Students-as-customers' satisfaction, predictive retention with marketing implications

The case of Malaysian higher education business students

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Abstract

Purpose – The purpose of this paper is to investigate two areas of interest: first, to determine business student customer satisfiers that could be contributors to students' current and predicted retention in a higher educational institution (HEI) and second, to use these satisfiers to inform HEI marketing planning.
Design/methodology/approach – The survey used 10 per cent of the sampling frame from the faculty total business students population. Descriptive statistics and correlation were employed to describe and measure the relationship between the teaching and non-teaching antecedents of student satisfaction and their five constructs (academic experience, teaching quality, campus life, facilities and placement support) and current and intended retention. Standard multiple regressions were run to measure the β and significant values of the composite variables as stated.
Findings – Quantitative results revealed that students were most satisfied with academic experience and it was also the most dominant predictor of students' retention. Other elements such as quality teaching, facilities and internship, though important for student satisfaction, were not predictors of retention.
Research limitations/implications – Findings based on one Malaysian institution could not be used as a representation of other institutions either locally or internationally.
Practical implications – Suggestions are made as to how HEIs can defend and safeguard their existing and future position by giving maximum attention to both "hard" and "soft" student satisfiers which would add customer value and strengthen their competitive position.
Originality/value – Based on teaching and non-teaching antecedents and constructs, enable HEIs to predict retention and so inform marketing planning in a highly competitive higher education environment.
Keywords Marketing, Malaysia, Student satisfaction, Intended retention
Paper type Research paper

1. Introduction

Competitiveness and sustainability are now totems amongst education fraternities in Malaysia's education sector. The higher education (HE) sector in Malaysia is getting more competitive with 414 private colleges, 37 private universities, 18 public universities, 20 university colleges and eight foreign branch campuses competing for the same pool of the local eligible students population and regional students, along with Singapore, Philippines, Hong Kong and Indonesia. Sustainability is, therefore, crucial to all the higher educational institutions (HEIs) at present and in the immediate future. Given the heavy competition (a sure sign that the education market is gradually maturing in Malaysia) one of the ways to enable the organisation to sustain itself is to maintain or increase its level of income from its "core market"

(domestic) and/or increase its level of income from overseas students via increased numbers or tuition fees.

According to Miles *et al.* (1974), given the stable political and economic conditions present in a country like Malaysia, the name of the game is to defend and expand market position. To "defend" means a HEI must provide a quality product or service, have a wide choice of product/service offerings, promote and maintain good service and loyalty amongst its existing customers, aligned to their needs. This package should create an "irresistible" value proposition. Whichever organisation posits the greatest value proposition to the students will most likely prevail (Piercy, 2001).

Recent literature (e.g. Hoyer *et al.*, 2010) has suggested that the differentiation of the product or service, and the development of new products or services should not be just organisation led and concentrate on "product characteristics", like, for example, a well devised curriculum but involve the customer's perceptions and emotions as well, like, for example, valuing student opinions, so called "co-creation". So the old concept of marketing an organisation's product or service attributes as a competitive differentiator, (the so called unique selling proposition (USP)) has now given way to the emotional selling proposition (ESP) (Bainbridge, 2004) in which the organisation now may not only have to produce a product or service but incorporate customer emotions as well. HEIs have been slow to recognise this change. The authors contend that this is done by increasing customer satisfaction and loyalty, and differentiating the "service" from competitors on both "hard" and "soft" factors which make up student satisfaction and loyalty. (We would contend that "Education" is a service as it displays the essential characteristics of a service, i.e. is "consumed" simultaneously as when offered and is "intangible" (Voon, 2007).)

We define "satisfaction" as a measure of student contentment with each course or programme, whereas we define "student retention and loyalty" as persistence from first year to graduation, and potential contributions beyond, i.e. potential return to their alma mater. Establishing satisfaction early on should lead to a greater likelihood that loyalty will follow (Rowley, 2003). Tinto (2006) formulated a student integration theory of persistence or retention based on the relationships between students and institutions. He argued that retention involves two commitments on the part of the student. The first commitment is the goal commitment to obtain a college degree, and the second is the decision to obtain that degree at a particular institution (institutional commitment). Moreover, if HEIs could predict "retention" based on the antecedents that make up "satisfaction" and "loyalty", these could be used to inform the organisational marketing plan in terms of future student numbers and income.

