

SERVICE QUALITY IN SCHOOL EDUCATION: A STUDENTS' PERSPECTIVE

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Abstract

The paper aims to study the factors influence student satisfaction in school education. Specifically, four dimensions were focussed: teaching quality, administration quality, infrastructure quality and academic reputation of the institution on students' satisfaction levels. Structured questionnaires were administered among 237 private high school students from different private schools. Exploratory factor analysis with the aid of SPSS 20.0 version was used to analyse the data. Further, multiple regression analysis was performed to test the hypothesised relationships. The findings of the study revealed that teaching quality, administration quality, infrastructure quality and reputation of the institution have a direct positive effect on student satisfaction.

Key words: Academic reputation, Administration quality, Infrastructure quality, Service quality, Student satisfaction, Teaching quality

1. Introduction

With the ever-growing competition in the services sector organizations lay greater emphasis to attract and retain their customers in across different service sectors (Thomas, 2011). Education sector, one of the major services sectors due to the high commercial and competitiveness in nature need to focus on service dimensions for a long term and sustained growth (Poole et al., 2000). Currently, students have a wide range of commercial/private schools to pursue education, indeed service quality plays a critical role (Saravanan L., 2018). Educational institutions need to be more concerned about service quality to better the educational standard and to gain competitive edge (Shutler, 1999). As discussed, service, quality is an important factor for competitive advantage in education sector. However, limited research was conducted in service quality in school education in private sector in India. This study focused to study the impact of various service quality dimensions on student satisfaction.

2. Review of literature and hypothesis development

2.1 Service Quality

Long-term growth and sustainability of a service-based firm highly influenced by the quality of service it renders to its customers. It has a predominant effect on the overall image of the firm, which needs a special consideration. According to Dedeke, A. (2003), service quality represents the capability to meet and exceed the results that the provider and the customer mutually defined and embraced at the beginning of a service encounter. From the preceding descriptions, in this research, students' perceived service quality can be defined as the students' subjective evaluation of the performance level of the services provided by the higher education institution, compared with their expectation level. Service quality in higher education institutions refers to a set of characteristics, dimensions and attributes that relate to the services they provide. The concept of higher education quality can be identified as a set of terms and conditions that should be available in the educational process to fulfil the students' needs and expectations. Service quality is indicated as an essence for establishing and sustaining favourable

relationship with customers and therefore it can be considered as an antecedent to satisfaction according to Bigne, Moliner and Sanchez (2003). In that sense, Elliot and Shin (2002) and Ham and Hayduk (2003) both confirmed the existence of a positive relationship between perceived service quality dimensions and student's satisfaction.

2.2 Student Satisfaction

Satisfaction is defined differently in the services and consumer marketing literature. According to Oliver (1997) customer satisfaction is a pleasurable fulfilment, which means consumers perceive that consumption fulfils some of their need, desire and goal. It is described as consumer sense of outcomes. The satisfaction concept has been extended to the context of higher education. Elliott and Shin (2002) state that student satisfaction being shaped continually by various outcomes and their experiences in campus. Likewise, Richardson (2005) uses various dimensions to measure quality learning environment and student satisfaction. These include student evaluation of teaching, course modules, perceptions of academic quality and student satisfaction. Cronin and Taylor (1992) posits between satisfaction and quality. They study realized that institutions needed to know whether their students satisfied with campus learning environment. They should also aim for higher service quality as a way of increasing student satisfaction.

2.3 Teaching Quality

According to Zeithaml (1988) satisfaction is the resultant outcome of an institutions' administrative as well as educational system's coherent performance. According to Wachtel, (1998) the students' rate their course instructor's performance and his methodology of teaching as the prime indicators in their educational development and successful completion of their studies

because the higher the intellectual ability of the instructor the better will be the students' evaluation (Edstrom, 2008) and, consequently, the more will be the reliability of the teaching staff. Navarro et al. (2005) posited that students evaluate the satisfaction based on teachers' knowledge. Sirgy et al. (2010) examined and concluded that students' satisfaction is influenced by teaching methods and teaching quality. Spoooren et al. (2007) indicated that students evaluate the satisfaction in terms of teachers' intellectual ability and feedback.

