

What Drives Student Loyalty in Universities: An Empirical Model from India

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Received: December 12, 2010 Accepted: January 4, 2011 doi:10.5539/ibr.v4n2p183

Abstract

Student loyalty is one of the major goals of educational institutions. A loyal student population is a source of competitive advantage. The specific objective of this research was to develop an empirical model linking student loyalty to student satisfaction and student perception of the reputation of the institution. Based on the data collected from students with leading universities in India, a structural model was developed explaining 57.7% of the variance in the student loyalty. The student satisfaction was seen to be a major driver of student's loyalty. The reputation of the institution also had a positive impact on student loyalty through the mediating variable student satisfaction. The research also validated a measurement model for student satisfaction and prioritized various dimensions of the satisfaction construct.

Keywords: Student satisfaction, Student loyalty, Reputation of the institute, University, India

1. Introduction

Performance measurement is so critical for all organizations, and educational institutions are no exception. With the sky-rocketing costs of education across the globe, there are increasing levels of scrutiny by students, parents and prospective employers of the value delivered by the educational institutes.

Universities are increasingly recognizing that higher education is a service industry, and are placing greater emphasis on meeting the expectations and needs of their participating customers, that is, the students. Furthermore, intense competition in today's competitive educational market forces institutions to adopt a market orientation strategy to differentiate their offerings from those of their competitors by delivering superior quality services.

Student loyalty is one of the major goals of educational institutions. A loyal student population is a source of competitive advantage with outcomes such as positive word of mouth (WOM) communication, retention and repeat. The creation and the delivery of superior customer value become important in creating a sustainable advantage in the highly competitive international education market (Kotler and Fox, 2002). Service quality, in this context, is acknowledged as a key performance measure for excellence in education and is a major strategic variable for universities as service providers (Donaldson and Runciman, 1995), with enduring effects on the institution and the students it serves.

The purpose of this paper is to analyze how student loyalty is affected by student satisfaction, and reputation of the university. The specific objective of this research is to identify and validate a structural model linking student loyalty to student satisfaction and student perception of the reputation of the university. The variants of the proposed model are checked through Structural equation modeling approach.

The study was conducted among post graduate students studying in the main campus of leading universities in South India. The paper is organized as follows. In the next part presents the literature review and research model. This is followed by a discussion on the research methodology. Finally, the results are presented and implications are discussed.

2. Literature review and Research Model

Many studies have looked at customer satisfaction and customer loyalty in marketing parlance. Even though one might hesitate to call students "customers" because of the student-teacher relationship, the fact is that without students, there would be no need for educational institutions. Hence understanding of linkages among student satisfaction, their

perception about the institution and loyalty to the Alma matter will help universities to devise strategies for operational excellence. Previous research frameworks with respect to these constructs are discussed below.

2.1 Student satisfaction

Customer satisfaction frameworks have been very popular among researchers. (Oliver, 1997; Giese and Cote, 2000; Wiers-Jenssen et al., 2002). Satisfaction has been defined as the perception of pleasurable fulfillment of a service (Oliver, 1997). Operationally, the construct is similar to an attitude as it can be assessed as the sum of the satisfactions with various attributes of a product or service (Churchill & Surprenant, 1982). A number of studies have identified determinants of customer satisfaction. These include ease of obtaining information (Oliva, Oliver, & MacMillan, 1992), attribute level performance (Oliva et al., 1992), prior experience (Bolton & Drew, 1991), and search time in choosing the service (Andersen & Sullivan, 1993). It is known that satisfaction level is determined by the difference between service performance as perceived by the customer and what the customer expects (Parasuraman et al., 1986).

An adaptation of the customer satisfaction concept in education is proposed by Elliot and Healy (2001) who indicate that student satisfaction results from the evaluation of their experience with the education service received. A variety of factors appear to influence student satisfaction. These factors can be divided into personal factors related to the student and institutional factors related to the educational experience. Personal factors include age, gender (Brokaw, Kennedy, & Merz, 2004; Stokes, 2003) and Institutional factors include instructor teaching style (Dana, Brown, & Dodd, 2001), quality of instruction (DeBourgh, 2003), quality and promptness of feedback from instructor, interaction with classmates (Fredericksen et al., 2000) and Infrastructural facilities (Helgesen, 2007).