DeShields *et al.* (2005) posited that due to the changing nature of the HE marketplace; it encourages college administrators to apply the customer-oriented principles that are used in profit-making institutions. These principles assume that "consumers", by definition, have: needs and wants (in this case a HE degree); the means to purchase from a number of choices; and seek a satisfying "exchange" by parting with their money to a HEI which provides their perceived quality service, in this case, the HE "package". Students can "consume" HE and, in Malaysia, from a large number of choices. The key is to change student "consumers" into "satisfied and retained customers", and this can only be done by offering a HE experience that meets the student's needs and wants and is superior in value to that offered by other HEIs (Kotler, 2003) By being more customer oriented, colleges and universities can provide this superior offering. Given the intense competitiveness of the education industry, weighing the satisfying effects of students and the possibility of retaining them has now become the mainstay of educational

marketing strategists. Given the fact that research into determinants of student satisfaction abound and also general consensus manifested in most of the research findings (e.g. Arambewela and Hall, 2009; Wilkins and Balakrishnan, 2012; Douglas *et al.*, 2006; Husain *et al.*, 2009), there is little research of the similar nature conducted in the context of a Malaysia HEI, uniquely peculiar to a quasi-government funded university college where teaching academic and professional programmes are the central stage and mainstay of the institutional sustainability. The purpose of this study, therefore, is to determine the student/customer satisfiers and current satisfaction on these (based on the sample of Malaysian students) that could be potential contributors for students' persistence (retention and loyalty), both actual and predicted, in a HEI in Malaysia and to use these satisfiers for informing marketing planning and implementation so as create a competitive advantage and so support and grow current and future student numbers and income.

2. Literature review
To support and inform the research, two strands of literature were considered important; literature regarding the teaching and non-teaching antecedents and constructs of student satisfaction and retention.

2.1 Teaching and intended retention
There are numerous studies on the effect of the quality of teaching and faculty on student satisfaction and intended retention. For example, Elliott and Shin (2002) found that academic satisfaction of students depended on academic advising, academic support, classroom technology, faculty care and support, and faculty expertise as well as out-of-the-classroom experiences. Additionally Kadar (2001) suggested that academic advising involved repeated interactions with students about their course offerings and schedules. Umbach and Porter (2002) highlighted the importance of faculty members and the great influence that good faculty had on the satisfaction of students in HE through their interactions with undergraduates. This was reinforced by Thomas and Galambos (2004) who found that faculty and student interactions in the classroom were significantly related to higher levels of satisfaction amongst undergraduates. On the other hand, Astin (1993) found that it was not just a case of faculty/student interaction which led to student satisfaction but that a strong relationship between satisfaction with student life in general (including more than faculty/student interaction) and students' interaction and involvement existed. This was reinforced by Kegan (1978) who found that there was a distinct interlink between undergraduate student satisfaction and involvement in all aspects of student life, social life, residential life, and the academic experience. This finding was reinforced by Belch *et al.* (2001) and Evans *et al.* (1998). Tinto (1993) who found that whilst it is important for students to be academically involved and engaged, it is also important for students to become involved and engaged in other areas of college life, such as campus organisations, activities, athletic event and other recreational activities. Interestingly, this finding was in contrast to those of Roberts and Styron (2010) who found that students did not persist due to the high level of involvement and engagement in other campus activities and, indeed, these detracted from their academic efforts. The conclusion is that the constant challenge and support of students produce opportunities for skill development leading to academic and social satisfaction with college experiences.

The quality of faculty are also key to student satisfaction. Wilkins and Balakrishnan (2012) in their research, found that quality of lecturers and effective use of technology were strong determinants of student satisfaction. Arambewela and Hall (2009) in their research, added that the elements of feedback from lecturers, good access to lecturers and quality of teaching were perceived to be the most important variables influencing student satisfaction. Interestingly, Bennett and Kane (2009) found that lecturers with a research background, as opposed to people with commercial and/or industry experience, was one of the factors that significantly influenced students to persist. One explanation of this finding could be that, within an academic environment, students, perhaps more so at the undergraduate level, relate more towards academically oriented lecturers than to faculty members with impressive track records as managers in businesses. This research tended to confirm this assertion. None of these studies attempted to assess whether these teaching elements of student satisfaction ("antecedents" and their "constructs" in our language) are predictive of student retention either currently or potentially in a Malaysian context. So in order to address this, we developed the following hypotheses:

H1. There is a positive relationship between academic experience and students' intention to continue their higher degree.

H2. There is a positive relationship between teaching quality and students' intention to continue their higher degree.

2.2 Non-teaching support and intended retention
Again, much research has been conducted on the non-teaching support elements as a source of student satisfaction and retention, for example the quality of the fabric of buildings and parking facilities. According to Gruber *et al.* (2010) and Wilkins and Balakrishnan (2012), students were particularly satisfied with the school placements and the atmosphere amongst students but were mostly dissatisfied with the university buildings and the quality of the lecture theatres. Whilst academic support, welfare support and course communication structures were identified as being significant determinants of student satisfaction, O'Driscol (2012) observed differences based on nationality, particularly in relation to pre-placement support. Carter and Yeo (2010) found that the Institution's facilities in terms of IT and relevant facilities support, library and information services and multipurpose retail shops were also increasingly becoming more important and this aspect was one of the contributing determinants to pre- and post- student recruitment, satisfaction and retention. So, involvement in HEI learning support facilities are essential to student satisfaction and retention but so are "non-academic" support and activities also.