Dalton & Denson (2009) revealed that students' satisfaction levels increase with teacher's knowledge and coordination with the students. The quality services offered by educational institutes include lecturer knowledge, class materials, feedback on student assignments and student-lecturer interaction (Hill, Lomas & MacGregor, 2003). From this background, it can be hypothesised that:

H1: Teaching quality has a direct positive effect on student satisfaction

2.4 Administration Quality

According to Zeithaml (1988) satisfaction is the resultant outcome of an institutions' administrative as well as educational system's coherent performance.

Shekarchizadeh (2011) feels that mostly, higher education institutions seek to provide high quality services in their educational curricula and administrative processes. Therefore, the importance of service quality makes its measurement and its subsequent management an issue of utmost importance.

Students' satisfaction can be predicted according to Maimunah, Kaka and Finch (2009) by three factors, namely performance of trainers, services delivery, and support facilities, what is in accordance with Hill Lomas and MacGregor (2003), who found in research on students' service quality experience that the lecturers and the support system are the most significant

predictors of students' satisfaction. Hence, it can be hypothesized that,
H2: Administration quality has a direct positive effect on student satisfaction

2.5 Infrastructure Quality

Students perceived educational institution's quality in terms of conducive atmosphere for learning and infrastructural facilities (Aldridge and Rowley, 2001). According to Aldridge and Rowley (2001), when students perceive the institutions' quality and standardized learning environment facilitated intellectual progress and that appropriate facilities of learning and infrastructure, are provided, their interest in their organization will explicitly be retained. Sohail and Shaikh (2004) specified that physical environment, layout, lighting, classrooms, appearance of buildings and cleanliness has a significant impact on quality of education and student satisfaction. According to Maimunah, Kaka and Finch (2009); Hill Lomas and MacGregor (2003), support facilities has a significant impact on customer satisfaction. Therefore, it can be hypothesized that,
H3: Infrastructure quality has a direct positive effect on student satisfaction

2.6 Academic reputation

Good reputation supports the long-term sustainability, performance and growth of the firm (Deephouse, 2004). According to Angell (2008), Good reputation of the educational institution is one of the most important aspects of service. Service quality is influenced by academic reputation (Joseph and Joseph, 1997; Vidaver-Cohen, 2007). Gibson (2010), remarked that student satisfaction is influenced academic reputation. Academic reputation of the institution affects student satisfaction as well as his/her performance. Thus, it can be hypothesized that,

H4: Academic reputation of the institution has a direct positive effect on student satisfaction

3. Research methodology

3.1 Sample Selection

Students who study in private schools from eighth to tenth standard were considered for the study. A total number of 237 students were taken randomly from four different private educational institutions were self-administered the questionnaires. To increase the response rate, the students were approached in the classrooms with the prior permission from the school principal.

3.2 Tools and techniques for Data Analysis

The data were analysed using SPSS 20.0 version. Demographic details were analysed using percentages and averages. The factors were extracted using exploratory factor analysis; later the hypotheses were tested using multiple regression analysis.

4. Data analysis results

4.1 Demographic details of the respondents

Among the 237 respondents, 54.4 percent were male and 45.6 percent of the respondent were female. The demographic details of the respondents are listed in table 1.

Insert table 1

4.2 Factor Analysis

Exploratory factor analysis is a data reduction performed in order to reduce data. The data were reduced into 25 items and five factors were identified. Scale reliability value was 0.87, which was well the prescribed value (Hair *et.al.*, 1995). Kaiser-Meyer-Olkin value for sample adequacy was found to be 0.832 above the suggested value, i.e. 0.70, and Bartlett's test value was significant.

