

Every Student Counts: Using Customer Relationship Management to Strengthen Student Retention

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Abstract

A strategic opportunity often overlooked by universities is the impact of customer relationship management (CRM) on student retention. The unpopular trend for state legislators to shift funding support for higher education to tuition-driven models means student retention rates are of critical importance. This study examines the impact of three relationship development based CRM concepts on student retention: needs satisfaction, brand loyalty and emotional loyalty. A literature review is provided with discussion of methodology, survey design, and findings. Two of three hypotheses tested were statistically significant at $p < 0.05$. Hypothesis one indicated the likelihood of students remaining and completing their program increases when the student's perception of individual needs' satisfaction is higher. The second hypothesis demonstrated the likelihood of students remaining with their university and completing their degree is higher when the student's perception of brand loyalty is higher. The article concludes with recommendations for marketing educators.

Keywords: customer relationship management, CRM, student retention, brand loyalty, emotional loyalty, needs satisfaction

1. Introduction

What was once expected to be a cyclical economic downturn 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 downward spiral is attributed to decreases 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 and the emphasis on data management is growing.

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.

Buttle and Maklan (2015) point out that CRM is not only being widely implemented in for-profit organizations but is also highly suitable for use in non-profit contexts such as universities. 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. "Finally, Lala and Priluck (2011) stress that "college student retention is an important customer relationship management task for universities" (p. 236). 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 as well as customers and brands. Customers want to "feel" special and valued as relationships evolve.

This empirical study develops and tests three hypotheses based the impact of three core CRM constructs on student retention: needs satisfaction, brand loyalty and emotional loyalty. There remains a dearth of research addressing the importance of CRM application in higher education management (Bowden, 2009) and the gap in the literature is even larger when focusing on only these three specific constructs.

2. Literature Review

2.1 Retention

The dependent variable of our study is the concept of student retention. When applied to students attending four-year universities, the meaning of the word 'retention' can be complex. When referring directly to institutions of higher education, the U.S. Department of Education's official definition of a university's retention rate is "the percentage of ...degree/certificate-seeking students from the previous fall who either re-enrolled or successfully completed their program by the current fall" (U.S. Department of Education, 2015). In the past, many retention definitions have been based on traditional four-year institutions that typically have a degree completion timeframe of four to six years based on a dichotomous institution-centric definition of student retention, i.e. students either stayed at their university or they did not (Roberts & Styron, 2007).

The highly diverse and complex nature of the student body of most universities today creates some inherent problems with this simplistic approach to retention (Hagedorn, 2005). Many universities are now offering online programs to students who are working adults who often choose course offerings sporadically based on their work schedules. As such, non-traditional students may often be attending a university on a part-time basis and may not fall into standard retention models. In addition, transfer students and students returning after more than a semester pause, may also be excluded from current retention calculations (Roberts & Styron, 2007).

Traditionally, retention studies are often focused solely on first- and second-year students (e.g. Jaeger & Eagan, 2011; Jones-White, Radcliffe, Huesman Jr & Kellogg, 2010); however, the retention literature also includes many studies that include the use of third and fourth-year students (e.g. Bejou & Bejou, 2012; Lindsey & Sessoms, 2006; Pritchard & Wilson, 2003). While the retention of first and second year students clearly remains a priority, the implementation of new budget models at the college and departmental level can often result in a renewed focus on the retention of third and fourth year students as well. Simply put, under most budget models, departments and colleges do not receive financial credit for fulltime enrolled students until they are actually admitted to their majors and begin taking classes in the department where their majors are offered. It is therefore crucial at a departmental level that retention efforts be directed at all students regardless of class standing.

In their study of student retention, Ackerman & Schibrowsky (2007) found the same 75% retention rate for juniors as they did for sophomores and although the retention rate for seniors was higher, the authors still showed a 20% student dropout rate for seniors. Schreiner (2009) pointed out, "senior retention might appear to be a moot point, but almost 10 percent of the seniors in this study had not graduated yet and did not return to the same institution the following year" (p. 5).