Responsiveness, communication and access are important determinants of student satisfaction in the context of teaching, learning and assessment areas. In their research into business school students, Douglas *et al.* (2008) found that reducing the number of dissatisfying experiences may likely to improve student recruitment, retention and financial stability of HE. According to Schertzer and Schertzer (2004), college students have become more consumer oriented in their college search process and, subsequently, have demanded more from the institution of their choosing so HEIs have become more driven to meet the satisfaction needs of their students. Also, a growing body of research suggests that the social adjustment of students might be an important factor in predicting persistence, for example the work of Gerdes and Mallinckrodt (1994),

Mallinckrodt (1988), Spady (1970) and Tinto (1975). These studies argued that integration into the social environment is a crucial element in commitment to a particular academic institution. Given the literature on non-teaching elements as important in student persistence, studies we developed a second set of hypotheses for our study, attempting to assess the predictive ability of non-teaching activities in student retention:

H3. There is a positive relationship between campus life and student intention to continue their higher degree.

H4. There is a positive relationship between facilities and student intention to continue their higher degree.

H5. There is a positive relationship between placement support and student intention to continue their higher degree.

In summary, to establish a good and long term relationship with students, HEIs need to know that student satisfaction through the various elements of teaching and non-teaching is important for student performance (Walther, 2000; Wiese, 1994) and student retention (Wiese, 1994; Dolinsky, 1994; Thomas *et al.*, 1996). Student satisfaction, consequently has an effect on potential student intake (Chadwick and Ward, 1987; Dolinsky, 1994; Alves and Raposo, 2007). We acknowledge that this research has been conducted in one Malaysian institution, primarily catering to students of Chinese ethnicity. The degree to which these antecedents and their constructs affect student satisfaction and retention, especially amongst the students under study (third generation Chinese living in Malaysia) or can be classed as typical "Chinese" as opposed to other ethnic communities (see Baumann *et al.*, 2012) is not the focus of this research but could be a fruitful further research topic.
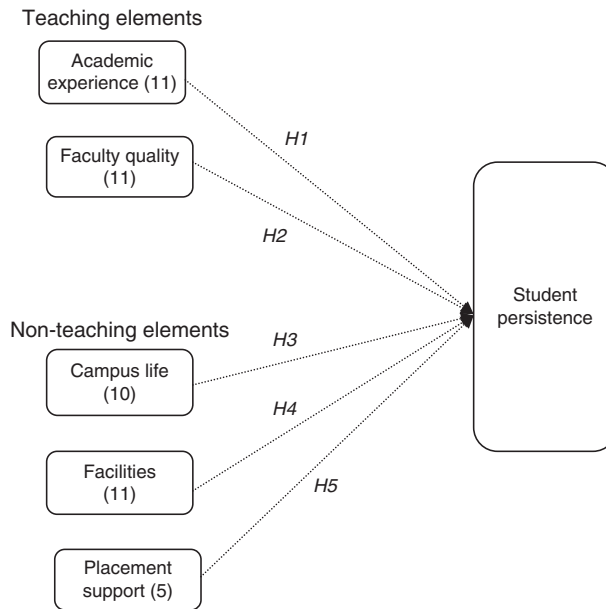
3. Methodology
3.1 Conceptual framework and hypotheses
Literature informed us that there were two antecedents of student satisfaction and loyalty which could be classified as "teaching elements" and "non-teaching elements". Each of these antecedents are made up of constructs, i.e. for teaching these are "academic experience" and "faculty quality" and for non-teaching elements these are "campus life", "facilities" and "placement support". These constructs can be further expanded on with the addition of items which make up the constructs. Based on this we proposed a conceptual framework (see Figure 1) which links antecedents and their constructs (the "bases" for student satisfaction and retention), from teaching and non-teaching support to student intended persistence ("retention"). A list of the items making up each construct is given in Table III.

In order to test the hypotheses, a Likert Scale questionnaire was developed which was designed to gauge student satisfaction on the items making up the five constructs: academic experience, teaching and faculty quality, campus life, facilities and placement support. The average mean scores of all the items contained in each construct was then calculated (see Tables III and IV). Each construct's retention predictability was then calculated using regression analysis. The use of a Likert Scale for data gathering purposes on student satisfactions was informed by the work of Joyce (2009) and O'Driscol (2012).

