ABSTRACT

The task of retaining students in an open and distance learning (ODL) higher education institutions (HEIs) represents a huge challenge. This has led to extensive research in this area. Several retention models have been explored and many intervention efforts have been attempted. The relationship quality-based student loyalty (RQSL) model, borrowed from marketing has been added to the repertoire of research approaches. It has been found to be appealing and well-suited for adoption by HEIs based on the premise that student relationship is the cornerstone of student loyalty. This study attempts to explore the use of this approach in a private ODL institution. A cross-sectional survey involving 2,300 student respondents was adopted and administered in September 2011. The results indicate that service quality, emotional commitment and students’ trust had positive impact on student loyalty. The step-wise regression analysis showed that the highest impact on student loyalty is due to emotional commitment, followed by service quality and trust. However, in terms of the total impact on student loyalty, the highest is due to service quality, followed by emotional commitment and trust. Based on the findings of this preliminary study, the institution can adopt three strategic approaches; service quality-based, an emotional commitment-based, and trust-based initiatives to increase the level of student loyalty. It is noted that student loyalty is not limited to the time that the student spends in the university; the advantages of student loyalty are probably greatest after they have graduated where they could contribute positively via financial support, word-of-mouth promotion and through some form of cooperation to the institution.

1. INTRODUCTION

Creating strong long-term bonds with customers, relationship marketing not only produces increased customer retention and loyalty, it sets barriers to entry for competitors since they are unable to create the same kind of relationship between the customer and the service provider (Roberts, Varki & Bordie, 2003). This concept of relationship marketing has significance for the higher education (HE) sector since a strong student-university relationship may reduce the likelihood of student dropping out and increase students’ commitment towards completion of their study. In addition, these students who are highly committed to the institution may ultimately become representatives and ambassadors of the institution upon graduation and subsequent employment. Indeed, it has been generally recognised that higher education institutions (HEIs) are business organisations in the services industry and that the students are their primary customers (Hill, 1995; Elliot, 2003). As in any services industry, it is commonly accepted that it is far cheaper to retain an existing customer than it is to attract a new customer and that customer loyalty can be linked to the company’s growth and profitability (Reichheld & Sasser, 1990; Reichheld, 1993; 1996). Therefore, the marketing principle of customer loyalty is equally applicable to HEIs and their students.

HEIs are facing stiff competition from tertiary providers, both locally and internationally, and this inevitably leads to an even more complex set of challenges with regard to attracting and retaining students. It is therefore very important to understand the factors which contribute to positive perceptions of services (service quality) and the way in which these affect the student experience and drive student retention. This study explores students’ perceptions of the relationship that they enter into when they set foot in the institution and the effect that this has on the development of student loyalty. Against this background, the present study focuses on three factors, namely service quality, trust and commitment and examines how they relate to student loyalty. The study was carried out in the environment of the Open University Malaysia (OUM), where the problem of student attrition is a critical factor affecting its growth and business profitability (Abdol Latif, L. & Fadzil, M., 2007).

1.1 Objective of the study

The primary objective of this study is to determine the significant impacts of service quality, trust and commitment on student loyalty. The findings of this study would also demonstrate how a relationship marketing approach can be successfully applied in the context of HEIs. Using this approach, HEIs can come up with some appropriate interventions which will improve the management of student loyalty so as to retain them until completion and to entice them back for a higher professional degree and lifelong learning.

1.2 Research questions

To achieve the study objective, the following research questions are formulated:

“Do the constructs of service quality, trust and emotional commitment have significant impacts on
student loyalty? If they do, what are the magnitudes of impacts?

1.3 Significance of the Study

This study is significant as the research findings obtained are expected to add to the growing body of knowledge pertaining to education, marketing and improvement of student loyalty and retention in open and distance learning (ODL) institutions. Educationists and administrators of both ODL and non-ODL institutions can also use the information obtained for student enrolment management. The study also provides an empirical evidence of the application of the relationship marketing approach in managing learner retention in an ODL institution.

