advances in Consumer Research* 23: 138-142.

Holbrook, M. B. 2004. Customer value and autoethnography: subjective personal introspection and the meanings of a photograph collection. *Journal of Business Research* 58, no. 1: 45-61

Jarvis, C. B., MacKenzie, S. B. and Podsakoff, P. M. 2003. A critical review of construct indicators and measurement model misspecification in marketing and consumer research. *Journal of Consumer Research* 30, no. 2: 199-218.

Kaufman, R., Villaneuva, G. R. and Bernádez, M. 2011. Graduating organisations and communities as a unique approach for higher education: creating value for an institution and all in its ecosystem. *Performance Improvement* 50, no. 5: 15-20.

Keiningham, T. L., Cooil, B., Aksoy, L., Andreassen, T. and Weiner, J. 2007. The value of different customer satisfaction and loyalty metrics in predicting customer retention, recommendation, and share of wallet. *Managing Service Quality* 17, no. 4: 361-384.

Kenney, M. G. and Khanfar, N. M. 2009. Antecedents of repurchase intention: propositions towards using marketing strategy to mitigate the attrition of online students. *Services Marketing Quarterly* 30: 270-286.

Khalifa, A. S. 2004. Customer value: a review of recent literature and an integrative configuration. *Management Decision* 42, no. 5: 645-666.

Klein, G., Moon, B. and Hoffman, R.F. 2006. Making sense of sensemaking II: a macrocognitive model. *IEEE Intelligent Systems* 21, no. 5: 88-92.

Lapierre, J. 1997. What does value mean to business-to-business professional services? *International Journal of Service Industry Management* 8, no.5: 377-397

LeBlanc, G. and Nguyen, N. 1999. Listening to the customers' voice: examining perceived service value among business college students. *The International Journal of Educational Management* 13, no. 4: 187-198.

Ledden, L. and Kalafatis, S. P. 2010. The impact of time on perceptions of educational value. *International Journal of Public Sector Management* 23, no. 2: 141-157.

Ledden, L., Kalafatis, S. P. and Samouel, P 2007. The relationship between personal values and perceived value of education. *Journal of Business Research* 60: 965-974.

Leder, G. C. and Forgasz, H. J. 2007. International and Australian mature students: the daily challenges. *Higher Education Research and Development* 23, no. 2: 183-198.

---



- Lomas, L. 2007. Are students customers? Perceptions of academic staff. *Quality in Higher Education* 13, no. 1: 31-34.
- Mathing, J., Sandon, B. and Edvardsson. B. 2004. New service development learning: from and with customers. *International Journal of Service Industries Management* 15, no. 5: 475-498.
- McCulloch, A. 2009. The student as co-producer: learning from public administration about the student-university relationship. *Studies in Higher Education* 34, no. 2: 171-187.
- McKnight, S. 2009. Bridging the gap between service provision and customer expectations. *Performance Measurement and Metrics* 10, no. 2: 79-93.
- McLung, G. W. and Werner, M. W. 2006. A market/value based approach to satisfy stakeholders of higher education. *Journal of Marketing for Higher Education* 18, no. 1: 102-123.
- Monroe, K. B. 1973. Buyers' subjective perceptions of price. *Journal of Market Research* 10, no. 1: 70-80.
- Moro-Egido, A. and Panadés, J. 2010. An analysis of student satisfaction: full-time vs. Part-time students. *Social Indicators Research* 96, no. 2: 363-378.
- Morrison, J., Merrick, B., Higgs, S. And Le Métails, J. 2005. Researching the performance of international students in the UK. *Studies in Higher Education* 30, no. 3: 327-337
- Munteanu, C., Ceobanu, C., Bobâlcă, C. and Anton, A. 2010. An analysis of customer satisfaction in a higher education context. *International Journal of Public Sector Management* 23, no. 2: 124-140.
- Nadiri, H., Kandampully, J. And Hussain, K. 2009. Students' perceptions of service in higher education. *Total Quality Management* 20, no.5: 523-535.
- Ng, I. C. L. and Forbes, J. 2009. Education as service: the understanding of university experience through the service logic. *Journal of Marketing for Higher Education* 19, no. 1: 38-64.
- Nunnally, J. C. 1978. *Psychometric Theory (2<sup>nd</sup> Ed.)*. New York: McGraw-Hill.
- Obermiller, C. and Atwood, A. 2011. In defence of the student as customer metaphor. *International Journal of Management Education* 9, no. 3: 13-16.
- Observatory on Borderless Higher Education, 2011. The 2000 Global Forum in Vancouver. [https://www.obhe.ac.uk/newsletters/global\\_forum\\_report](https://www.obhe.ac.uk/newsletters/global_forum_report).
- Parasuraman, A., Zeithaml, V. A. and Berry, L. L. 1988. SERVQUAL: a multiple item scale for measuring consumer perceptions of service quality. *Journal of Retailing* 64, no.1: 12-40.

