

# **Engineering Student Satisfaction in Private and Public Universities in Bangladesh**

Samia H. Mazumder  
University of Michigan-Flint  
Flint, MI 48502, USA  
Email: smazumde@umflint.edu

## **Abstract**

To compare and contrast the quality of higher education in public and private universities of Bangladesh, a study was conducted to evaluate student satisfaction in these institutions. The study used a modified Noel-Levitz student satisfaction survey, consisting of 22 questions which measured student satisfaction levels in four different areas: faculty, curriculum, resources, and campus environment. The survey also measured the overall satisfaction level of the student with the institution.

Data collected from different private and public universities showed the overall satisfaction level to be higher among private university students than public university students. Students from private universities are more satisfied with the curriculum, whereas students from public universities are more satisfied with campus environment and support systems. The analysis results showed different areas of concerns among students of private and public universities. Students' from private universities are least satisfied with weekend activities whereas students from public university are least satisfied with teachers' understanding of unique life situation of each student as well as fair and unbiased treatments towards them.

## **Keywords**

Student satisfaction, Noel-Levitz, quality in education, engineering education

## **Introduction and Background**

Institutions across the globe are currently facing challenges with the quality of higher education at their institutions. A study was conducted that explored the perceptions of importance and satisfaction in the areas of academics, academic support, personal growth and collegiate services. [1] Upon completion, it was concluded that the quality of education in higher education institutions is directly dependent on the level of student satisfaction at these institutions. In order to improve the quality of higher education, institutions must improve student satisfaction levels by their quality of teaching, variety of courses offered, interactions with faculty out of class, quality of academic advising and assessment of knowledge.

To measure the level of student satisfaction in higher education institutions, a myriad of methods have been employed including student feedback questions (SFQ), students' evaluations of educational quality (SEEQ), course experience questionnaire (CEQ), SERVQUAL, and Noel-Levitz surveys [2]. Acting upon feedback from students that complete the satisfaction measures, it has been found that students, who constitute the primary and arguably the most important stakeholder of the education system, has in fact a long history in the quality endeavor of higher education throughout the world.

By employing instruments with established reliability and validity, formal student surveys can provide a credible and cost-effective means to conduct a census of student opinions through surveying the student population. The implementation of formal student surveys allows quality issues to be tackled from different perspectives and constitute a useful reference framework for educational institutions in the design of their internal quality monitoring mechanisms. Upon the analysis of multiple student-based satisfaction surveys, the most important aspect of higher education is the quality of instruction and faculty knowledgeability [3]. In terms of performance gaps for most higher-education intuitions, financial aid availability and higher-education practices seem to remain problematic. For other, select, institutions, different kinds of quality gap (the understanding gap, the design gap, the delivery gap and the communication gap) are identified, and the most important gap is evidenced to be the one between customer expectations of the service and customer perceptions of the survey actually delivered.

The comparison between the quality of education in public and private universities in India suggested that the popularity of fee-charging private schools in India (Uttar Pradesh district) is explained by their superior quality [4]. The methods used to measure the quality of education in this study differ from the previously stated student-satisfaction survey approach. It is instead measured by student achievement in the Indian economy, such as finding a stable job. The quality and cost-efficiency of government-funded schools in India need to be greatly improved and would ultimately lead to gains in higher-education efficiency as these institutions are both more technically efficient and more cost-efficient.