II. LITERATURE REVIEW OF STUDENT LOYALTY MODELS

Several studies have been carried out to establish the relationship between service quality and student loyalty in higher education institutions. One of the recent studies was carried out by the research team of Hennig-Thurau, Langer, M.F. and Hansen, U. (2001) who developed the “relationship quality-based student loyalty” (RQSL) model. In the RQSL model, student loyalty is determined directly by three components: students’ perception of the quality of teaching activities (service quality), students’ trust in the institution’s personnel, and students’ commitment to the institution. The researchers tested the RQSL model based on empirical data from a survey of graduates and dropouts from several German universities. The results indicate that the quality of teaching and the students’ emotional commitment to their institution are crucial contributors to student loyalty. Trust has no significant impact on student loyalty. The study also found that there were clear differences between the results obtained from different courses of study.

Marzo, et al., (2005a, 2005b) conducted a satisfaction and loyalty study using Structural Equation Modelling (SEM) and Confirmatory Factor Analysis (CFA) on students taking continuing education programmes and/or complementary courses in a Spanish university. Their research findings showed that three dimensions determined student satisfaction with their courses and they are: teaching methods, teaching staff and course administration. They also verified that satisfaction with the courses positively affected student loyalty.

Helgesen and Nesser (2007a, 2007b) conducted a study at a university college in Norway and found that student satisfaction and university image and reputation were positively related to student loyalty. The authors also found that service quality, information and facilities were all positively related to satisfaction. In a study based on a sample of active students and dropouts in a distance learning institution, Ng (2010) found that five factors had an impact on student retention. The five factors were satisfaction, goal commitment, family support, study habits and number of semesters attended. However, service quality had no significant effect.

With the exception of Ng’s (2010) study, all the past research studies discussed above were carried out in traditional universities in western countries where the culture, types of the students – fresh school leavers or adults and whether they are studying full-time or part-time, will differ from the context of this study. Thus, the findings from the studies mentioned above may not be entirely applicable to open and distance learning (ODL) institutions in Malaysia.

III. METHODOLOGY

3.1 Proposed conceptual model and hypotheses

The conceptual model for this study was adapted from the RQSL model (Hennig-Thurau, et., al., (2001), and it is illustrated in Figure 1. In this proposed model, student loyalty refers to a situation where a student would return or continue to study and to make recommendations to others to study in the same institution, and to provide word-of-mouth references and publicity about the institution (Bowen, J. and Shoemaker, S., 1998). Students’ trust is hypothesized to be related to student loyalty. The term students’ trust refers to students’ confidence in the institution’s integrity and reliability (Morgan and Hunt, 1994). It is based on the personal experiences each student has had with faculty members and non-academic staff. Service quality refers to the students’ assessment of the quality of academic and non-academic services and facilities (e.g., Library, computers, teaching facilities), and this construct is hypothesized to have an influence on student loyalty (Hennig-Thurau, et. al., 2001). Finally, the construct of students’ commitment is also hypothesized as a determinant of student loyalty. Here, students’ commitment refers to emotional commitment to the institution (Hennig-Thurau, et. al., 2001).

Guided by the proposed conceptual model as shown in Figure 1, three sets of hypotheses were formulated and tested with empirical data collected in a survey. The first set (A) consists of three null hypotheses (H1, H2 and H3) for identifying the factors that have an impact on student loyalty. The three null hypotheses are as follows:

Figure 1: Relationships of Students’ Trust, Service Quality and Emotional Commitment with Student Loyalty

1. H1: Students’ trust is directly and positively related to student loyalty.
2. H2: Students’ emotional commitment is directly and positively related to student loyalty.
3. H3: Service quality is directly and positively related to student loyalty.

The second set (B) consists of two null hypotheses (H4 and H5) for identifying the factors that have an impact on emotional commitment. These two hypotheses are as follows:

4. H4: Service quality is directly and positively related to emotional commitment.

5. H5: Students’ trust is directly and positively related to emotional commitment.

The third set (C) consists of one hypothesis for identifying the factor that has an impact on students’ trust. The hypothesis is:

6. H6: Service quality is directly and positively related to students’ trust.

From H1 to H6, the study expected to estimate both the direct and indirect effects of the factors influencing student loyalty.