- Paswan, A. and Ganesh, G. 2009. Higher education institutions: satisfaction and loyalty among international students. *Journal of Marketing for Higher Education* 19, no. 1: 65-84.
- Patti, C. H. and Chen, C. H. 2009. Types of word-of-mouth messages: information search and credence-based services. *Journal of Promotion Management* 15: 357-381.
- Perin, M. G., Sampaio, C. H. and Brei, V. A. 2007. Loyalty's antecedents: a cross-sector study. *Latin American Business Review* 8, no. 1: 83-102.
- Petruzzellis, L. and Romanazzi, S. 2010. Educational value: how students chose university – evidence from an Italian University. *International Journal of Educational Management* 24, no. 2: 139-158.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J-Y and Podsakoff, N. P. 2003. Common method biases in behavioural research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology* 88, no. 5: 879-903.
- Poyrazli, S. and Lopez, M. D. 2007. An exploratory study of perceived discrimination and homesickness: a comparison of international students and home students. *Journal of Psychology*, 141, no. 3: 263-281.
- Propper, C., Wilson, D. and Burgess, S. 2006. Extending choice in English healthcare: the implications of the economic evidence. *Journal of Social Policy* 35, no. 4: 537-557.
- Prugsamatz, S., Pentecost, R. and Ofstad, L. 2006. The influence of explicit and implicit service promises on Chinese students' expectations of overseas universities. *Asia Pacific Journal of Marketing and Logistics* 18, no. 2: 129-145.
- Quinn, A., Lemay, G., Larsen, P. and Johnson, D. M. 2009. Service quality in higher education. *Total Quality Management* 20, no. 2: 139-152.
- Rangvid, B. S. 2010. Source country differences in test score gaps. *Education Economics*, 18, no. 3: 269-295.
- Reichheld, F. 2003. The one number you need to grow. *Harvard Business Review*, December: 46-54.
- Relyea, C., Cocchiara, F. K. And Studdard, N. L. 2008. The effect of perceived value in the decision to participate in study abroad programmes. *Journal of Teaching in International Business* 19, no. 4: 346-361.
- Rigotti, S. and Pitt, L. 1992. SERVQUAL as a measuring instrument for service provider gaps in Business Schools. *Management Research News* 15, no. 3: 9-17.
- Rodgers, T. 2007. Measuring value added in higher education: a proposed methodology for developing a performance indicator based on the economic value added to graduates. *Education Economics* 15, no. 1: 55-74.
-