Insert table 2

4.3 Multiple Regression Analysis

The model was found to be significant with $p < 0.001$ and the model explains 68.3 percent variance. In other words, the variables, teaching quality, administrative quality, infrastructure quality and academic reputation of the school explain 68.3 per cent of variance in student satisfaction ($R^2 = 0.683$ and Adjusted $R^2 = 0.679$). ANOVA results show that the model is significant at 0.001.

Insert table 3, 4 & 5

5. Hypothesis Testing Results

H1: Teaching quality has a direct positive effect on student satisfaction

Results of the regression analysis show that student satisfaction can be estimated by quality of teaching. Standardised β value is 0.387 and P value is significant at 0.05 level of significance, which means teaching quality positively influences student satisfaction. Hence, H1 is accepted.

H2: Administration quality has a direct positive effect on student satisfaction

Results of the regression analysis show that student satisfaction can be predicted by quality of administration. Standardised β value is 0.214 and P value is significant at 0.05 level of significance, which means administration quality positively influences student satisfaction. Hence, H2 is accepted.

H3: Infrastructure quality has a direct positive effect on student satisfaction

Results of the regression analysis show that student satisfaction can be estimated using infrastructure quality. Standardised β value is 0.317 and P value is significant at 0.05 level of significance, which means infrastructure quality positively influences student satisfaction. Hence, H3 is accepted.

H4: Academic reputation of the institution has a direct positive effect on student satisfaction

Results of the regression analysis show that student satisfaction can be predicted by the academic reputation of the institution

(school). Standardised β value is 0.293 and P value is significant at 0.05 level of significance, which means reputation of the school positively influences student satisfaction. Hence, H4 is accepted.

6. Conclusion

The study examined the various factors influence students' satisfaction in education sector. For this purpose, a conceptual model was developed, and the relationships were tested. The regression model significantly explains the variation in the outcome variable i.e. student satisfaction. The results revealed that teaching quality and academic reputation has a strong positive impact on student satisfaction, whereas administration quality and infrastructure quality have a low to moderate direct relationship with student satisfaction. The study is cross sectional in nature, however longitudinal research may yield more insights. Sample size is a major constraint in the study, research with a larger sample size could be taken up in future.

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Figure 1: Conceptual framework

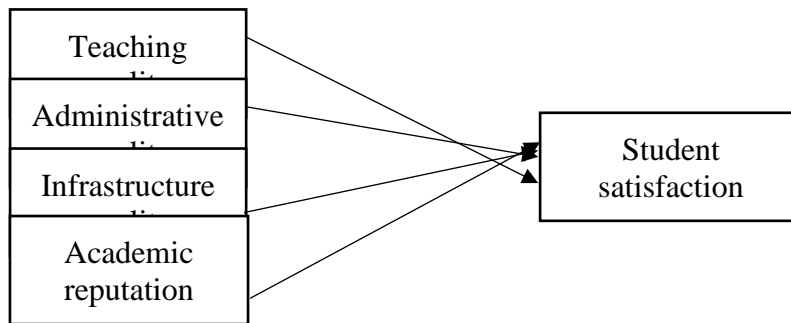


Table 1: Demographic Details

Variable	Category	Frequency	Percentage (%)
<i>Gender</i>	Male	129	54.4
	Female	108	45.6
<i>Age (Yrs.)</i>	13	48	20.3
	14	87	36.7
	15	98	41.4
	16	4	1.6
<i>Educational Qualification</i>	8 th standard	59	24.9
	9 th standard	83	35.0
	10 th standard	95	40.0
<i>Total</i>		237	100

