



2015 BEST PAPER



FROM DEATH SPIRAL TO SURVIVAL: USING CUSTOMER RELATIONSHIP MANAGEMENT TO STRENGTHEN STUDENT RETENTION

Terry Alkire, Central Washington University
Natalie A. Lupton, Central Washington University
Robert A. Lupton, Central Washington University

Abstract

A strategic opportunity often overlooked by universities is the impact of customer relationship management (CRM) on student recruitment and retention. With the unpopular trend for state legislators to shift the funding support for higher education to tuition-driven models, student retention rates have become increasingly important as a strategy to increase ROI. The purpose of this empirical study was to examine the impact of three CRM concepts based on relationship development on student retention: needs satisfaction, brand loyalty and emotional loyalty. A brief review of the current literature is provided with discussion on the methodology, survey design, and findings. Two of the three hypotheses tested were statistically significant at $p < 0.05$: 1) The likelihood of students remaining with their university and completing their program or degree is higher when the student's perception of individual needs' satisfaction is higher and 2) the likelihood of students remaining with their university and completing their program or degree is higher when the student's perception of brand loyalty is higher. The authors conclude with recommendations for marketing educators.

Introduction

What was once expected to be a cyclical financial downtick in public university funding has, for many post-secondary institutions, become a constant state of financial crisis. The headline, "Small U.S. Colleges Battle Death Spiral as Enrollment Drops" in a recent business magazine article is more than concerning. The author mentions that Moody's Investors Service downgraded an average of 28 public and private nonprofit educational institutions annually from 2009-2013, doubling the average of the previous five years. This is attested to drops in enrollment and retention; drops in tuition revenue; an increase in tuition discounts; and other factors (McDonald, 2014). With continuous waves of reductions in government funding and support for higher education institutions, retention rates have become increasingly important as low retention rates can have an adverse negative impact on funding for institutions (Jaeger & Eagan, 2010; Sanford & Hunter, 2011). As a consequence, aggressive student recruitment and retention have become common goals for most higher education institutions. Emphasis on data processing has grown as administrators want business metrics to make strategic decisions. A strategic initiative often overlooked is the impact of customer relationship management (CRM) on student recruitment and retention (Ackerman & Schibrowsky, 2007; Berry, 1983). For this paper, CRM is defined as "an enterprise-wide business strategy for achieving customer-specific objectives by taking customer-specific actions" (Peppers & Rogers, 2004, p. 6). Buttle (2009) states the core CRM processes are customer acquisition, customer retention, and customer development. Enterprises need to manage each stage.

Ackerman and Schibrowsky (2007) modified the term CRM to "student relationship management" as they argue the importance of relationship building between students and institutional constituents. They are not alone in applying CRM concepts to universities and colleges. Milovic (2012) writes that CRM is a fast, efficient, flexible solution for knowledge management. CRM tools and techniques can help institutions differentiate themselves from the competition. Seeman and O'hara (2006) further add to the literature with their research and offer technological tools to implement CRM campus wide. Grant and Anderson (2002) stress a

customer-centric viewpoint of students will be a “competitive imperative.” Customer-centricity places the customer (students) first as the focal point of every interaction they have throughout the university. This action, if successful, can influence the three CRM core processes Buttle (2009) proposes.

This study focuses on student retention through CRM processes. Two questions Buttle (2009) suggests that must be answered in a strategic retention plan include, “What customer retention objectives should be set?” and “What strategies should be used?”. Barnes (2004) portends that to meet these goals academic leaders need to manage customer relationships. He offers Czepiel’s (1990) definition of a relationship as “the mutual recognitions of some special status between exchange partners”. Indeed, relationships exist between customer and enterprise constituents and customers and brands. Customers want to “feel” special and valued as relationships evolve.

The purpose of this empirical study was to examine the impact of three CRM hypotheses based on relationship development on student retention: needs satisfaction, brand loyalty and emotional loyalty. As will be shown in the literature review and the development of the hypotheses, there remains a dearth of research addressing the importance of CRM application in higher education management (Bowden, 2009) especially as it relates to these three specific constructs.