- Rojas-Méndez, J. I., Vasquez-Parraga, A. Z., Kara, A. and Cerda-Urrutia, A. 2009. Determinants of student loyalty in higher education: a tested relationship approach in Latin America. *Latin American Business Review* 10: 21-39.
- Rossiter, J. R. 2002. The C-OAR-SE procedure for scale development in marketing. *International Journal for Research in Marketing* 19, no. 4: 305-335.
- Ruiz, D. M., Gremmler, D. D., Washburn, J. H. And Carrión, G. C. 2008. Service value revisited: specifying a higher-order, formative measure. *Journal of Business Research* 61, no. 12: 1278-1291.
- Sánchez-Fernández, R., Iniesta-Bonillo, Á. 2007. The concept of perceived value: a systematic review of the research. *Marketing Theory* 7, no. 4: 427-451.
- Sánchez-Fernández, R., Iniesta-Bonillo, Á., Schlesinger-Díaz, W. and Rivera-Torres, P. 2010. Analysis of the value creation in higher institutions: a relational perspective. *Theoretical and Applied Economics* 17, no. 10: 25-36.
- Satmetrix 2006. *The Official Net Promoter Web Site* (Online). <http://www.netpromoter.com>
- Schmidt, R. 2002. A student's initial perception of value when selecting college: an application of value added. *Quality Assurance in Education* 10, no. 1: 37-39.
- Selnes, F. And Sallis, J. 2003. Promoting relationship learning. *Journal of Marketing* 67, no. 3: 80-95.
- Sheth, J. N., Newman, B. I and Gross, B. L. 1991. Why we buy what we buy: a theory of consumption values. *Journal of Business Research* 22, no. 2: 159-170.
- Sumaedi, S., Bakti, I. G. M. Y. And Metasari, N. 2011. The effect of students' perceived service quality and perceived price on student satisfaction. *Management Science and Engineering* 5, no. 1: 88-97.
- Tian, M. and Lowe, J. 2009. Existentialist internationalisation and the Chinese student experience in UK universities. *A Journal of Comparative and International Education* 39, no. 5: 659-676.
- Vargo, S. L. and Lusch, R. F. 2004. Evolving to a new dominant logic for marketing. *Journal of Marketing* 68, no. 1: 1-17.
- Vargo, S. L. and Lusch, R. F. 2008. Service-dominant logic: continuing the evolution. *Journal of the Academy of Marketing Science* 36, no. 1: 1-10.
- Voss, R., Gruber, T. and Szmigin, I. 2007. Service quality in higher education: The role of student expectations. *Journal of Business Research* 60, no. 9: 949-959.
- Walsh, E., 2010. A model of research group microclimate: environmental and cultural factors affecting the experiences of overseas research students in the UK. *Studies in Higher Education* 35, no. 5: 545-560.

Webb, D. And Jagun, A. 1997. Customer care, customer satisfaction, value, loyalty and complaining behaviour: validation in a UK university setting. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behaviour* 10: 139-151.

Weick, K. E. 1995. *Sensemaking in Organisations*. Thousand Oaks, CA: Sage Publications.

Woodall, T. 2003. Conceptualising value for the customer: an attributional, dispositional and structural analysis. *Academy of Marketing Science Review*.  
<http://www.amsreview.org/articles/woodall12-2003.pdf>

Figure 1. The major customer value concepts (see Woodall, 2003)

- |  |
|--|
| <p>6. <b>Attributes</b> only – product/service features that consumers find to be of benefit, or value</p> <p>7. <b>Outcomes</b> only – benefits, or value, that consumers derive from their association with an offering</p> <p>8. <b>Value for money</b> - a readily rationalised balance of benefits and sacrifices, usually based on price and attributes (plus the more obvious outcomes).</p> <p>9. <b>Net value</b> - a complex, intuitively balanced combination of all benefits (outcomes and/or attributes) and all sacrifices (monetary and/or non-monetary) perceived to be associated with a particular offering.</p> <p>10. <b>Cheapest option</b> - bargain, usually focused on minimum possible sacrifice.</p> |
|--|

Figure 2: Adapted value equation (based upon Heskett, Sasser and Schlesinger, 1997; and Grönroos, 1997)