3.2 Research design and sample

A cross-sectional survey design was adopted in this quantitative study. A sample of 2,300 students representing all faculties in all the learning centres of OUM was selected to participate in the study which was carried out in September, 2011. Administrators of the learning centres were enlisted to administer the survey operations, which included seeking the cooperation of the selected students to complete the questionnaires. Through this procedure, a total of 1,958 usable questionnaires were obtained.

3.3 Questionnaire

The questionnaire used in this study consists of three sections. Section A of the questionnaire gathered demographic and academic information about the respondents. Items of information gathered include age, race, sex, and programme of study. Section B gathered information on students’ perception of importance and satisfaction towards services offered to them. Finally, Section C gathered information to measure (a) student loyalty; (b) students’ trust; (c) service quality; and (d) emotional commitment, based a 7-point Likert Scale. The statements used in the questionnaire to measure these four variables are given in Appendix 1.

3.4 Data analysis

3.4.1 Profile of Respondent

Table 1 presents the profile of the 1,958 respondents who participated in the survey. The majority of the respondents were Malays and other bumiputras (80.7%) followed by Chinese (13.2%), Indians (4.7%). Female respondents made up 62.4% of the sample as compared with 37.6% for males. The majority (93.4%) of the respondents were above 24 years old. The student distributions by sex, race and age for the sample were generally consistent with the corresponding distributions for the entire student population in OUM.

3.4.2 Reliability and validity

Reliability analysis was conducted for the three constructs of student loyalty, students’ trust and service quality. (As there was only 1 statement for emotional commitment, there was no need to perform the reliability analysis for it). The minimum limit 0.4 for item-to-total correlation as suggested by Blaikie (2003) was applied in the conduct of the reliability analysis tests. With the exception of one item belonging to the student loyalty variable, all the remaining 10 items had item-to-total correlations exceeding the minimum threshold of 0.4. The item which failed the test was removed from further analysis, and it refers to the following statement for the student loyalty variable:

(i) I propose to complete my programme in OUM, in whatever conditions

The values of Cronbach’s alpha based on the remaining 10 items were computed for the three variables of student loyalty, service quality and students’ trust. As indicated in Table 2, the computed Cronbach’s alphas were above the recommended minimum of 0.7 as suggested by Nunnally (1988). Thus, the internal consistency of the variables was established. Construct validity was also established by carrying out factor analysis with varimax rotation for the three variables of student loyalty, students’ trust and service quality. The factor analysis found that all the 10 items had factor loadings exceeding 0.50, thus meeting the minimum requirement as suggested by Hair, et al., (2006). The variance extracted for the three variables was also above 60%, exceeding the minimum as suggested by Hair et. al. (2006).

Table 1: Distribution of respondents by ethnicity, gender and age group

<table>
<thead>
<tr>
<th>Demographics variables</th>
<th>No of respondents</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malay and other bumiputras</td>
<td>1,560</td>
<td>60.7</td>
</tr>
<tr>
<td>Chinese</td>
<td>350</td>
<td>13.3</td>
</tr>
<tr>
<td>Indians</td>
<td>92</td>
<td>4.7</td>
</tr>
<tr>
<td>Not reported</td>
<td>27</td>
<td>1.1</td>
</tr>
<tr>
<td>Total</td>
<td>1,958</td>
<td>100.0</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1,154</td>
<td>64.0</td>
</tr>
<tr>
<td>Female</td>
<td>784</td>
<td>36.0</td>
</tr>
<tr>
<td>Total</td>
<td>1,958</td>
<td>100.0</td>
</tr>
<tr>
<td>Age group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-24</td>
<td>133</td>
<td>8.6</td>
</tr>
<tr>
<td>25-44</td>
<td>215</td>
<td>10.9</td>
</tr>
<tr>
<td>45 and above</td>
<td>209</td>
<td>10.6</td>
</tr>
<tr>
<td>Not reported</td>
<td>100</td>
<td>6.0</td>
</tr>
<tr>
<td>Total</td>
<td>1,958</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 2: Cronbach’s alpha, variance extracted for student loyalty, students’ trust and service quality