Literature Review

Needs Satisfaction

Satisfying the needs of customers is one of the main tenants of a successful CRM retention plan. According to Peppers and Rogers (2004), satisfaction is one of six mediating variables required for relationships to form between a customer and an enterprise. For CRM to succeed, an enterprise’s constituents must be knowledgeable of and aligned to the needs of the customers (Buttle, 2009; Stringfellow, Nie & Bowen, 2004). Berry (1983) stated that relationship-marketing concepts can be applied whenever the customer has a need for the service.

There is no question that college students have needs they seek to have satisfied as they enter into their educational pursuits. Student needs satisfaction have many categories, but take precedence in the retention literature: financial (Wetzel, O’Toole & Peterson, 1999), social (Terenzini & Pascarella, 1980; Bean & Eaton, 2001) and post-graduation career assistance. Bowden (2011) states that student satisfaction is positively correlated to peer recommendations, retention and return on investment. Seymour (1993) proposes that developing satisfied customers should be a primary goal of higher education. DeShields, Kara and Kaynak (2005) concur that enhancing customer satisfaction is crucial in developing student value. By understanding student satisfaction educational institutions can align their organizational structure, strategic planning, enrollment and retention processes and procedures to become more customer-centric (DeShields, Kara & Kaynak, 2005). Based on these discussions, we arrived at the first hypothesis:

Hypothesis 1: the likelihood of students remaining with their university and completing their program or degree is higher when the student’s perception of individual needs’ satisfaction is higher.

Brand Loyalty

Defined as “a consistent pattern of purchase of a specific brand over time and a favorable attitude towards a brand” (Quester & Lim, 2003, pg. 26); brand loyalty to a university forms when the student perceives that the university’s brand fits their self-image or the brand affords

value for them in some unique way that ultimately forms a 'personal attachment' over time to the brand. A search of terms "university brand" uncovers a plethora of brand identity standards, guidelines and handbooks for specific colleges and universities. On its website Boston University states, "it is increasingly important for us to express a single, compelling voice in everything we do" (Boston University, 2014). The University of Texas reminds constituents of their brand personality: "There's no place on earth like the Forty Acres — a home that's equally comfortable for artists and scientists, historians and entrepreneurs, philosophers and engineers. No matter who you are or where you came from, this is a place where you can follow your dreams and find your passion." Cornell University states as part of their brand strategy, "It speaks to the satisfaction and emotional connection we provide to our stakeholders."

In the literature, the construct of brand loyalty includes both a behavioral component (i.e. the repeated purchase or selection of the brand) and an attitudinal component (i.e. the strong psychological attraction to the brand) (Dekimpe, Steenkamp, Mellens & Abeele, 1997; Quester & Lim, 2003). Aaker's (1997) research looks at brands as having a 'personality' or as the author states, "the set of human characteristics associated with a brand" (p. 347). Oregon State University's brand is such an example as they use words to define who they are in order to seek humanistic alignment with constituents. These words are: Smarter, Greener, Healthier, Safer, Kinder and Innovative.

A positive brand image can play a significant role in building student trust and loyalty which in turn have both been shown to be key factors in the "economic viability of educational institutions" (Ghosh, Whipple & Bryan, 2001, p. 324). Research has shown that those institutions that are able to leverage brand loyalty as a tool for establishing student trust and building student loyalty will be rewarded by higher levels of retention and future relations in the form of post-graduate studies, alumni support and referrals (Carvalho & Mota, 2010).

The importance of an organization's brand image has also been shown to play a major role in the overall attractiveness of the organization as a place to work or study (Lievens & Highhouse, 2003; Turban and Greening, 1996). In the context of higher education, a university's image and reputation can often be as critical to the student as the actual quality of education provided (Kotler & Fox, 1995). Palacio, Meneses and Pérez (2002) found that the perception of a university's brand image has a direct impact on the choices made by students. Based on these discussions, we arrive at the second hypothesis:

Hypothesis 2: the likelihood of students remaining with their university and completing their program or degree is higher when the student's perception of brand loyalty is higher.