Allen and colleagues (2008) propose that studying the retention rate of juniors over freshman is important because “(1) third-year enrollment status may be a more reasonable proxy for degree attainment, (2) students who return for their second year may drop out or transfer by their third year (or vice-versa), and (3) the effects of motivation, social connectedness, and academic performance on long-term retention and transfer are not well documented” (p. 648). Clearly for funding strapped department chairs struggling to show positive enrollment numbers, the retention of each and every student becomes a high priority.

For the purpose of this study, we will use a combination of two of the four types of retention defined by Hagedorn (2005). The first, institutional retention follows the U.S. Department of Education’s definition of students that re-enroll into the same institution year after year until degree completion. The second is retention within academic major which means that a student that begins their academic career as a communications major but graduates with a marketing degree will not be considered to be retained by the college or department of communications. Because this research is intended for use at a departmental level, it is important that our definition of student retention includes the retention within the major.

2.2 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 have knowledge of and be aligned to the needs of its customers (Buttle, 2009; Stringfellow, Nie & Bowen, 2004). In the context of higher education, universities are increasingly being identified as service providers and, as such, they are finding themselves focusing more and more on the needs of their students (Gruber et al., 2012). There is no question that college students have needs they seek to have satisfied as they enter higher education. Student needs satisfaction have many categories, but those that take precedence in the retention literature are: 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, enrollment and retention processes 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.

2.3 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 (2014) 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 (2014) 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 (2014) 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 & 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.

2.4 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).

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 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.

3. Methodology

The data were collected over a period of 27 consecutive months from primarily junior and senior students of a 300 level marketing class at a public four-year institution. The main focus of this marketing class was CRM. A total of 469 undergraduate students responded to the survey. The sample population was comprised of students from traditional, hybrid and online classes. The gender breakdown was fairly even across all respondents at 44% female and 56% 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.

3.1 Survey Design

The students were first 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 respondent 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.

Hayslett and Wildemuth (2004) found that web based survey responses tend to be returned faster and are often a more effective way of promoting the survey than traditional paper notices and more importantly, no detectable sampling bias or differences were found in the content of responses. Therefore, data were collected from January of 2013 until April of 2015. 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. All questions were measured using a five point Likert scale that ranged from 'Strongly Disagree' to 'Strongly Agree'. 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.

4. 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 five steps.

Table 1. Descriptive Statistics and Correlations of Variables

	Mean	SD	1	2	3	4	5	6	7	8
1. Retention	4.70	.65	1.00							
2. Gender	-	-	-.02	1.00						
3. Needs Satisfaction	3.84	.92	.25**	.05	1.00					
4. Brand Loyalty (BL)	3.41	1.0	.24**	.03	.47**	1.00				
5. Emotional Loyalty (EL)	3.27	1.0	.18**	.10*	.44**	.62**	1.00			
6. Needs x BL (centered)	.45	1.2	-.17**	.03	-.30**	-.14**	-.09	1.00		
7. Needs x EL (centered)	.42	1.1	-.14**	.08	-.27**	-.09**	-.11**	.67**	1.00	
8. BL x EL (centered)	.66	1.2	-.07	.03	-.10*	-.10*	-.07	.52**	.58**	1.00

Note: $N = 469$, **. Correlation is significant at $p < 0.01$ level, *. Correlation is significant at $p < .05$ level.

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.

Table 2. Results of Hierarchical Linear Regression

Dependent variable: Student Retention

Evaluation Criteria	Retention			
Step 1:Hypothesis 1	Beta	<i>StandardError</i>	<i>Model 1 R²</i>	t-ratio
Intercept	$\beta = 4.027^{**}$.126		32.018
Needs Satisfaction	.249 ^{**}	.032	.06 ^{**}	5.533
Step 2: Hypothesis 2				
Intercept	$\beta = 3.892^{**}$.132		29.450
Needs Satisfaction	.174 ^{**}	.036		3.446
Brand Loyalty	.157 ^{**}	.032	.02 ^{**}	3.096
Step 3:Hypothesis 3				
Intercept	$\beta = 3.886^{**}$.134		28.963
Needs Satisfaction	.171 ^{**}	.037		3.314
Brand Loyalty	.148 [*]	.038		2.492
Emotional Loyalty	.015	.036	.000	.261
Step 4: Interactions				
Needs x Brand Loyalty	-.11 [*]	.026	.01 [*]	-2.245
Needs x Emotional Loyalty	-.02	.034	.000	-.397
Brand Loyalty x Em. Loyalty	.03	.030	.001	.533
Step 5: Gender				
Gender	-.03	.059	.001	-.738

$N = 469$, ^{**} $p \leq 0.01$, ^{*} $p \leq 0.05$. Note: '+' sign indicates a higher intention of retention.