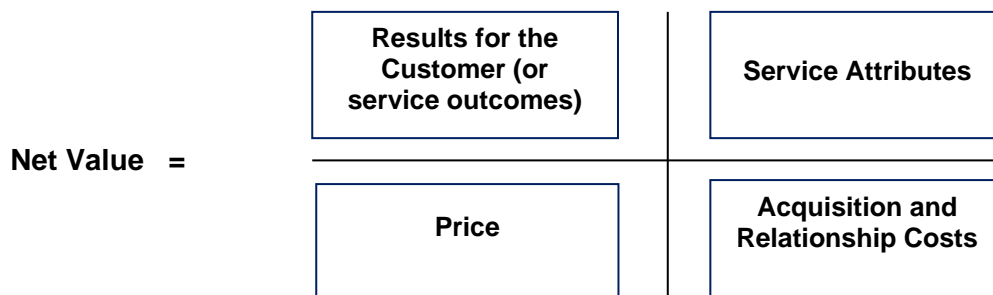


Figure 3. Ideal NetValue equation

<p style="text-align: center;"><b>Results for the Customer</b></p> <p><b>Practical outcomes</b></p> <ul style="list-style-type: none"> <li>• Knowledge/learning</li> <li>• Transferable skills</li> <li>• Business understanding</li> <li>• Time/money management</li> </ul> <p><b>Social outcomes</b></p> <ul style="list-style-type: none"> <li>• Life experience</li> <li>• Friendships</li> <li>• Social status</li> <li>• Familiarity with different cultures</li> </ul> <p><b>Strategic outcomes</b></p> <ul style="list-style-type: none"> <li>• Degree</li> <li>• Employment opportunities</li> <li>• Networking opportunities</li> <li>• Further education opportunities</li> <li>• Corporate pipeline</li> </ul> <p><b>Personal outcomes</b></p> <ul style="list-style-type: none"> <li>• Self-actualisation/fulfilment</li> <li>• Confidence</li> <li>• Independence</li> <li>• Personal development/maturity</li> <li>• Please parents/significant others</li> </ul>	<p style="text-align: center;"><b>Service Attributes</b></p> <p><b>Lifestyle facilitators</b></p> <ul style="list-style-type: none"> <li>• Local sustenance (Cafés, shops)</li> <li>• Local services (Banking, print shop, insurance)</li> <li>• Transport links</li> <li>• Accommodation Office</li> </ul> <p><b>Support services</b></p> <ul style="list-style-type: none"> <li>• Personal counselling</li> <li>• Financial advice</li> <li>• Health centre</li> <li>• Students union</li> <li>• International office</li> </ul> <p><b>Lifestyle enhancers</b></p> <ul style="list-style-type: none"> <li>• City centre campus</li> <li>• City life</li> <li>• Cultural variety</li> <li>• Gym/sports facilities</li> <li>• Personal freedom</li> <li>• Student's Union</li> </ul> <p><b>Academic support</b></p> <ul style="list-style-type: none"> <li>• Library</li> <li>• Language programmes</li> <li>• Internet/pc access</li> <li>• Teaching staff</li> <li>• Administration</li> </ul> <p><b>Career Enhancers</b></p> <ul style="list-style-type: none"> <li>• Placement/internship</li> <li>• University business initiatives</li> <li>• Careers office</li> </ul>
<p style="text-align: center;"><b>Price</b></p> <ul style="list-style-type: none"> <li>• Course/tuition fees</li> </ul>	<p style="text-align: center;"><b>Acquisition and Relationship Costs</b></p> <p><b>Lost opportunity:</b></p> <ul style="list-style-type: none"> <li>• Work experience/wages</li> <li>• Travel/other social and entertainment</li> <li>• Starting family/establishing stable relationships</li> </ul> <p><b>Subsistence:</b></p> <ul style="list-style-type: none"> <li>• Rent</li> <li>• Daily transport</li> <li>• Occasional travel</li> <li>• Utilities</li> <li>• Food and entertainment</li> <li>• Telephone costs</li> </ul> <p><b>Effort</b></p> <ul style="list-style-type: none"> <li>• University work (revision/examinations, coursework)</li> <li>• Loss of home comforts/fending for yourself</li> <li>• Part-time work</li> <li>• Travel between classes/buildings</li> </ul> <p><b>Direct learning costs</b></p> <ul style="list-style-type: none"> <li>• Books</li> <li>• Stationary</li> <li>• Print costs</li> <li>• IT (laptop, etc.)</li> </ul> <p><b>Psychological costs</b></p> <ul style="list-style-type: none"> <li>• Academic stress (workload, deadlines, fear of failure)</li> <li>• Financial worries/debt</li> <li>• Homesickness</li> <li>• Pressure on personal relationships</li> <li>• Weight of expectation from family/friends</li> <li>• Personal expectations</li> <li>• Pressure to socialise</li> </ul> <p><b>Other Acquisition costs</b></p> <ul style="list-style-type: none"> <li>• Pre-course study</li> <li>• Loss of privacy (communal living)</li> <li>• Leaving 'safe'/familiar environment</li> <li>• Crime</li> <li>• Cultural/social prejudice</li> <li>• UK weather</li> </ul>