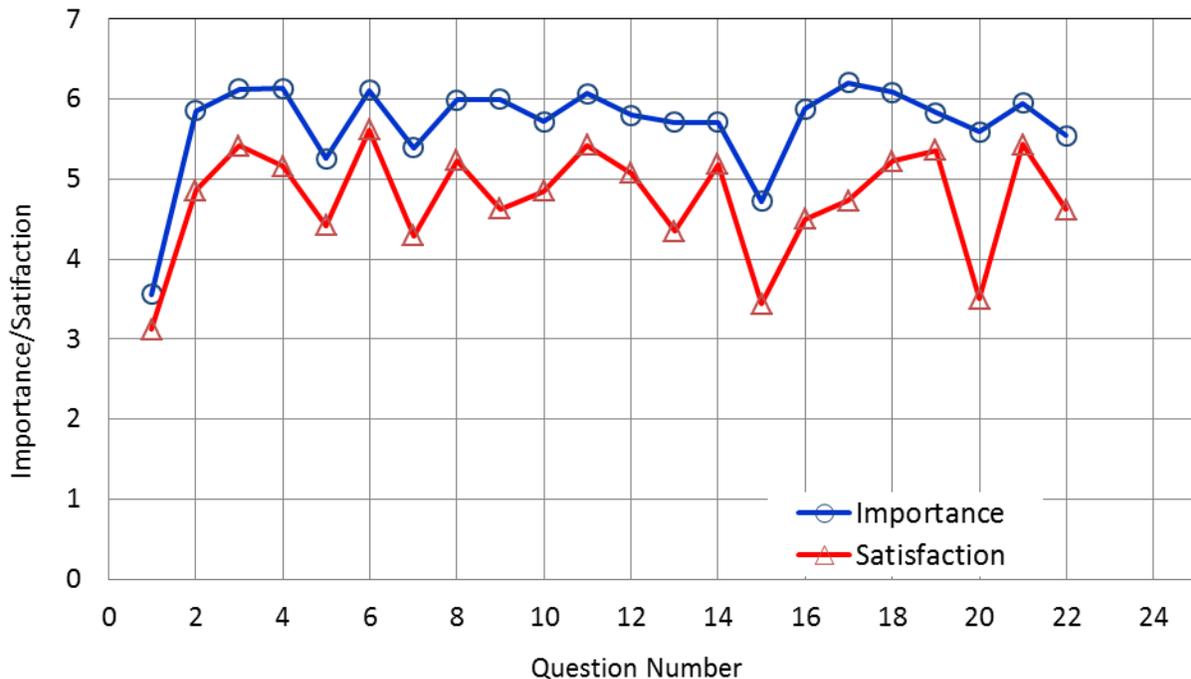
A similar study was conducted with the University of Bari in Italy [5]. Quality of service could be tested by assessing student satisfaction by comparing the quality expected, quality provided, and quality perceived. The quality of service in this institution was measured by students through SRT, the student rating of teaching. With regards to student satisfaction, the main factors which give rise to a positive judgment are a good response to the student needs in general. The dissatisfied students identified their disappointment with bad organization, poor administrative services, tutoring placement, international relationship, counseling and free language courses. The two main areas in which universities ought to concentrate their efforts, as evidenced by this study are the improvement of quality of teaching and not teaching services and a stronger relationship with local economies and productive systems, in order to respond to the demand for training and competence. Because demand is at such a high level, higher education institutions must address social expectations as well as the overall quality of teaching in order to improve the quality of higher education.

## Methods:

The current study uses a modified Noel-Levitz student satisfaction survey to the high validity and acceptance of this widely used instrument. The survey consisted of 22 questions divided into four different categories – curriculum, instruction, extracurricular activities and university service. This study analyzed 230 survey responses of which 98 were collected from a private university (AUST) and 132 responses were collected from a public university (CVASU). The survey responses were collected from students ranging from first-year to fourth-year and male and female to assure accurate and representative data. The hypothesis employed in this study was that private university held a higher quality, as perceived by students, compared to public universities. This study also identifies the areas where highest differences (gap) exist between the importance and satisfaction based on the students' survey responses. This information is important as the highest gap areas can be used by institutions to prioritize areas of improvement needs.