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach’s Alpha</th>
<th>Variance extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student loyalty</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.94</td>
<td>74.4%</td>
</tr>
<tr>
<td>Students’ Trust</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.55</td>
<td>56.4%</td>
</tr>
<tr>
<td>Service quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.91</td>
<td>85.5%</td>
</tr>
</tbody>
</table>
3.4.3 Average Ratings

The mean ratings for student loyalty, students’ trust, service quality and emotional commitment were computed. The results as given in Table 3 show that the average ratings for all the four variables were above average, ranging from 5.35 points for students’ trust to 5.78 points for emotional commitment out of 7 points on the Likert scale.

Table 3: Average ratings for student loyalty, students’ trust, service quality and emotional commitment (N=1,958)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Average rating</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student loyalty</td>
<td>5.49</td>
<td>1.099</td>
</tr>
<tr>
<td>Students’ trust</td>
<td>5.35</td>
<td>1.089</td>
</tr>
<tr>
<td>Service quality</td>
<td>5.54</td>
<td>1.013</td>
</tr>
<tr>
<td>Emotional commitment</td>
<td>5.78</td>
<td>1.138</td>
</tr>
</tbody>
</table>

3.4.4 Correlation analysis

For this study, correlation coefficient analysis was carried out in order to determine the relationship of the four study variables. As reported in Table 4, students’ trust, service quality and emotional commitment were significantly correlated with student loyalty, with the correlation coefficients hovering around the value of 0.7. These statistical results suggest that these three variables were highly correlated, implying that these three variables have an influence on student loyalty.

Table 5: Correlation coefficients between student loyalty with students’ trust, service quality and emotional commitment

<table>
<thead>
<tr>
<th>Variables</th>
<th>(N=1,958)</th>
<th>Students’ trust</th>
<th>Service quality</th>
<th>Emotional commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student loyalty</td>
<td>0.95b</td>
<td>0.74**</td>
<td>0.75**</td>
<td></td>
</tr>
<tr>
<td>Students’ trust</td>
<td>0.80c</td>
<td>0.74**</td>
<td>0.75**</td>
<td></td>
</tr>
<tr>
<td>Service quality</td>
<td>0.80c</td>
<td>0.74**</td>
<td>0.75**</td>
<td></td>
</tr>
<tr>
<td>Emotional commitment</td>
<td>0.80c</td>
<td>0.74**</td>
<td>0.75**</td>
<td></td>
</tr>
</tbody>
</table>

3.4.5 Regression analysis

A step-wise regression analysis was performed with students’ trust, service quality and emotional commitment as the independent variables and student loyalty as the dependent variable. The results of the regression analysis given in Table 6 indicate that the regression model explained 64.4% of the variation in the predicted student loyalty. The F-value of 1,179 was significant and this indicated that the regression model was acceptable for further analysis.

Table 6: Results of the regression analysis for predicting student loyalty

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficient</th>
<th>t-value</th>
<th>P-value</th>
<th>Variance inflation factors (VIF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.361</td>
<td>0.95b</td>
<td>521</td>
<td>0.000</td>
<td>1</td>
</tr>
<tr>
<td>Emotional commitment</td>
<td>-4.45</td>
<td>-0.22</td>
<td>-4.18</td>
<td>0.000</td>
<td>3.9</td>
</tr>
<tr>
<td>Service quality</td>
<td>-0.85</td>
<td>-0.36</td>
<td>-0.55</td>
<td>0.000</td>
<td>3.2</td>
</tr>
<tr>
<td>Students’ trust</td>
<td>1.06</td>
<td>0.30</td>
<td>1.04</td>
<td>0.000</td>
<td>2.2</td>
</tr>
</tbody>
</table>

The variance inflation factors (VIFs) were also examined to determine whether multi-collinearity among the three independent variables posed a serious problem to the regressions results. The VIFs ranged from 2.3 for emotional commitment to 3.9 for service quality which were below the upper cut-offs of 10 as suggested by Hair, et al. (2006). These results of acceptable VIFs suggest that multi-collinearity did not produce adverse effects for the purpose of this study.