3.2 Sampling
The Malaysian participants were the final year diploma students from different programme major ranging from accounting, business administration, marketing,

Teaching elements

Academic
experience (11)

Faculty quality
(11)

H1

H2

Student
persistence

Non-teaching elements

Campus life
(10)

H3

H4

Facilities
(11)

H5

Placement
support (5)

Figure 1.
Proposed model of
student satisfaction
and retention

finance and investment to retail and logistics management. Table I shows
the frequency percentage of gender and the respective programmes. Prior to the
distribution of questionnaires, we sought the permission of the institution's Ethic
Committee and the approval was granted. A total of 500 (i.e. 10 per cent of the total
sampling frame) set of questionnaires were distributed during classes and collected
from the participants in the following weeks through the respective module lecturers
and tutors. All questionnaires were then filtered and checked against incompletion and

	Frequency	%
Gender		
Male	209	50.0
Female	209	50.0
Programme		
Accounting	118	28.3
Business management	29	6.9
Business administration	21	5.0
Marketing	42	10.0
E-commerce and marketing	50	12.0
Human resource management	13	3.1
Finance and investment	30	7.2
International business	46	11.0
Business economics	31	7.4
Logistics and supply chain management	25	6.0
Retail management	13	3.1

Table I.
Frequency
distribution for
gender and
programme

Note: $n = 418$

errors resulting in a convenience sample of 418 usable responses which constitutes 83.6 per cent response rate. The respondents under survey constituted 99 per cent of Malaysian Chinese and so were rather homogenous in terms of demographic characteristics. Coincidentally, the distribution of students by gender was 50 per cent male and 50 per cent female. In terms of programme frequency, accounting studies students (28.3 per cent) represented a higher percentage in contrast with the other non-accounting programme students (71.7 per cent).

3.3 Measurement and instrument
The questionnaire, which was partially adapted from Joyce (2009) and O'Driscol (2012) and also based on past literature was segmented into the two antecedents, teaching and non- teaching elements and their respective constructs. Each of the constructs, informed by the above authors and the literature were populated with the appropriate and relevant items. This resulted in a number of assessment areas, i.e.: academic experience (11 items), resulting in questions like, for example, kindly indicate the level of satisfaction in terms of academic challenges of your programme, academic advising opportunity, etc.; faculty and teaching quality (11 items), for example, faculty knowledge of the programme, etc.; campus life (ten items), for example, campus ministry opportunities, social outreach opportunities, etc.; facilities (11 items), for example, multipurpose retail shops, library, accommodation, etc.; placement and internship support (five items), for example, availability and feedback of placement, etc.; overall student perceived satisfaction (five items); and intent of retention in the institution (five items). For example, students were asked if they will definitely or most likely or unsure or most likely will not return ... to our institution for the next semester. In this case, the total numbers of items were kept to a level adequate to capture the constructs but no less than five items per construct were presented (Churchill, 1979; Kohli et al., 1993). Questions asked respondents to rate their extent of satisfaction using a five-point Likert scales ranging from 1 = very dissatisfied to 5 = very satisfied (Sanchez et al., 2006; Wong and Fitzsimmons, 2008; O'Driscol, 2012). The final part of the questionnaire which measured intended retention required participants to indicate their enrolment intentions for their next higher level of study (i.e. the higher diploma offered by the institution). The survey instrument was pre-tested to a group of ten business respondents to determine length of time, ensure ambiguity or error free as well as avoid glitches in wording questions. Minor adjustments were made following the pre-test including design changes, spacing and spelling. The estimated completion time was 15-25 minutes, which turned out to be correct, and the respondents were optimistic in their evaluation of the overall revised instrument. All valid responses obtained from students were coded into SPSS Version 14.0. Several statistical tests and analyses were conducted using SPSS reliability tests, descriptive analysis, correlation and multiple regression analysis.

4. Results and discussion
4.1 Reliability test
Table II shows the reliability coefficients of major variables. All items were retained except AE8 which addressed student perceived satisfaction on the "size of class". Removal of this item in calculating reliabilities increased the reliability of these subscales from 0.849 to 0.890. Therefore, this item was removed as it suppressed the internal consistency index. Overall most of the constructs showed Cronbach's α readings above 0.60 and these items were within the acceptable range of coefficient, as suggested by Nunnally (1978).