Source: Primary Data

Table 2: Items and their loadings

Construct	Statement / item	Factor loading	Cronbach's Alpha
<i>Teaching quality</i>	The teachers are well educated and experienced (qualified)	0.721	0.814
	Teachers have the knowledge to answer my questions relating to the course content.	0.823	
	Teachers deal with me in a caring and courteous manner	0.857	
	Teachers provide feedback about my progress.	0.912	
	Teachers communicate well in the classroom	0.829	
	Teachers engage the students well in the classroom	0.791	
<i>Administration quality</i>	Administrative staff show equal treatment and respect for all students	0.834	0.857
	Administrative staff provides service within reasonable time	0.902	
	Administrative staff deal with inquiries/complaints efficiently and promptly.	0.893	
	When the staff promise to do something by a certain time, they do so.	0.927	
	Administrative staff communicate well with students.	0.889	
		0.742	

	Administrative staff have good knowledge of the systems/procedures.		
<i>Infrastructural quality</i>	The school has an attractive campus layout and appearance	0.827	0.829
	The institution has a professional appearance/image.	0.752	
	The school has excellent sports and recreational facilities	0.769	
	The physical facilities are visually appealing, (i.e. building and surroundings)	0.847	
	The school has excellent campus layout and appearance.	0.865	
<i>Academic reputation</i>	The first thing that I look for is the academic reputation of the institution.	0.734	0.743
	Attending a school with a good reputation is the most important factor.	0.702	
	The institution has a high academic reputation	0.788	
<i>Student satisfaction</i>	I am satisfied to study in this school	0.917	0.892
	My choice to study in this school is wise	0.834	
	I feel bad about my decision to enroll in this school	0.772	
	I think I did the right thing to join in this school	0.802	
	I am happy that I enrolled in this school	0.845	

Table 3: Regression model results

Model	R	R ²	Adjusted R ²	SE of the estimate	Durbin-Watson
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1 0.827^a 0.683 0.679 0.492 2.005

Notes: ^aPredictors: teaching quality, administration quality, infrastructure quality, academic reputation

Table 4: ANOVA results

Model		Sum of squares	df	Mean square	F	Significance
1	Regression	221.657	4	55.414	122.869	0.000 ^b
	Residual	101.482	225	0.451		
	Total	323.139	229			

Table 5: Multiple regression coefficients and P values

	Standardized coefficients β	t-Value	P-Value
Teaching quality → student satisfaction	0.387	5.342	0.000
Administration quality → student satisfaction	0.214	5.125	0.001
Infrastructure quality → student satisfaction	0.317	4.238	0.001
Academic reputation → student satisfaction	0.293	3.429	0.005

Questionnaire items

Construct	Statement / item	
<i>Teaching quality</i>	The teachers are well educated and experienced (qualified) Teachers have the knowledge to answer my questions relating to the course content. Teachers deal with me in a caring and courteous manner Teachers provide feedback about my progress. Teachers communicate well in the classroom Teachers engage the students well in the classroom	Abdullah, 2006; Brochado, 2009; Angell 2008
<i>Administration quality</i>	Administrative staff show equal treatment and respect for all students Administrative staff provides service within reasonable time Administrative staff deal with inquiries/complaints efficiently and promptly. When the staff promise to do something by a certain time, they do so. Administrative staff communicate well with students. Administrative staff have good knowledge of the systems/procedures.	Abdullah, 2006; Brochado, 2009
<i>Infrastructural quality</i>	The school has an attractive campus layout and appearance The institution has a professional appearance/image. The school has excellent sports and recreational facilities The physical facilities are visually appealing, (i.e. building and surroundings) The school has excellent campus layout and appearance.	Joseph, 1997; Yousapronpaiboon, 2014; Brochado, 2009; Angell 2008
<i>Academic reputation</i>	The first thing that I look for is the academic reputation of the institution. Attending a school with a good reputation is the most important factor. The institution has a high academic reputation	Joseph, 1997; Angell 2008
<i>Student satisfaction</i>	I am satisfied to study in this school My choice to study in this school is wise I feel bad about my decision to enroll in this school I think I did the right thing to join in this school I am happy that I enrolled in this school	Adee Athiyaman, 1997