Figure 4. Analysis of means, independent variables

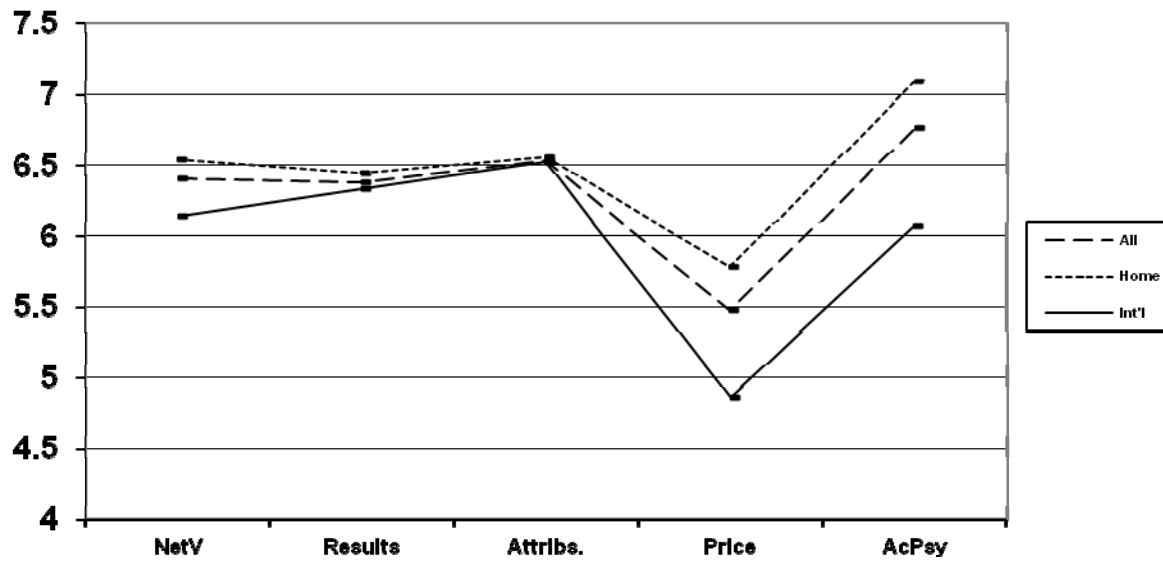
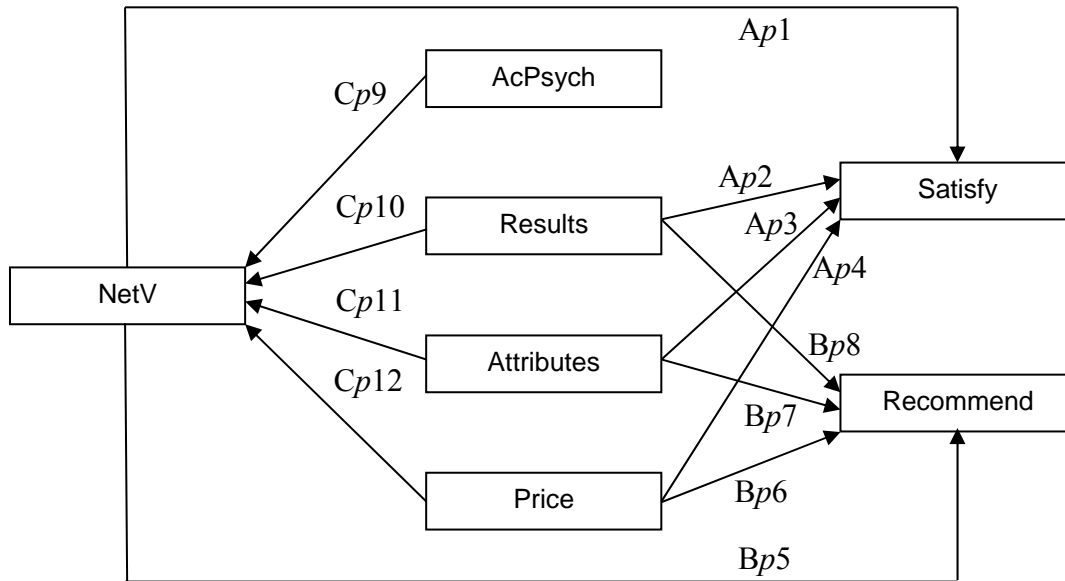