Emotional Loyalty

The importance of the consumer's attitudinal commitment towards an organization or brand is captured in the term *emotional loyalty*. Peppers and Roger's (2004) define emotional loyalty as "attitudinal loyalty, or a preference, for one brand over another" (pg. 60). Understanding customers' emotional needs is vital for predicting and influencing their purchasing behavior (Stringfellow, Nie & Bowen, 2004). Although highly related, there is an important difference between emotional loyalty and brand loyalty. Thompson and associates (2005) distinguish the two constructs by considering brand loyalty as a subset of emotional loyalty. Their research suggests that whereas consumers may display brand loyalty towards any number of consumer products, those products or brands "to which consumers are emotionally attached ... are few in number and are generally profound and significant" (pg. 79).

The establishment of a relationship between both parties involved heavily influences the development of emotional loyalty. In order for a customer-service provider relationship to progress into an emotional commitment, the relationship must be based on an open two-way exchange of information (Barnes, 1994; Dunne & Barnes, 2003). Behavioral or functional loyalty based on the simple repeated purchase habits of a customer is very distinct from emotional

loyalty and that, just because an organization temporarily enjoys functional loyalty from a customer, it does not mean that they have gained that customer's emotional loyalty (Barnes, 2004).

Several studies have shown psychological or emotional attachment to an organization or brand to be a critical component in the establishment and continuance of customer loyalty (Dick & Basu, 1994; Geyskens, Steenkamp, Scheer & Kumar, 1996). As proposed by Baloglu (2002), "the attitudinal measures of loyalty include trust, emotional attachment or commitment, and switching cost" (pg. 50). Increased levels of student satisfaction and feelings of connectedness (i.e. emotional loyalty) have been shown to play a significant role in the retention rate of students (Ackerman & Schibrowsky, 2007; Roberts & Styron, 2010). Bean and Eaton (2001) proposed that universities that recognize and subsequently develop programs that address the underlying psychological factors comprising student loyalty will have higher success in their retention efforts. As if to underscore the importance of student loyalty, Nguyen and LeBlanc (2001) measure the construct of student loyalty as a being synonymous with the definitions of student retention. Based on the above research, the third hypothesis was developed as follows: *Hypothesis 3: the likelihood of students remaining with their university and completing their program or degree is higher when the student's perception of emotional loyalty is higher.*

Methodology

The data were collected from a total of 344 undergraduate student respondents over 36 consecutive months in a CRM class at a public four-year institution. The sample population was comprised of students from traditional, hybrid and online classes. The gender breakdown was fairly even across all respondents at 42% female and 58% male. Due to the mixed, classroom delivery modality represented in the data, the sample encompasses a variety of ages (from 19 to over 60) and includes many students who are also working professionals. Although the respondent group is primarily comprised of students majoring in the field of Information Technology Management (76%) the survey also includes respondents from a variety of other professional specializations such as Business Administration and Management, Retail Management, Fashion Merchandising (16% combined) and also includes a portion of students (8%) from a diverse group of additional specializations.

Survey Design

The students were presented with a reading defining CRM and the variables that were to be measured in the survey. Included in these readings were clear definitions of each of the variables in order to ensure their ability to distinguish between the three constructs. The students were then directed to complete the confidential survey. The experimental method chosen for this study was a secured web based questionnaire. Following some basic demographic questions, the survey participants were asked to answer a series of questions each intended as a measure of the students' perception of a particular construct. The students were instructed to consider all questions based on the university as a whole and not just the student's particular department or college.

The first question asked the students whether their university does a good job determining and meeting their individual needs as a consumer. Stemming directly from CRM theory, this question relates to the Needs Satisfaction variable of the study. The second question asked the students whether they perceive themselves to have brand loyalty to their university. This question relates in turn to the Brand Loyalty variable in this study. The variable known as Emotional Loyalty is operationalized by the third question that asks the students if they have an "emotional" loyalty to their university. Finally, the dependent variable, Retention, is addressed in the last question which asks the students whether they will finish their degree at their current university.

Table 1: Descriptive Statistics and Correlations of Variables

	Mean	SD	1	2	3	4	5	6	7
1. Retention	4.68	.70	1.00						
2. Gender	-	-	.04	1.00					
3. Major	-	-	.02	-.11*	1.00				
4. Needs Satisfaction	3.79	.96	.25**	-.09	-.09	1.00			
5. Brand Loyalty	3.38	1.0	.23**	-.03	-.05	.47**	1.00		
6. Emotional Loyalty	3.22	1.0	.14*	-.09	-.02	.43**	.61**	1.00	

Note: N= 344, **. Correlation is significant at $p < 0.01$ level, *. Correlation is significant at $p < 0.05$ level.