2.2 Student loyalty

The customer loyalty is manifested in different ways including a commitment to re buy or patronizes a preferred product or service (Oliver, 1997; Reichheld and Sasser, 1990; Dick and Basu, 1994). Student loyalty has both short term and long term impact on the educational institution. Loyal students are influencing teaching quality positively through active participation and a committed behavior (Rodie and Kleine, 2000). Probably they are good advocates, recommending the institution to others. Besides, a growing number of former students are returning to higher educational institutions in order to update their knowledge (Marzo-Navarro et al., 2005).

2.3 Reputation

The reputation of a firm may be interpreted as the overall perception of a company, what it stands for, what it is associated with, and what may be supposed to get when buying the products or using the services of the company (MacMillan et al., 2005; Schuler, 2004; Weiss et al., 1999). Students may have formed a perception about both their school and their specific study program. Reputation management is also looked upon as very important for attracting and retaining students (Bush et al., 1998; Standifird, 2005).

2.4 satisfaction – reputation- loyalty linkages

Customer loyalty is supposed to be positively related to customer satisfaction and to the performance of a business unit (Kotler and Fox, 1995; Zeithaml, 2000; Helgesen, 2006). This link between customer satisfaction and the performance (profitability) of a business unit forms the cornerstone of the marketing concept (Drucker, 1954; Gronroos, 1989). Student satisfaction is supposed to be positively related to student loyalty (Athiyaman, 1997; Schertzer and Schertzer, 2004; Marzo-Navarro et al., 2005) and is seen as a potential antecedent of customer loyalty (Fornell, 1992; Oliver, 1999; Rust & Zahorik, 1993).

Corporate image or reputation has been studied as an antecedent or mediator of constructs regarding the evaluation of organizations, products or services individually or together with satisfaction (Bloemer and De Ruyter, 1998; Bloemer et al., 1998; Andreassen and Lindestad, 1998; Abdullah et al., 2000). Barich and Kotler (1991) argue that a company has a strong image if the clients believe that they receive good value in their transactions with the company. A favorable perception of reputation is supposed to be positively related to loyalty (Johnson et al., 2001; MacMillan et al., 2005).

Øyvind Helgesen and Erik Nasset (2007) proposed and validated a model linking student satisfaction, reputation and loyalty. This model had reputation of the institution acting as a mediating variable between student satisfaction and loyalty. But there are many arguments in literature for looking at reputation as an antecedent to satisfaction. Lim et al. (2000), in referring to the perceived image of a profession point out that image has strong influence on satisfaction, since those employees who see their profession as prestigious, have high levels of satisfaction with their job. Andreassen and Lindestad (1998) verified that corporate image has a strong influence on customer satisfaction. Other authors, such as Hildebrandt (1988) and Mazursky and Jacoby (1986) similarly point out that image precedes

the consumer's evaluation. If the students start off with a positive perception about their university and course of study, there are likely to be more satisfied.

Based on these arguments from literature, we are proposing a research model shown in figure 1 linking the three constructs namely student loyalty, student satisfaction and student perception of the reputation of the university. The model assumes that the dependent variable (student loyalty) has two independent variables (student satisfaction and reputation) linked to it. The model also checks for the indirect impact of reputation on loyalty through the mediating variable called student satisfaction.

3. Research Methodology

The study is designed as an explanatory study using survey method. Data is collected by administering validated instruments to the qualified respondents.

3.1 Measures of concepts

The main concepts included in this study are student satisfaction, reputation and student loyalty. There is no consensus concerning the measurements of these concepts but different approaches are popular. There are generalized measures independent of any particular service context like SERVQUAL (Parasuraman et al., 1988, 1994) and SERVPERF (Cronin and Taylor, 1992). However, many researchers argue that additional dimensions that emanate from industry-specific contexts should be included (Athiyaman, 1997; Abdullah, 2005).

Student satisfaction can be measured by asking questions related to various aspects pertaining to their stint with the educational institutions (Ryan et al., 1995). This study used a modified version of an instrument developed by Øyvind Helgesen and Erik Nettet (2007) and measured student satisfaction with respect to the following dimensions: Quality of academics, quality of administration, quality of social life, quality of infrastructure and quality of support services.