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 ($\beta = .16$, $R^2 = .02$, $p < .01$) on the dependent variable 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 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, there was no significant effect found for this variable. The results of this study indicate no statistical support for the third hypothesis.

In order to further evaluate our model, it was decided to perform an additional hierarchical regression step on the two-way interaction terms for each of the three main independent variables. As shown in Table 2, Step 4, in order to determine whether there was a significant interaction between the variables *Needs Satisfaction* and *Brand Loyalty* and the student's retention intent a new interaction variable (using centered terms) was created. Therefore in Step 4, the interaction term *Needs x Brand Loyalty* was added to the model. This interaction variable predicted significant variance ($\beta = -.11$; $p < .05$; $\Delta R^2 = .01$). Although the results of this analysis are statistically significant, the change in R^2 is quite small. However when taken in conjunction with the evidence provided by the analyses for Step 1 and 2, these findings serve to lend further support for Hypotheses 1 and 2. Further analyses were conducted in Step 4 which included adding the interaction terms *Needs x Emotional Loyalty* and *Brand Loyalty x Emotional Loyalty* to the model. Neither of these interaction variables predicted significant variances which were in agreement with the results of Step 3 which found no significant support for Hypothesis 3.

The last and final step of our hierarchical regression was to control for significant effect between the male and female respondents. As shown in Step 5 of Table 2, gender did not play a significant role in the responses to this survey.

5. 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 CRM concepts to student retention is another set of constructs for which to define retention strategies. Marketing and business educators are poised to be leaders in CRM retention initiatives. Indeed, the role of marketing faculty and staff to meet students' needs and build brand loyalty at the departmental level is equal to, and sometimes more successful than, those efforts at the college and university level. A model of a CRM student retention plan is presented by the authors in Figure 1.