From Table 6, the results of testing the hypotheses are summarised as follows:

1. There is a significant positive impact of students’ trust on student loyalty (hypothesis H1). An increase of 1 point on the 7-point Likert scale for students’ trust would result in 0.175 point for student loyalty given that the other factors remain constant.

2. There is a significant positive impact of emotional commitment on student loyalty (hypothesis H2). An increase of 1 point on the 7-point Likert scale for emotional commitment would result in 0.408 points for student loyalty, given that other factors remain constant.

3. There is a significant positive impact of service quality on student loyalty (hypothesis H3). An increase of 1 point on the 7-point Likert scale for service quality would result in 0.294 points for student loyalty given that the other factors remain constant.

Based on the standardized regression coefficients (Beta), emotional commitment has the greatest impact on student loyalty, followed by service quality and students’ trust.

Another round of stepwise regression analysis was performed with students’ trust and service quality as independent variables and emotional commitment as the dependent variable. This regression model explained 56.2% of the variation in the predicted emotional commitment. The F-value of 1,256 was significant and this indicated that the regression model was acceptable for further analysis. The results as shown in Table 7 are that both students’ trust and service quality are significant predictors of emotional commitment. Multicollinearity was not serious as the value of VIF was 3.2, was below the recommended threshold of 10. The results of testing the hypotheses are summarised as follows:
There is a significant positive impact of service quality on emotional commitment (hypothesis H4). An increase of 1 point on the 7-point Likert scale for service quality would result in .212 points for emotional commitment, given that other factors remain constant.

2. There is a significant positive impact of students’ trust on emotional commitment (hypothesis H5). An increase of 1 point on the 7-point Likert scale for service quality would result in .565 points for emotional commitment, given that other factors remain constant.

Finally, another regression analysis was performed with service quality as the independent variable and students’ trust as the dependent variable. This regression model explained 68.7% of the variation in the predicted students’ trust. The F-value of 4,290 was significant and this indicated that the regression model was acceptable for further analysis.

The results as given in Table 8 show that service quality has a positive impact on students’ trust (for hypothesis H6). An increase of 1 point on the 7-points Likert scale for service quality would result in .829 points for students’ trust, given that other factors remain constant.

From the results given in Tables 6, 7 and 8, the total effects and the component direct and indirect effects of emotional commitment, service quality and students’ trust on student loyalty were derived, and these effects are given in Table 9.

### IV. DISCUSSION

While OUM learners are relatively satisfied with the services currently provided by the university, as indicated by mean for service quality of 5.5/7.0 (Table 3), there is room for improvements. To ensure that the university is at par or better than the other higher education institutions, we need to determine what else need to be done to further enhance the quality of its facilities and services. OUM provides distributed learning; where students’ learning takes place at the learning centres across the whole country. The facilities and services provided at these centres have to be further improved. Apart from the introduction of new and up-to-date facilities and services, the maintenance of the current facilities and services needs to be given due consideration. In this regard, for the current financial year of 2013, the budget allocation for the maintenance of its learning centres has been increased substantially from that of the previous year. To further improve the quality of its services to its learners, the budget also provides for the recruitment of additional staff for the learning centres.

The average mean rating for emotional commitment is 5.78 (Table 3) which is the highest rating compared to the other variables. In the context of this study, emotional commitment refers to ‘the pride to be an OUM learner’. One determinant of this pride is the image of the university both locally and internationally. In this regard, OUM has been able to establish itself not only as the leading ODL institution in the country not only in terms of the number of enrolled learners but also in terms of quality. In 2011, the Ministry of Higher Education Malaysia (MOHE) has accorded a Tier-5 SETARA Rating which means Excellence as a HEI in the country. Internationally, OUM has gained an international recognition by its presence in 9 countries in Southeast Asia, South Asia, Africa and even Eastern Europe where its post-graduate and undergraduate programmes are conducted by the local partners, awarding OUM degrees. A plan to further enhance its image as an ODL provider both locally and abroad has been put in place in its 5-year strategic plan.