The loyalty and reputation constructs are measured by the instruments developed and validated by Øyvind Helgesen and Erik Nettet (2007). They have used the popular three item measure of loyalty (Dick and Basu, 1994; Oliver, 1997): Chance of recommending the university to friends/acquaintances, Attending the same university if starting from fresh, and the chance of returning to the same university for new courses/further education. The perception of reputation is measured by two items: the students' perceptions of the general reputation of their university and the students' perceptions of the reputation of their chosen study program at the university.

All indicators are measured on a five-point Likert-scale where "1" indicates the least favorable response alternative (Highly dissatisfied / very poor reputation / never recommend etc.) and "5" the most favorable response alternative (very satisfied / very good reputation / strongly recommend etc.).

3.2 Data Collection

Data is collected from students undergoing post graduate programmes in arts, commerce, science, engineering etc the main campus of major Universities in South India. A total of 279 students answered the questionnaire of which 234 answered all the questions relevant for this study. The sample consists of 131 males and 103 females with a mean age of 24 years.

4. Data Analysis

The data analysis is split into two parts: Validating the measurement model of student satisfaction and Validating the structural model (figure 1) linking these constructs.

Structural equation modeling (SEM) is often used for testing theory associated with latent variable models because it enables the inference of complex relationships among variables which cannot be directly observed. SEM is a multivariate statistical methodology, which takes a confirmatory approach to the analysis of a structural theory. SEM provides researchers with the ability to accommodate multiple interrelated dependence relationships in a single model. (Hair et al., 1998). AMOS 4.0, a leading SEM package, was used in this study.

The overall fit of a model in SEM can be assessed using a number of fit indices. There is broad consensus that no single measure of overall fit should be relied on exclusively and a variety of different indices should be consulted (Tanaka, 1993). The indices used include Chi-square (χ^2), Goodness of Fit Index (GFI) (Joreskog and Sorbom, 1989), Non-normed Fit Index (NNFI) (Bentler and Bonet't, 1980), Comparative Fit Index (CFI) (Bentler, 1990) and Root Mean Squared Residual (RMSR). Table 1 shows major fit measures and guidelines for their acceptable values.

The models can also be evaluated based on the magnitude and the significance of the loading coefficients. These loadings, or parameter estimates, are similar to the reliability measures between a set of indicators and the construct that they measure. The high magnitude and significance of the loadings would further validate the models.

4.1 The measurement model of student satisfaction

Confirmatory Factor Analysis (CFA), which is part of the structural equation modeling (SEM) techniques, can be used to validate a measurement model that specifies the relationship between observed indicators and their underlying latent constructs. The measurement model specifies how latent constructs are measured by the observed variables and it assesses the construct validity and reliability of the observed variables (Joreskog and Sorbom, 1989). CFA is often used to confirm a factor structure known beforehand as is the case with constructs in the study. The measurement model for student satisfaction is shown in figure 2.

Table 2 shows the fit measures for the measurement model of student satisfaction. All the fit indices values as well as the reliability value (cronbach alpha) show very good fit validating the measurement model. The loading coefficients of all the observed indicators onto the hypothesized dimensions were also seen to be significant at 1% level further supporting the validity of the measurement model. Since the research used validated models of reputation and loyalty without any change, they were not revalidated.

4.2 Structural model

The proposed research mode (figure 1) is now tested with SEM using AMOS4.0. The model makes an important assumption about the role of satisfaction variable as a mediating variable between reputation and loyalty. To validate this hypothesis, two variants of this model are proposed. The first model called full model will check for both the direct and indirect effect of reputation on loyalty. The second model called indirect model will not estimate the direct path linking reputation to loyalty thereby assuming a strictly mediating relationship. In conducting a multi model analysis using AMOS the procedure suggested by Ho (2006) is used. The step involves (1) defining the full direct model and (2) defining the indirect model in which the direct path linking reputation to loyalty is constrained to zero. Constraining paths to zero is equivalent to those paths not being estimated.

The fit measures of both the model variants are shown in table 3.