All questions were measured using a five point Likert scale that ranged from Strongly Disagree to Strongly Agree. Although the use of Likert scales has been the topic of some debate (Cummins & Gullone, 2000), Garland (1991) demonstrated that in some cases the five point Likert scale is preferable because removing the neutral answer may skew the respondents' answers unrepresentatively in either the positive or negative direction. In his meta-analysis of statistical issues concerning Likert scales, Norman (2010) found no reason for Likert based data not to be used in parametric statistical studies even when that data includes less than perfect distributions and variances, stating that "these findings are consistent with empirical literature dating back nearly 80 years" (pg. 631).

Results

Means, standard deviations and item correlations for study variables are shown in Table 1 below. The primary hypotheses of this study were tested using hierarchical linear regression. Table 2 displays the main results of the regression models including standardized Beta (β) values, corresponding standard errors, change in R^2 and t-ratios for each step of the regression. The dependent variable for these regression models was student retention. Independent variables were subsequently added in four steps.

Hypothesis 1 predicted that the likelihood of students remaining with their university and completing their program or degree is higher when the student's perception of individual needs' satisfaction is higher. In order to test for the effect of this variable on our dependent variable (Student Retention), step 1 of the regression was run using the variable Needs Satisfaction. The results of this test are shown in Step 1 of Table 2. As the results indicate, there is a significant positive effect ($\beta = .25$, $R^2 = .06$, $p < .01$) on the dependent student retention when the students' needs are perceived to be satisfied by their university. Hypothesis 1 is therefore fully supported. Hypothesis 2 predicted that the likelihood of students remaining with their university and completing their program or degree is higher when the student's perception of brand loyalty is higher. In order to test for the effect of this variable on our dependent variable (Student Retention), Step 2 of the regression was run using the variable Brand Loyalty. The results of this test are shown in Step 2 of Table 2. As the results indicate, there is a significant positive effect ($\beta = .15$, $R^2 = .02$, $p < .01$) on the dependent student retention when the students perceive themselves as having a high degree of brand loyalty to their university. Hypothesis 2 is therefore fully supported.

Hypothesis 3 predicted that the likelihood of students remaining with their university and completing their program or degree is higher when the student's perception of emotional loyalty to their university is higher. In order to test for the effect of this variable on our dependent

Table 2: Results of Hierarchical Linear Regression

Dependent variable: Student Retention

Evaluation Criteria	Retention			
Step 1:				
Hypothesis 1	Beta	<i>Standard Error</i>	<i>Model 1 R²</i>	t-ratio
Intercept	B = 3.999**	.148		27.012
Needs Satisfaction	.249**	.038	.062**	4.738
Step 2: Hypothesis 2				
Intercept	B = 3.853**	.158		24.393
Needs Satisfaction	.180**	.042		3.051
Brand Loyalty	.148**	.039	.017**	2.510
Step 3: Hypothesis 3				
Intercept	B = 3.752**	.171		22.078
Needs Satisfaction	.132*	.048		2.006
Brand Loyalty	.128*	.040		2.138
Emotional Loyalty	-.075	.046	.003	- 1.104
Step 4: Demographics				
Gender	.055	.075		1.039
Major	.031	.010	.003	.585

N = 344, **p ≤ 0.01, *p ≤ 0.05. Note: '+' sign indicates a higher intention of retention.

variable (Student Retention), Step 3 of the regression was run using the variable Emotional Loyalty. The results of this test are shown in Step 3 of Table 2. As the results indicate, again there was no significant effect found for this variable. Hypothesis 3 is therefore not supported.

The last and final step of our hierarchical regression was to control for significant effects from our two demographic variables: Gender and Major. As shown in Step 4 of Table 2, there was no significant influence found between the male and female students or the student's area of major or specialization.