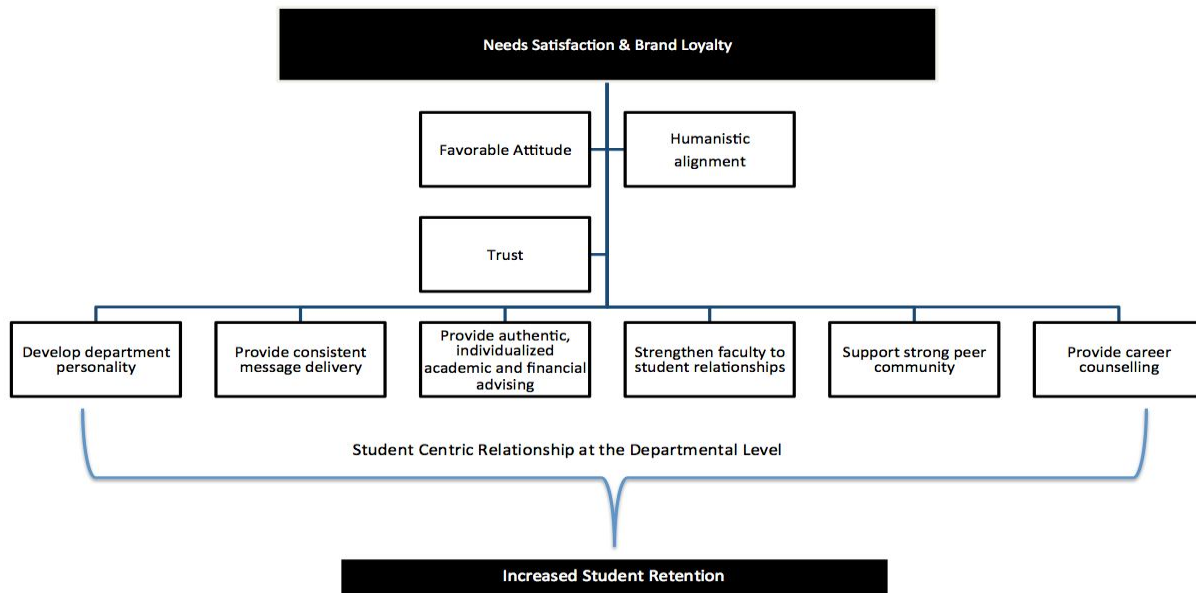


Figure 1. CRM Student Retention Plan Tactics

As stated earlier, financial (Wetzel, O'Toole & Peterson, 1999), social (Terenzini & Pascarella, 1980; Bean & Eaton, 2001) and post-graduation career assistance are emphasized in student retention literature as common student needs. Building brand loyalty includes the characteristics the customer must perceive about the service being offered; namely those characteristics being a favorable attitude towards the service, trust with the constituents of the service, and humanistic alignment of the organization's brand personality. Combining the constructs of needs satisfaction and brand loyalty as in Figure 1, specific tactics that a department can implement to strengthen a student centric relationship are to develop a department personality, provide consistent message delivery, provide authentic, individualized academic and financial advising, strengthen faculty-to-student relationships, support a strong peer community and provide career counseling. Implementing such tactics increases the likelihood of students remaining completing their program or degree, thus increasing the student retention rate.

Developing a departmental personality may be one of the most difficult tactics to complete, as this is not a common practice. The personality is not just a logo but requires a profound understanding of the humanistic characteristics of the department. The personality must be consistent across all voices of the faculty and staff in the department. Training staff to provide a consistent message is also a daunting task. That message should be promoted not just in the class, but through multiple channels known as "touch points" (Buttle & Maklan, 2015). Each person on the team is part of the "touch points" as students, parents, employers, friends, etc. make contact. Providing authentic, individualized academic and financial advising often takes time away from faculty's other duties. However, realizing how crucial these activities are to meeting students' needs should increase the level of prioritization by faculty and staff. Strengthening faculty-to-student relationships may already be in place, especially in small marketing departments. Faculty should know their students' names and be available for not only answering content questions, but also for mentoring students in areas of interest and perhaps research pursuits.

Supporting a strong peer community is sometimes neglected or is viewed as being met by creating a student club. However, while not all students join clubs, they all would benefit in some way from being a member of a peer community. The department can provide opportunities for students to interact informally to build a strong connection with each other. Creating a peer mentoring program and/or sponsoring student planned events will do well as a catalyst for student peer relationship building. Providing career counseling to students helps departments to meet another crucial need factor. Educators and staff should understand and promote the purpose and perhaps more importantly, *the value* of the total degree package and be able to convey the relationship between the degree/classes and the student's career interests. Although universities may have a larger career center, a department's student may get lost among all other students or be misadvised by career counselors who are not as familiar with specific career markets as the corresponding departmental faculty.

Marketing educators and staff should continue to sell the value of their programs and course offerings in classes, presentations, public events, etc. At every department meeting and retreat, educating faculty and staff to be customer driven is paramount. Build the value by using creative tools that appeal to the target audiences. CRM tactics can lead to meeting student needs and building loyalty which has been shown to increase student retention.

6. Closing Thoughts

Administrators of marketing and management departments in post-secondary institutions should assess student retention focusing on CRM variables including needs satisfaction and brand loyalty status. Using the outcomes of this assessment, administrators would have specific outcomes relating to direct student-centric relationship building that will lead to increased student retention.

Based on these findings and the resulting CRM model for student retention, marketing departments should include as part of their ongoing assessment plans, CRM surveys to measure needs satisfaction, brand loyalty and emotional loyalty. Additionally, future research could be expanded to include other constructs of CRM. For example, adding an analysis of the most valuable touch points between students and the department would help administrators prioritize and focus their external communication efforts on certain activities to strengthen relationships. Mapping the student experience leading up to and including the personal and professional development as a department major would also provide more information as to when to initiate and continue student engagement. As a department, it is imperative to strive for change and build towards the future. These metrics will ease the downward death spiral and refocus the mission on survival using CRM to strengthen student retention!

7. References

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