Both the models are fitting the data very well as the fit values in both cases are above the cutoffs for very good fit. In such cases where both models are nested (i.e., they are hierarchical models based on the same data set) and have different degrees of freedom, their goodness-of fit can be directly compared. Looking at the Nested Model Comparisons statistics in Table 4, it can be seen that subtracting the indirect model's chi square value from the full model's chi-square value (32.23-31.93) yields a chi-square difference value of 0.3. With 1 degree of freedom (30-29), this statistic is not significant at the 0.05 level and hence indirect model is preferred. This argument is further supported by the Akaike Criterion Information (AIC) comparison statistics. The indirect model yielded a lower AIC value (82.2) than the full model (83.9), which indicates that the indirect model is both better fitting and more parsimonious than the indirect model. Also, the indirect model has slightly better fit indices values for most of the indices compared to full model. Again, in the full model the loading coefficient on the direct path between reputation and loyalty is seen to be insignificant at 5% level. Therefore, we conclude that although both models fitted the data relatively well, the indirect model represents a significantly better fit than the full model, and is to be accepted.

Figure 3 shows the final model with path loading coefficients significant at 0.05 level.

This model demonstrates the linkages among satisfaction, reputation and loyalty for students at universities in India. This model explained 57.7% of the variance in the student loyalty through the effect of direct antecedent variable student satisfaction and the indirect effect of the second variable, reputation. There is a strong positive correlation between satisfaction score and the loyalty score. This implies that the student satisfaction is a major driver of student's loyalty. The reputation also correlates positively with through an indirect impact of 0.44 (0.759*0.574). This means that a student who has a positive perception about the institution is likely to feel more satisfied which in turn will make him/her more loyal. The dimensions of satisfaction also need to be analyzed to see how student satisfaction can be improved. All dimensions have significant loading onto the satisfaction construct and their order of importance can be read from the magnitude of loading coefficients.

5. Discussion and Conclusion

The research proposed and validated a structural model linking satisfaction, reputation and loyalty for students at universities. The study has limitations with respect to sampling and hence the model can not be generalized across the globe. But findings from the study have great value for academic institutions everywhere.

This study has highlighted the importance of student satisfaction in driving student loyalty. The most important aspect of student satisfaction is seen to be teaching quality and the role of the teaching staff. It is evident that lecturers remained the primary contact of the students for both academic and non-academic issues. The feedback from lecturers, good access to lecturers and quality of teaching are perceived to be the most important variables

influencing student satisfaction. This is consistent with previous literature. McManus (2006) found that educational institutions need to understand student expectations in these areas to provide them with a suitable learning environment. The universities need to adopt non-traditional teaching techniques to cater to the specific pedagogical demands of the course (Davies, 2007). Geall (2000) provides evidence of how feedback to students is important given that interaction with lecturers is considered to be an important part of the learning experience. The universities should continuously review the academic programs in terms of their content and quality and should recognize the contribution made by the academic staff in terms of student retention and satisfaction.

The “social life has emerged as the second most important factor in driving student satisfaction. The counseling services, social activities and close working relationships with other students are considered most important variables within the social construct that influence student satisfaction. Most of the students consider social networking and interaction with the outside world, as a major part of their learning experience. Also, social support from friends and seniors can help the students to handle academic stress better (Dunn,2001). Kohut (1997) identified a number of initiatives that would allow students to interact socially with peers as well as with society at large with a view to enriching their student experience.

The administration plays a major support role to academic environment. Institutions should develop a logical, reasonable and transparent administrative environment to foster academic growth. It is very important that key administrators are drawn from academic and should have excellent administrative skills.

The academic institutions should also realize the importance of a range of support services in increasing student satisfaction. These services include job placement support, hostel, canteen etc. Lack of opportunities for employment can be a source of dissatisfaction for the professional students even when they undergo an excellent academic programme (Burke (1986). The students expect quality accommodation and food to be made available in the campus at reasonable cost. Food and accommodation are rated as important factors influencing student satisfaction (Townley, 2001; Harvey ,2001).

The infrastructural facilities like computer centre and library are also very important. Most courses require the constant use of computers, internet and software applications and the presence of modern and adequate computer and library facilities enhances the satisfaction levels of the students (Rodney Arambewela and John Hall, 2009).