Discussion

The results of this study suggest that the key variables 'needs satisfaction' and 'brand loyalty' have a positive effect on student retention. There was no significant effect of emotional loyalty to student retention. Applying these CRM concepts to student retention is another set of constructs for which to define retention strategies. A model of CRM student retention plan tactics are presented by the authors in Figure 1. The model proposes that as administrators in post-secondary institutions assess student retention, at least two CRM retention plan tactics should be put into place. Assessment should include a needs satisfaction survey as well as the development of a strong brand. Using the outcomes of both of these tactics to direct student-centric relationship building will lead to increased student retention.

Closing Thoughts

Marketing and business educators are poised to be leaders in CRM retention initiatives. Marketing educators are faced with retention challenges and opportunities. Indeed, the role of marketing faculty and staff with building brand loyalty is equal to those efforts by administration and university PR. The authors would argue that marketing faculty are by professional training best suited to lead these efforts.

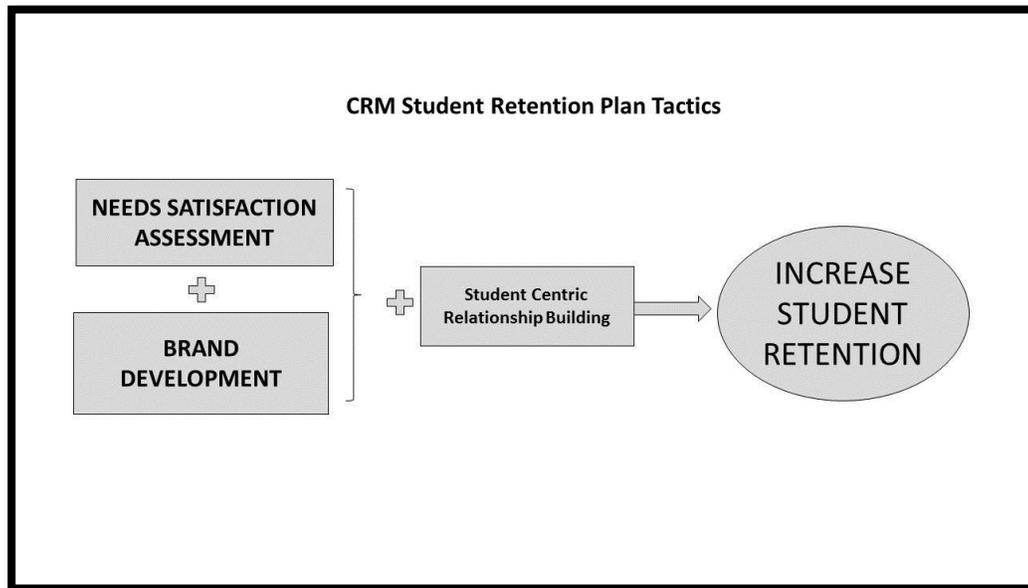


Figure 1: CRM Student Retention Plan Tactics

The likelihood of students remaining with a department or college and completing their degree is higher when the student’s perception of individual needs’ satisfaction is higher. Marketing educators and staff should continue to sell the value of their programs and course offerings in classes, presentations, public events, etc. Educators and staff should understand and promote the purpose – the value – of the total degree package. The message should accent the relationship between the degree/classes and the student’s career interests. That message should be promoted not just in the class, but through multiple channels. At every department meeting and retreat, educating faculty and staff to be customer driven is paramount. Each person on the team is part of the “touch points” as students, parents, employers, friends, etc. make contact. Build the value by using creative tools that appeal to the target audiences. As a department, don’t be living in the past – strive for change and build towards the future.

The likelihood of students remaining with their university and completing their program or degree is higher when the student’s perception of brand loyalty is higher. The ultimate retention goal of any marketing department is to create brand loyalty with its students and graduates. The brand is not just the logo but requires a profound understanding of the personality of the department. The personality must be part of the classroom and advising and must be consistent across all voices of the marketing educators and staff in the department. Consistency in advising and genuine support at every “touch point” within the department will help to create brand loyalty. A positive brand image leads to building student trust and loyalty which has been shown to increase student retention.

Finally, marketing departments should include as part of their ongoing assessment plans CRM surveys to measure needs satisfaction and brand loyalty. These metrics will stop the death spiral and refocus the mission on survival using CRM to strengthen student retention!

References Available upon Request