## Results and Discussion:

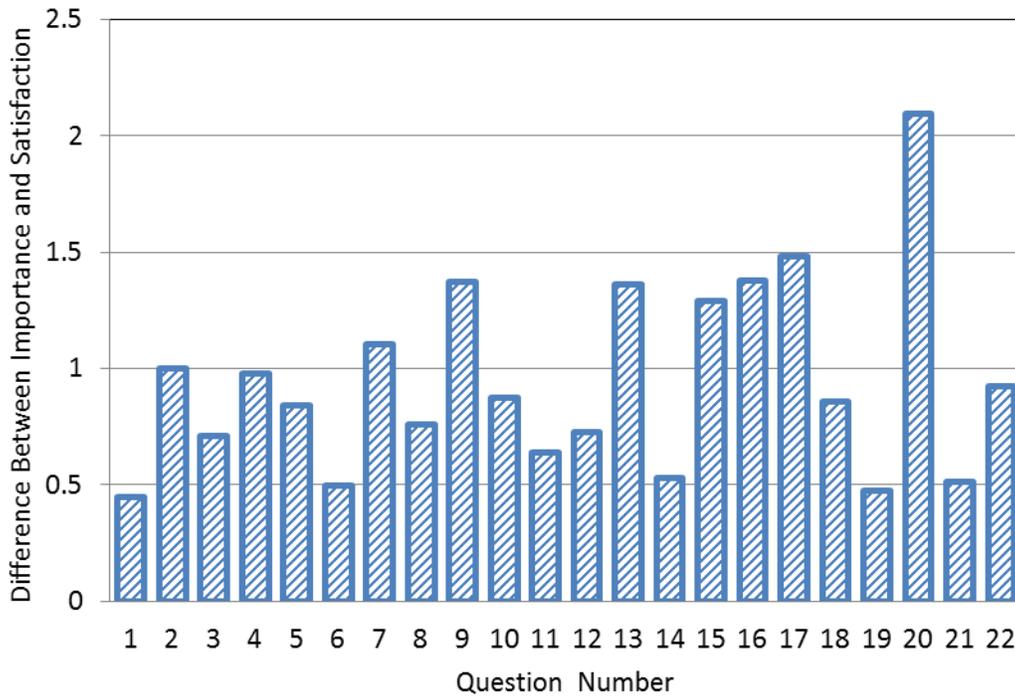
The survey responses were analyzed by averaging the importance of each question for all students. Similarly satisfaction responses were also averaged for each question. The average responses for each question are presented in Figures 1-4.



**Figure 1: Comparison of Importance and Satisfaction in a private university (AUST)**

The source of greatest student satisfaction, as evidenced by Figure 1, is found in question numbers 6 (“teachers are usually available after class and during office hours”), 19 (“I feel a

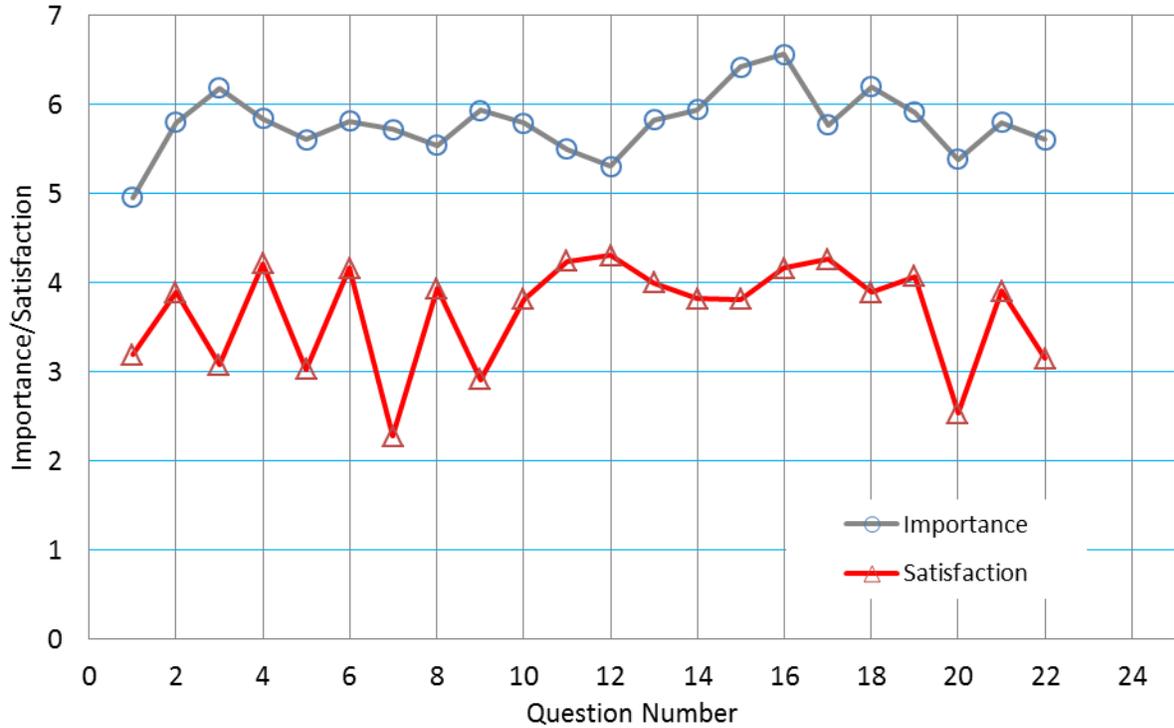
sense of pride about my campus”) and 21 (“Males and females have equal opportunities to participate in intercollegiate activities”).