4.2 Descriptive statistics on service determinants

We used descriptive statistics to determine the mean scores and standard deviations of each variable in terms of teaching and non-teaching support (see Table III). The most striking feature was (and this may be a reflection of this particular cohort) that all the mean scores on the constructs were highly rated, i.e. circa 3.5. In academic experience and support component, students rated "opportunity to participate in class discussion" ($M = 3.830$, SD $= 0.612$) as the most influencing factor whilst "the use of technology in your courses" ($M = 3.481$, SD $= 0.675$) as the least influencing factor in student satisfaction which is consistent with Basheer Al-Alak's (2010) findings. Students seemed to be satisfied with the "the faculty's knowledge of course content" ($M = 3.749$, SD $= 0.569$) as opposed to "the opportunity to speak with faculty out-side of class about course content" ($M = 3.562$, SD $= 0.627$). In the same vein, Pop *et al.* (2008) found that instructional effectiveness, including faculty's knowledge, was one of the most satisfied determinants. On the other hand, under the non-teaching domains (campus life, facilities and placement and internship support), it was interesting to note that students obtained the greatest satisfaction from the "participation in the financial aid programme" ($M = 3.632$, SD $= 0.683$); "library and information services" ($M = 3.759$, SD $= 0.682$); "preparation for placement" ($M = 3.389$, SD $= 0.629$) but achieved the least satisfaction from "the personal counselling services provided" ($M = 3.362$, SD $= 0.615$); "availability of multipurpose retail shops and saloon"; "feedback from employers". Overall, the students were satisfied with the "quality of the academic programme" ($M = 3.770$, SD $= 0.540$) and less satisfied with the "placement and internship support" ($M = 3.416$, SD $= 0.584$).

4.3 Correlation coefficient of composite determinants of satisfaction

In order to perform inferential statistics (hypotheses testing) we first calculated correlations and then performed regression analyses on each of the constructs comprising teaching and non-teaching elements. We averaged the mean and standard deviation scores of each of construct items to get the composite scores of each construct. We did not attempt, in this research, to test the importance of each individual item making up the constructs.

Table IV shows that students generally were satisfied with the academic experience ($M = 3.77$, SD $= 0.54$), faculty and teaching quality ($M = 3.69$, SD $= 0.61$) as well as campus life ($M = 3.65$, SD $= 0.64$). Conversely, students were less satisfied with the facilities ($M = 3.55$, SD $= 0.65$) and placement and internship support ($M = 3.42$, SD $= 0.58$).

As for the correlation analysis, it was interesting to note that all constructs were correlated at the $p < 0.01$ significance level. Of the five constructs, four constructs; academic experience ($R = 0.26$, $R^2 = 0.07$); campus life ($R = 0.24$, $R^2 = 0.06$); facilities

Variable name	No. of items remained	Cronbach's α
Service antecedents		
Academic experience (AE)	10	0.890
Faculty and teaching quality (FTQ)	11	0.912
Campus life (CL)	10	0.898
Facilities (FAC)	11	0.910
Placement and internship support (PIS)	5	0.907
Overall student satisfaction (SAT)	5	0.787

Table II.
Reliability
coefficients for
service components

Code	Attributes	Mean	SD
Teaching elements			
Academic experience (AE)			
AE1	The courses you were enroled in this semester	3.710	0.556
AE2	The requirements for your course	3.641	0.592
AE3	The academic challenges of your courses	3.776	0.626
AE4	Opportunities to participate in class discussions	3.830	0.612
AE5	The sense that you are being prepared for a career	3.565	0.704
AE6	Academic advising opportunities	3.649	0.667
AE7	Availability of desired courses	3.689	0.689
AE9	Academic support services provided	3.619	0.623
AE10	Availability of academic support services staff	3.557	0.673
AE11	The use of technology in your courses	3.481	0.675
Faculty and teaching teams (FTQ)			
FTQ1	The faculty's knowledge of course content	3.749	0.569
FTQ2	The faculty's delivery of course content	3.695	0.590
FTQ3	How the faculty evaluates your academic work	3.570	0.572
FTQ4	The faculty's academic and professional experiences brought to the classroom	3.684	0.603
FTQ5	The faculty's care and concern for you as an individual	3.573	0.634
FTQ6	The opportunities to speak with faculty out-side of class about course content	3.562	0.627
FTQ7	The level of importance faculty members place on your thoughts and opinions	3.584	0.624
FTQ8	Faculty member's expectations and standards	3.662	0.643
FTQ9	The availability of faculty	3.643	0.618
FTQ10	The approachability of faculty members	3.584	0.646
FTQ11	The opportunities for informal interactions with faculty members	3.570	0.630
Non-teaching elements			
Campus life (CL)			
CL1	The campus ministry opportunities provided	3.573	0.608
CL2	Social outreach opportunities provided	3.530	0.675
CL3	The opportunities to interact with individuals from different racial and ethnic backgrounds	3.424	0.707
CL4	Participation in the financial aid programme (scholarships, grants, loans, work study, etc.)	3.632	0.683
CL5	The health services provided	3.278	0.691
CL6	The orientation programme	3.408	0.689
CL7	The personal counselling services provided	3.362	0.615
CL8	The safety of the campus	3.527	0.751
CL9	The student activities sponsored events	3.605	0.695
CL10	The opportunity to become socially integrated on campus	3.557	0.661
Facilities (FAC)			
FAC1	Updated facilities for learning and teaching	3.565	0.656
FAC2	IT systems and support	3.530	0.718
FAC3	Availability of software to aid courses	3.462	0.654
FAC4	Access to networked computers	3.535	0.744
FAC5	Equipment/professional facilities	3.530	0.703
FAC6	Library and information services	3.759	0.682
FAC7	Availability of multipurpose retail shops and saloon	3.151	0.775
FAC8	Availability of cafeteria at each faculty	3.268	0.794
FAC9	Adequate group discussion rooms	3.297	0.876
FAC10	The recreational and relaxation platforms provided	3.378	0.835
FAC11	Availability of accommodation	3.443	0.724