Even if the findings imply that the impact of reputation on student loyalty is indirect, the managers should still focus on reputation management and image building. The reputation of an educational institution may have a lot to do for the attraction of top class teachers which in turn leads to higher satisfaction scores (Lemmink et al., 2003). A high image and the prestige of a university are attractive to students as it is expected that such image and prestige would create better career opportunities for them. Gaining international image and prestige as an educational institution is a long and arduous process requiring a commitment to excellence in the delivery of education, and quality research output (Zabala et al., 2005; Rodney Arambewela and John Hall, 2009).

The increased competition among academic institutions is conferring greater importance to the student loyalty as a way to obtain competitive advantage. This increased competition, which is developing internationally, has led to many universities competing fiercely for students, teaching and research staff. In that context, it is imperative for them to appreciate the strong linkages between student satisfaction, institute reputation and loyalty. The institutions which initiate appropriate measures to improve student satisfaction will be in a better position to face successfully the new reality which will take shape in the near future.

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Table 1. Fit indices and their acceptable values

Indicators of fit	Target Values for very good fit	Target Values for moderate fit
Normed Chi-square (χ^2)	< 3	< 5
GFI	>0.90	>0.80
AGFI	>0.80	>0.70
RMSR	<0.05	<0.10
RMSEA	<0.05	<0.08
CFI	>0.90	>0.80

Table 2. Fit measures for the measurement model

Fit Indices	Student satisfaction
Normed chi square	0.942
GFI	0.972
AGFI	0.917
CFI	0.989
NFI	0.889
RMSR	0.02
Cronbach alpha	0.864

Table 3. Fit measures for the model variants.

<i>Fit measures</i>	<i>Values for the indirect model</i>	<i>Values for the full model</i>
Chi square (χ^2)	32.23	31.93
Normed chi (χ^2 / d.f.) square	1.07	1.10
GFI	0.906	0.908
AGFI	0.828	0.825
CFI	0.981	0.975
RMSR	0.035	0.041
Akaike Criterion Information (AIC)	82.2	83.9