The average rating for students’ trust is 5.35 (Table 3). In this study, students’ trust is translated into the ‘confidence they have in the university staff in delivering the promises made by the university and the belief that these staff will act in the best interests’. For OUM, since its inception, management had recognised that the staff of the university are its principal asset and are very critical in determining its success. And the quality of staff is determined right at the recruitment stage where very stringent screening and interview processes are put in place.
place. This is necessary to ensure that we select the staff not only with the required skills and competencies, but more importantly, with the right attitude, traits and motivation (ATM). In addition, our performance management system (PMS) which allows for a variable bonus system rewards the high performers and penalises the inefficient ones. These human resource mechanisms had contributed to the high rating accorded to student’s trust in this study.

The combination of the above efforts in enhancing emotional commitment, service quality and students’ trust has led to the high average mean rating for student loyalty of 5.49 (Table 3). As the model posits, the above efforts have resulted in increased loyalty in terms of recommending the university to others and the commitment to complete the study programme in whatever conditions that may prevail.

V. CONCLUSION

Strategies for managing student loyalty have become increasingly important, since the length of student relationship is the main determinant of the educational institutions’ success and profitability. This is even more important for private higher education institutions. A key finding of this study concerns the critical role of emotional commitment in the development of student loyalty. Emotional commitment was found to be an even stronger predictor of loyalty, and to a lesser extent, service quality and student’s trust. It appears that a strong emotional connection between the student and the institution is required to produce a strong relationship, which results in greater loyalty. The development of emotional commitment in order to mitigate service failure situations seems even more important in the case of higher education given that the service relationship between the student and the institution in the higher-education environment goes over a period of years. In all cases, service quality has a positive influence on all three constructs, but the greatest impact is on trust (Table 9 & 10). Thus it is crucial that whatever interventions that an institution decides to take up, they must first of all contribute towards improving the support services, teaching and learning, assessment, curriculum, infrastructure and facilities and staff.

Overall, institutions should actively foster and develop the connections with their student base in order to ensure high levels of positive recommendation and coming back to the institution for higher levels of study and lifelong learning. It is important for institutions to develop a proactive rather than a reactive management strategy in the development of student-institution relationships. This requires a careful consideration of students’ a priori expectations and their satisfaction with regard to these expectations.

VI. LIMITATIONS

This study is a preliminary attempt in applying the relationship marketing concept in a higher education institution. In any preliminary attempt, there will be its accompanying limitations. The present study is focused on only one particular education institution, which uses the open and distance concept and is privately runned. This therefore limits the generalizability of the findings; the implications and the recommendations put forth will have to be viewed with caution.

VII. FUTURE RESEARCH

To enhance the generalizability of the findings, the study can be extended to other private and/or public, local and/or international ODL and conventional higher education institutions. Future longitudinal research could help investigate the extent to which the students-university relationship changes over time as they progress through their studies. This would provide useful insights into the dynamic and evolutionary nature of the student-university relationships.

REFERENCES


Appendix 1: The Statements used to represent the various Constructs.

The respondents were asked to rate all the 11 statements based on a seven-points Likert scale which ranged from 1(Strongly disagree) to 7(Strongly agree).

**Student Loyalty:**
1. If I am given the chance to go through the learning process again, I will choose OUM.
2. I will encourage others (e.g. family members and friends) to study in OUM;
3. I will continue my study in OUM until I graduate, in whatever conditions;
4. I propose to complete my programme in OUM, in whatever conditions.

**Students’ Trust**
5. I am sure that the university staff are always acting in my best interests;
6. I trust the university staff completely;
7. University staffs always keep their promises to me.

**Service Quality**
8. In terms of quality, OUM is equivalent to other higher education institutions;
9. Overall, the quality of facilities at OUM is good; and
10. Overall, the quality of services at OUM is good

**Emotional Commitment**
11. I am proud to be a student of OUM.