Table III.
Structural models
of observed service
antecedents

Code	Attributes	Mean	SD
Placement and internship support (PIS)			
PIS1	Preparation for placement	3.389	0.629
PIS2	Level of support whilst on placement	3.354	0.613
PIS3	Relevance of placement	3.332	0.589
PIS4	Feedback from employers	3.319	0.695
PIS5	Temporary placement upon graduation	3.335	0.590
Overall student satisfaction (SAT)			
AE12	The overall satisfaction on the quality of the academic programme	3.770	0.540
FTQ12	The overall satisfaction with faculty members	3.681	0.608
CL11	Your overall satisfaction with campus life	3.643	0.640
FAC12	Overall satisfaction with the institution's facilities	3.546	0.658
PIS6	Overall satisfaction with placement support	3.416	0.584

Table III.

Variables	Mean	SD	IP	AE	FTQ	CL	FAC	PIS
IP, intention to persist (DV)	1.692	0.839	1**					
AE, academic experience	3.770	0.540	−0.268	1				
FTQ, faculty and teaching quality	3.681	0.608	−0.168	0.597	1			
CL, campus life	3.643	0.640	−0.238	0.573	0.513	1		
FAC, facilities	3.546	0.658	−0.221	0.552	0.476	0.653	1	
PIS, placement and internship support	3.416	0.584	−0.202	0.461	0.446	0.490	0.557	1
Notes: $n = 418$. **All correlations are significant at $p < 0.01$ level (two-tailed)								

Table IV.
Means, standard
deviations and
dimension
correlations

$(R = 0.22, R^2 = 0.05)$; placement and internship support $(R = 0.20, R^2 = 0.04)$ reflected moderate variances whereas faculty and teaching quality $(R = 0.17, R^2 = 0.03)$, displayed a weaker correlation-variance.

4.4 Standard multiple regression
Results of the standard multiple regression, as presented in Table V, revealed tolerance values $(1–R^2)$ generally exceeded 0.40 indicating no possibility of multi-collinearity. As such, the five composite variables were entered to determine the predictability of each dimension in relation to possible retention.

Model	Composite variables	β	t	Sig.	Tolerance
1	Academic experience	−0.19	−2.95	0.00**	0.52
2	Faculty and teaching quality	0.04	0.65	0.51	0.58
3	Campus life	−0.09	−1.42	0.15	0.48
4	Facilities	−0.044	−0.59	0.55	0.47
5	Placement and internship support	−0.07	−1.15	0.24	0.62
	R		0.29		
	R^2		0.08		
	$R^2\Delta$		0.07		
	Sig. $F\Delta$		0.000		
Notes: $n = 418$. **Significant at the $p < 0.01$ level					

Table V.
Standard multiple
regression by
dimensions

Of the five composite variables, academic experience ($\beta = 0.19$, $t = 2.95$, $p = 0.001$) was the only dominant and significant factor in predicting students' retention. Clearly, this indicated students were satisfied with the overall programme primarily in terms of opportunities to participate in class discussion, academic support, academic opportunities and academic challenges (see Table VI).

This seemed to also align with the results postulated by O'Driscol (2012) and Nasser *et al.* (2008) in which academic support; academic advisor and welfare support emerged as significant determinants of students' satisfaction and desire to stay until the completion of their programmes. Whilst the remaining four dimensions (faculty and teaching quality, campus life, facilities, placement support) were insignificant and therefore did not make a good predictor for students intending to continue their studies. We noted that the adjusted R^2 value 0.07 was low indicating that the models explained the low variance of the perceived retention. As a result of the low variance, we suspect that one or more impact factors may not have been included in the prediction.

5. Conclusions and implications
The aim of the research was to investigate the relationship between the antecedents (teaching and non-teaching elements) and their constructs of student satisfaction and loyalty and their predictive ability in order to assist HEIs in proactively managing their organisations, processes and procedures, especially the learning experience and marketing processes, particularly in a Malaysian context. The findings from the research can be considered from both an academic and practical perspective.

5.1 Academic perspective
The results showed that the degree of student satisfaction varies from teaching to non-teaching antecedents and their constructs. Students showed greater satisfaction as evidenced by the mean scores (academic experience, $M = 3.770$ and faculty and teaching quality, $M = 3.681$) both of which were higher than the mean scores for the non-teaching antecedent and constructs (campus life, $M = 3.643$, facilities, $M = 3.546$ and placement and internship support, $M = 3.416$).