Figure 5. Regression paths for ‘first level’ characteristics



- A,  $Satisfy = x_1NetV + x_2Results + x_3Attributes + x_4Price + e_1$
- B,  $Recommend = x_1NetV + x_2Attributes + x_3Attributes + x_4Price + e_1$
- C,  $NetV = x_1AcPsych + x_2Results + x_3Attributes + x_4Price + e_1$



Table 1. Research questions and associated constructs

<b>Value-based research questions</b>	<b>Value conceptualisation</b>	<b>Value equation element</b>	<b>Name</b>
1. <i>Does The School represent 'good value'?</i>	Net Value	Net Value	NetV
2. <i>Are 'Results for the Customer' all you could wish them to be?</i>	Outcomes	Results for the Customer	Results
3. <i>Are 'Service Attributes' as good as you would like them to be?</i>	Attributes	Service attributes	Attributes
4. <i>Considering what you get from The School, is the 'Price' fair?</i>	Value for money	Price	Price
5. <i>Putting 'Price' to one side, are 'Acquisition and Psychological Costs' worth expending for the benefits you receive?</i>	n/a	Acquisition and Relationship Costs	AcPsych

Table 2. Descriptive statistics/independent samples test

Variable		Demographic Category						t-test for equality of means		
		Work			Not Work					
		N	Mean	SD	N	Mean	SD	t	df	Sig (2 tail)
Dep.	Recommend	107	7.03	1.42	186	6.90	1.44	0.75	291	0.45
	Satisfy	106	3.80	0.61	186	3.80	0.64	0.08	290	0.94
	Repurchase	48	4.94	1.25	83	4.70	1.31	1.02	129	0.31
Indep.	NetV	108	6.42	1.48	195	6.42	1.54	-0.02	301	0.98
	Results	108	6.52	1.66	192	6.34	1.57	0.96	298	0.34
	Attributes	108	6.58	1.82	191	6.53	1.54	0.29	297	0.77
	Price	108	5.42	2.02	191	5.55	1.94	-0.59	297	0.56
	AcPsych	107	6.97	1.64	190	6.68	1.74	1.43	295	0.16
		<b>Home</b>			<b>International</b>					
Dep.	Recommend	207	7.18	1.32	86	6.37	1.52	<b>4.58</b>	<b>291</b>	<b>0.00</b>
	Satisfy	206	3.87	0.63	86	3.67	0.60	<b>3.03</b>	<b>290</b>	<b>0.00</b>
	Repurchase	99	4.98	1.29	32	4.19	1.12	<b>3.12</b>	<b>129</b>	<b>0.00</b>
Indep.	NetV	213	6.54	1.36	90	6.14	1.81	<b>2.06</b>	<b>301</b>	<b>0.04</b>