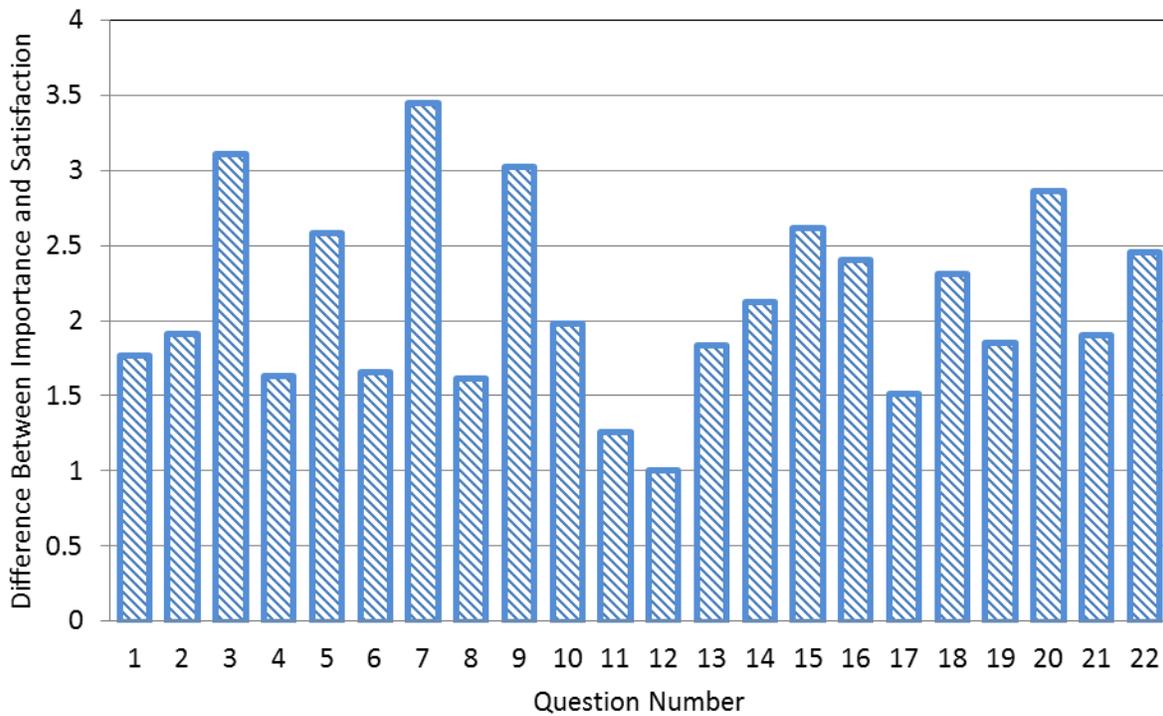
**Figure 2: Difference between importance and satisfaction in a private university (AUST)**

Analysis of gap between importance and satisfaction can be used as an indicator for student satisfaction level. For example, if students’ perceived a specific item to be very important to them and they are less satisfied, the gap will be larger. Figure 2 shows the gap between importance and satisfaction among engineering students in a private university. The largest gaps are observed in question nos. 9, 13, 16, 17, and 20. Students are least satisfied with weekend activities available to them (Q20) followed by religious activities (Q17), library resources (16), support from university staff (Q13) and lack of opportunity for intellectual growth (Q9)

Figure 3 and 4 shows the average importance and satisfaction of students in a public university. The gap between importance and satisfaction appears to be higher in Figure 3 compared to Figure 1. The gap between importance and satisfaction is highest in question 7 followed by 3, 9 and 20. Question 7 is related to teachers understanding of students’ unique life situation where students are least satisfied. Public university students also showed lower satisfaction in unbiased treatment of teachers. Question 9 and 20 are common in both public and private universities.