5.1.1 Teaching elements. Students were most satisfied with their academic experience. As regards the items that made up this construct, students were most satisfied with the opportunity to participate in class and the content and structure of their programmes. The skills and knowledge elements were picked out as most useful but also the challenging assessment regime was positively highlighted. Students were very positive in assessing that the skills and knowledge gained would not only prepare

Hypothesis	Result
H1. There is a positive relationship between academic experience and students' intention to continue their higher degree	Supported
H2. There is a positive relationship between teaching quality and students' intention to continue their higher degree	Not supported
H3. There is a positive relationship between campus life and student intention to continue their higher degree	Not supported
H4. There is a positive relationship between facilities and student intention to continue their higher degree	Not supported
H5. There is a positive relationship between placement support and student intention to continue their higher degree	Not supported

Table VI.
Results of the
hypothesis test

them for a different academic experience, like admission to a University top-up programme in the UK and elsewhere, but enable them to jointly sit for a professional qualification like the ACCA. This "added value" seemed particularly attractive in gaining student satisfaction and loyalty. This may be cohort specific, reflecting the fact that many Malaysian HEIs have top-up arrangements with overseas universities, unlike those, say, in the UK and USA where opportunities for students to study overseas are usually of a semester or two duration and credited to their original degree. Academic experience was the only predictive construct significant in student retention.

The results showed that there was a significant relationship between teaching and faculty quality and student satisfaction, and students were generally satisfied with this aspect. They were most satisfied with the faculty's knowledge of course content and its delivery and least satisfied with the faculty's care and concern for the student as an individual and their thought and opinions. This finding is in contrast with most western HEIs where students are encouraged to express their opinions. This may be further evidence to support the difference between Eastern and Western approaches to teaching and learning (Baumann *et al.*, 2012). Interestingly, teaching and faculty quality however, had little predictive ability in student retention.

These results tend to confirm the findings of authors like Elliott and Shin (2002), Thomas and Galambos (2004) and Wilkins and Balakrishnan (2012), especially on the academic experience front. However, none of these authors attempted, as this research does, to assess the predictive ability of these teaching antecedents of student satisfaction on student retention currently or potentially.

5.1.2 Non-teaching elements. The results showed that there was a positive relationship between campus life and student satisfaction and loyalty. Particularly the students enjoyed the opportunity for social interaction amongst friends and classmates from different Malaysian states. This finding is probably common to most HEI students wherever they may be. The ability to participate in the financial aid programmes was very much appreciated, probably reflecting the poorer family background of the students. However, campus life was insignificant in predicting student's intended persistence (retention).

The results showed that students were generally less satisfied with facilities, including the personal counselling services, the multipurpose retail shops and salons and feedback from employers and especially the lack of parking spaces. They were, however, satisfied with the library and information services. This facilities element was insignificant in predicting student's intended persistence (retention) especially when progressing from a lower to a higher diploma.

The results showed that there was a significant relationship between placement support and student intention to continue their higher degree. The results showed that students were less satisfied with the intern opportunities and support offered to them and preferred the duration of the internship to be extended so that they could put "real life" experience to their academic studies. However, this element was insignificant in predicting student's intended persistence (retention).

These findings on non-teaching antecedents of student satisfaction are supportive in general of the findings of authors such as Gruber *et al.* (2010) and Gerdes and Mallinckrodt (1994).

However, this research showed that these elements are not predictive of student retention either currently or potentially.

The overall conclusion is that students were highly satisfied with the teaching antecedents and their constructs, especially "academic experience" rather than the

non-teaching antecedent and their constructs and "academic experience" was the only highly significant element in the actual and predicted, persistence (retention) of students. This is somewhat surprising given other research findings on the importance of other factors in student satisfaction, for example, the organisation location and course fees (see Carter and Yeo, 2010 who included in their research students of a similar ethnic background). However these were, at the same time, confirmatory of the findings of Kadar (2001), Belch *et al.* (2001), Elliott and Shin (2002), Umbach and Porter (2002), Soutar and Turner (2002), Thomas and Galambos (2004), Carter and Yeo (2010) and Wilkins and Balakrishnan (2012), where the reputation for courses, quality of course learning materials, course suitability and academic reputation were considered top elements in the choice of university by students in these studies. Our findings in this regard could well have been cohort specific, and given the ethnic background of the students, i.e. primarily Chinese where academic attainment is a priority, may not be that surprising. However, it is still worthy of further research.

5.2 Practical perspective

So from the institutional and marketing perspective, what are the practical implications of this study for HE competitiveness, sustainability and student retention? The results suggest that students are not only looking for HEIs which provide all the necessary service attributes like relevant curriculum and facilities (the "USP") but for HEIs which care for their social needs, listen to their thoughts and opinions and have approachable staff (the "ESP").These latter attributes are not as prominent as the more "hard" attributes like course structure in HEIs marketing strategies and promotional literature but are vital "added value" differentiators between rival HEIs.