	Results	210	6.44	1.52	90	6.33	1.79	0.51	298	0.61
	Attributes	209	6.56	1.64	90	6.52	1.65	0.21	297	0.83
	Price	209	5.78	1.90	90	4.86	1.96	<b>3.83</b>	<b>297</b>	<b>0.00</b>
	AcPsych	209	7.09	1.54	90	6.07	1.85	<b>4.93</b>	<b>295</b>	<b>0.00</b>
		<b>Undergraduate</b>			<b>Postgraduate</b>					
Dep.	Recommend	217	7.13	1.34	77	6.33	1.54	<b>4.58</b>	<b>302</b>	<b>0.00</b>
	Satisfy	216	3.84	0.60	77	3.70	0.68	1.72	301	0.09
	Repurchase	107	4.81	1.33	35	4.49	1.20	1.30	140	0.20
Indep.	NetV	233	6.52	1.41	80	6.08	1.72	<b>2.29</b>	<b>311</b>	<b>0.02</b>
	Results	230	6.43	1.56	80	6.23	1.73	1.00	308	0.32
	Attributes	229	6.61	1.63	80	6.28	1.63	1.60	307	0.11
	Price	229	5.71	1.95	80	4.81	1.99	3.51	<b>307</b>	<b>0.00</b>
	AcPsych	228	7.07	1.56	79	5.90	1.81	5.50	<b>307</b>	<b>0.00</b>

Table 3. Dependent variable = Satisfy

Independent variable		All			Home			International		
Path	Name	$\beta$	$T$	Sig	$B$	$T$	Sig	$\beta$	$t$	Sig
$p5$	Results	0.140	2.123	0.035	0.111	1.458	0.146	0.209	1.576	0.119
$p6$	Attributes	0.134	2.071	0.039	0.176	2.227	0.027	0.077	0.678	0.500
$p7$	Price	-0.023	-0.357	0.722	-0.128	-1.545	0.124	0.118	1.101	0.274
$p8$	NetV	0.340	5.038	0.000	0.326	3.916	0.000	0.364	3.159	0.002

Table 4. Dependent variable = Recommend

Independent variable		All			Home			International		
Path	Name	$\beta$	$T$	Sig	$\beta$	$t$	Sig	$\beta$	$t$	Sig
$p1$	Results	0.128	1.935	0.046	0.127	1.705	0.090	0.207	1.390	0.168
$p2$	Attributes	0.095	1.463	0.144	0.142	1.846	0.066	0.054	0.417	0.678
$p3$	Price	0.061	0.927	0.355	-0.018	-0.223	0.824	0.064	0.530	0.598
$p4$	NetV	0.310	4.586	0.000	0.324	3.985	0.000	0.276	2.124	0.037

Table 5. Dependent variable = NetV

Independent variable		All			Home			International		
Path	Name	$\beta$	$T$	Sig	$\beta$	$t$	Sig	$\beta$	$t$	Sig
$p1$	Results	0.179	3.208	0.001	0.109	1.695	0.092	0.348	2.929	0.004
$p2$	Attributes	0.144	2.664	0.008	0.148	2.249	0.026	0.092	0.889	0.377
$p3$	Price	0.345	6.350	0.000	0.452	7.067	0.000	0.127	1.237	0.220
$p4$	AcPsych	0.171	3.248	0.001	0.097	1.607	0.110	0.262	2.475	0.015