Table 4. Nested model comparison

	DF	Chi square (χ^2)	P
Full model	1	0.30	0.58

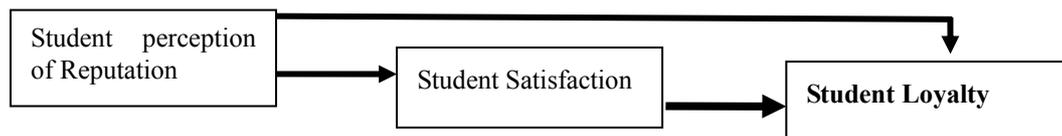


Figure 1. The proposed research model

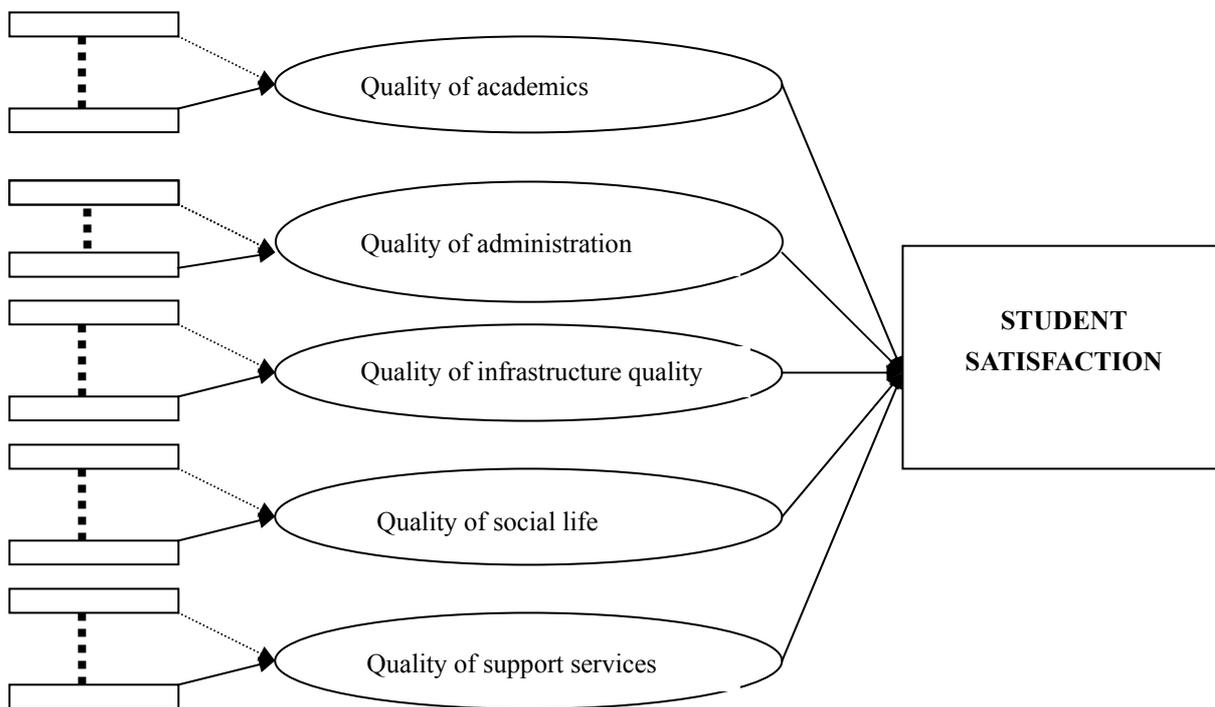


Figure 2. Measurement model for student satisfaction

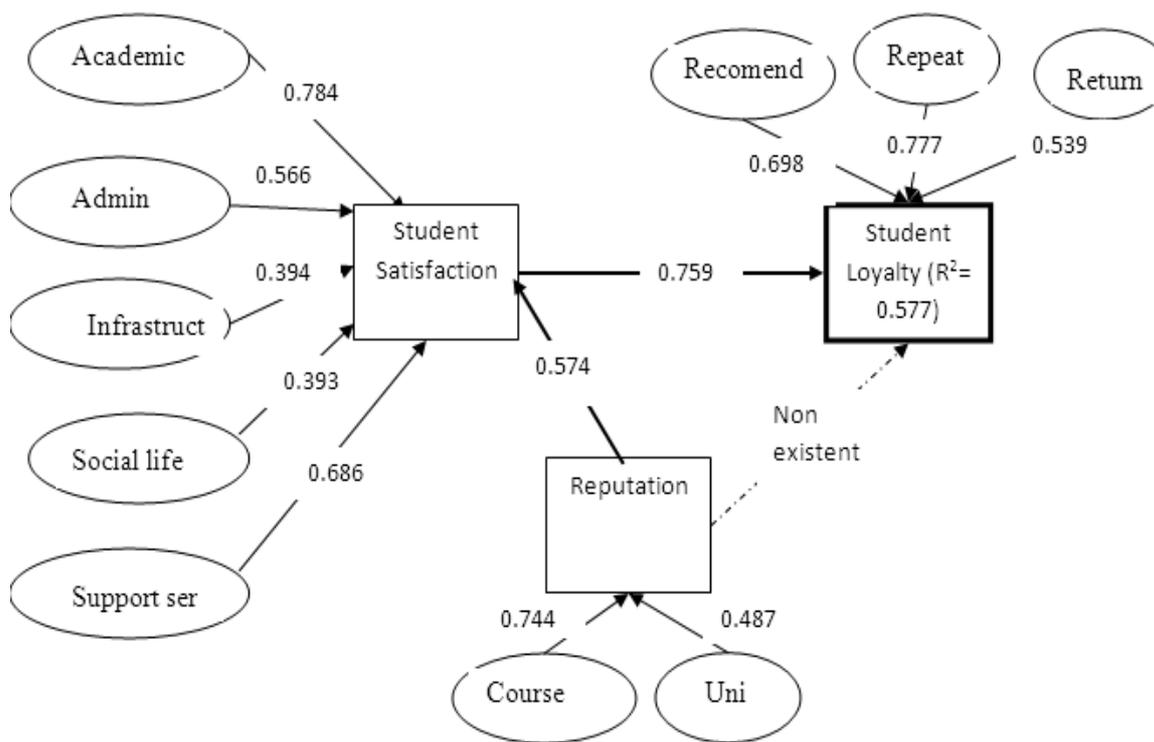


Figure 3. Final model with path loading coefficients