First, the HEI should consider concentrating on defending its current position via retaining its existing students through the provision of an excellent "academic experience" and in so doing, would appear to go a long way to guaranteeing its future income and students numbers. From the results of this study, focusing on the "core" of a HE business, i.e. the "academic experience" appears to be the main issue. This means that programme syllabi, content and courses structures must be clear, relevant, contemporary, and according to research findings, challenging to students. HEIs may need to give maximum academic support via advice on course offerings and study schedules. In addition, students need to feel that they have opportunities to participate in classroom discussions, have access to academic support services staff. This appears at the heart of student persistence and retention both actual and predicted. The HEI could make the "academic experience" the core of its marketing strategy and in its publicity material stress this as its key competitive differentiator. Over time, this "reputational differentiator" could well ripple beyond Malaysian territorial boundaries with success and also into domestic students considering rival institutions. Moreover, we would contend that our findings have established the importance of "academic experience" in the formation of student persistence, and that in turn contributes to competitiveness, not only for the HEI, but also for Malaysia. This finding confirms the study by Baumann and Hamin (2011) who looked at the role of macro environmental factors (culture, economic performance and level of competitiveness) rather than individual characteristics on academic performance and concluded that the level of competitiveness was the strongest explainer of academic performance. In a further transnational study, Baumann and Winzar (2016) found that "educational achievement" explained 54 per cent of competitiveness of countries with East Asia

challenging the Western nations in this regard. In marketing "Malaysian education" therefore, the HEI could well use the excellence of its "academic experience" in assisting national competitiveness as a powerful selling proposition in student recruitment.

Second, but nowhere near as significant as the "academic experience" other factors, contributory to supporting the "academic experience" appear to be important. Included in this is the faculty and teaching quality, where the institution engages not only high-quality teaching staff (and industry savvy) but ensuring that they are fully engaged with/approachable to students during the student stay by repeated informal interactions with students, valuing their thoughts and opinions via out of classroom interaction and the quality of feedback on coursework. Staff availability, formally and informally, as well as academic advice on what to study next to enrich their academic experience was also valued by students. This will lead to the "co-creation" of the student experience and satisfaction and the establishment of the powerful ESP as proposed by Hoyer *et al.* (2010) and Bainbridge (2004), respectively. In order to achieve this, not only does the institution have to attempt to recruit the appropriate staff, but engage in an "internal" marketing strategy to educate their staff in effective student (customer) relations.

Third, and again less significantly, the results suggest there should be opportunities to gain access to scholarships, loans and work study programmes. In addition, campus life needs to be secure with good social opportunities and activities, especially for those students who are domiciled a long way from the campus. Again, and of lesser importance, the institution appears to need to provide excellent facilities like library, shops, cafeterias and IT facilities, etc., although these were not seen as particularly significant in student retention but in progression. Opportunities for work placements and support in both obtaining them and staff support, whilst in themselves were seen as important in terms of satisfaction, were not significant factors to retention. From a marketing point of view, it seems reasonable to suggest that these elements are now of secondary importance and a "given" in any HEI and so no longer a significant competitive differentiator.

These findings suggest that teaching and non-teaching elements need to be encapsulated and turned into reality via the provision of sound academic (course pedagogy, structure and content and quality faculty, etc.) provision and non-teaching support (adequate IT facilities, and social facilities, etc.). In addition they need to be incorporated into marketing programmes and promotional literature so that all elements, both "hard" and "soft" are equally given prominence and communicated via internal and external communications to both current and potential students. "Word of mouth" promotion must not be underestimated as students who experience a "superior experience" are motivated to act in an ambassadorial and advocate way. It appears that getting these elements "right" indicate that competitiveness, sustainability and retention, both actual and predicted, whilst not guaranteed, will be better addressed. And from this research, the most important element is getting the academic experience "right".

6. Limitations and further research
As this study was conducted solely based on one institution in Malaysia with a large proportion of the Chinese ethnic group, we are well aware of the homogenous characteristics of the total respondents in terms of age, formal education and language hence the applicability of the findings. Depending on one particular satisfying element, in this instance, the academic experience, is certainly not an absolute student retention trigger, but a multitude of interaction that matters for

possibility of retention (Rummel *et al.*, 2011). Further research could be conducted on inter antecedent and construct relationships to ascertain the most significant of these elements in students satisfaction and retention and to conduct similar research on other ethnic groups in Malaysia and, indeed, in other parts of the world to ascertain if these results are ethnic specific or generalisable. One further aspect worth studying would be to see if Chinese students (often second and third generation Chinese) in Malaysian HEIs and so often exposed to "Western" education and enculturation display the same characteristics as Mainland Chinese who have not been so exposed (Baumann *et al.*, 2012).

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