**Figure 3: Comparison of Importance and Satisfaction in a public university (CVASU)**



**Figure 4: Difference between importance and satisfaction in a public university (CVASU)**

## Summary and Conclusion:

A study was conducted to evaluate the quality of education between private and public universities in Bangladesh. The study used a modified Noel-Levitz student satisfaction survey and collected responses from engineering students from one public and one private universities of Bangladesh. The survey responses were averaged for each question and plotted to determine the gap between importance and satisfaction for each of the twenty two questions.

The analysis of results showed that private university students are least satisfied with availabilities of weekend activities whereas, public university students are least satisfied with teachers and expects teachers to understand and consider unique life situation of students' as well as fair treatment from the teachers.

Overall the study was able to identify the key areas of concern as evidenced by lower level of satisfaction in some areas. The institutional leaders can address these issues to improve the level of student satisfaction that may positively influence the academic environment that is critical to improving quality in higher education.

## Acknowledgement:

Thanks to Dr. Quamrul Mazumder and Dr. Murali Mani of University of Michigan-Flint for their guidance towards this research. These research activities are supported by University of Michigan-Flint Undergraduate Research Opportunities Program (UROP) sponsored by Office of research.

## References

- [1] De Lourdes Machado, Maria, Rui Brites, António Magalhães, and Maria José Sá. "Satisfaction with Higher Education: Critical Data for Student Development." *European Journal of Education* 46.3 (2011): 415-32. Print.
- [2] Law, Dennis Chung Sea. "Quality Assurance in Post-secondary Education: The Student Experience." *Quality Assurance in Education* 18.4 (2010): 250-70. Print.
- [3] "Quality, Access and Service Remain Top Priorities for Most Students." *Noteworthy News* [Iowa City] 11 Oct. 2001, 18th ed., sec. 17: 14. Print.
- [4] Kingdon, Geeta. "The Quality and Efficiency of Private and Public Education: A Case-study of Urban India." *Oxford Bulletin of Economics and Statistics* 58 (1996): 57-82. Web.
- [5] Petruzzellis, Luca, Angela Maria D'Uggento, and Salvatore Romanazzi. "Managing Service Quality: Student Satisfaction and Quality of Service in Italian Universities." *Emerald* 16.4 (2006): 349-64. Web.
- [6] Elliott, Kevin M. "Key Determinants Of Student Satisfaction." *Journal of College Student Retention: Research, Theory and Practice* 4.3 (2002): 271-79. Print.
- [7] Husain, Fawad, Suhaiza Hanim, Yudi Fernando, and Mostafa Nehati. "Education Service Delivery and Students' Satisfaction: A Study of Private Colleges in Malaysia." *Global Business and Management Research: An International Journal* 1.1 (2009): 64-72. Web.

- [8] Uddin, Muhammad Naseer, Ali Murtaza, and Faridullah Khan. "Comparative Study of Quality of Education in Public and Private Secondary Schools in NWFP." *Interdisciplinary Journal of Contemporary Research in Business* 2.10 (2011): 416-28. Web.

### **Appendix: Survey Questions**

- 1 Teachers care about me as an individual
- 2 The instruction in my field is excellent
- 3 Teachers are fair and unbiased in their treatment of individuals
- 4 Teachers provide timely feedback about student progress in a course
- 5 Teachers take into consideration student difference as they teach a course
- 6 Teachers are usually available after class and during office hours
- 7 Teachers understand of students' unique life/situation/circumstances
- 8 The content of the courses with my courses is valuable
- 9 I am able to experience intellectual growth here
- 10 The assessment and course placement procedures are reasonable
- 11 There is a commitment to academic excellence on this campus
- 12 Cost is a factor in decision to admission/enroll
- 13 The campus staff is caring and helpful
- 14 Residence hall regulations are reasonable
- 15 Computer labs are adequate and accessible
- 16 Library resources and services are adequate
- 17 Religious activities are up to mark
- 18 On the whole, the campus is well-maintained
- 19 I feel a sense of pride about my campus
- 20 There are a sufficient number of weekend activities for students
- 21 Males and females have equal opportunities to participate in intercollegiate activities
- 22 I can easily get involved in campus organizations/activities