

STUDENT SATISFACTION WITH SERVICE QUALITY IN HIGHER EDUCATION INSTITUTIONS: AN ANALYTICAL REVIEW

Aaradhya Srivastava* and Anoop Beri**

Purpose: The main objective of present paper is to critically analyze the literature for exploring the development of the concept of student satisfaction, evolved from customer satisfaction and embedded in service quality literature. The present paper would present a holistic view of the determinants of student satisfaction within HEIs. This review paper would provide a clear insight on the earlier and recent approaches of student satisfaction. The paper also analyzed the student satisfaction models (conceptual /empirically tested) till date for evaluation of student satisfaction in HE context.

Design/Approach: The paper critically examines past researches in the literature, exploring the determinants of student satisfaction.

Findings: The reviews of past researches on student satisfaction revealed various approaches for the study of student satisfaction like expectancy disconfirmation paradigm, satisfaction indices and GAP analysis model (or SERVQUAL), out of which SERVQUAL is most widely used. Several service quality factors are found influencing the student satisfaction, but none of them is widely accepted. Still there is need to incorporate more aspects in evaluating student satisfaction.

Research implications: This review paper would provide service marketing literature an understanding of the individual variables that intertwined to make-up the higher education students experience satisfactory with the HEIs. It developed a linkage between student satisfaction and service quality and provided scope for further growth and development of the concept of student satisfaction.

Practical implications: This review paper can be of great help to the researchers and to the management of HEIs in enhancing student satisfaction by examining its determinants and ensuring their availability within HEIs.

Originality/Value: This paper provides new insight in student satisfaction enhancement measures in higher education context. It explores issues in student satisfaction within HEIs and provides help to researchers in providing directions for further research in this area.

Keywords: Service quality, Student satisfaction, Higher education institutions (HEIs)

In the present era of globalization, students have a lot many of choices regarding the selection of HEIs for tertiary education. The motivated youth seek the best education they afford anywhere in the world. The competition is continuously increasing in the educational field posing the challenges of ensuring quality in universities. As students are the direct recipients of the facilities and services of the universities. If they are satisfied then, their education can be taken-up as quality

* Research scholar, Faculty of education, Lovely Professional university, Phagwara, Punjab, E-mail: aaradhya.bhu@gmail.com

** Associate Professor, Faculty of education, Lovely Professional university, Phagwara, Punjab, E-mail: anoop.16085@lpu.co.in

education. Many researchers reported student satisfaction as major driver for student loyalty (Kumar & Yang, 2014). By focusing on student satisfaction university management can monitor quality for handling student's expectations effectively. Thus, it is necessary to explore the determinants of student satisfaction within HEIs.

SERVICE QUALITY IN HIGHER EDUCATION RESEARCH

There are two most popularly used measures independent of service context, like SERVQUAL and SERVPERF in any service-industry context. In case of educational services, its consumers participate in the service delivery process. Thus, it would be appropriate to evaluate the performance of HEIs with SERVQUAL, a service marketing instrument (Shostack, 1977).

SERVQUAL (Parashuraman *et al*, 1988) is most widely used tool for measuring service quality among different tools proposed by researchers. Although SERVQUAL is most widely used in a range of service organizations and also its several adaptations has been used by researchers in different service sectors, considerable criticism have been raised regarding the instrument reliability and validity (Cronin & Taylor, 1994). In responses to these criticisms, researchers developed alternative approaches to measure service quality like SERVPERF (Cronin & Taylor, 1992). SERVQUAL utilized disconfirmation paradigm while SERVPERF used an attitudinal paradigm. The literature revealed that SERVPERF is most suited for assessing the predictive validity of service quality while SERVQUAL for diagnosing service pitfalls.

THE RELATIONSHIP BETWEEN SERVICE QUALITY AND STUDENT SATISFACTION

In earlier decades, the constructs of satisfaction and service quality have been used interchangeably and it caused difficulties in defining these constructs and exploring the causal directions of their relationships. Application of the concept of service quality in educational institutions has been suggested by many researchers. Past researches based on SERVQUAL in higher education sector confirmed the positive influence of service quality on student satisfaction. Parashuraman *et al* (1988) considered the directions of causality from satisfaction to service quality. Cronin & Taylor (1992) conducted empirical researches and concluded service quality as an antecedent of satisfaction. Rust and Oliver (1994) stated that satisfaction measurement was based on several dimensions and service quality is one of them. The student satisfaction approach goes along with the continuous improvement of service quality (Harvey, 1995). However, it was explored that satisfaction is a multidimensional concept and should be operationalized differently than service quality (Sureshchander *et al*. 2002).

THEORETICAL FRAMEWORK OF SATISFACTION

In the due course of the development of the concept of satisfaction, different theories/ approaches based on some standards have been postulated. The following section overviews the earlier & recent foundations of satisfaction.

I) Earlier approaches to the study of satisfaction:

1. **Assimilation theory:** It was introduced by Anderson (1994). The theory states that the consumer makes some kind of post-usage evaluation about the product's performance. If the product's performance does not meet the consumer's expectation/ perceptions then, discrepancy arises which may be called as dissonance or negative disconfirmation.
2. **Contrast theory:** It was introduced by Hovland *et al.* (1957). It postulates that post-usage evaluation by the customer gives predictions in opposite directions for the expectations' effect on the satisfaction, leading to a surprise effect.
3. **Assimilation-contrast theory:** It is amalgamation of both assimilation and contrast theories. It explains satisfaction as a function of discrepancy involving expectations and perceived performance. If the discrepancy is relatively small, then, it would be assimilated but if it is not assimilated, then contrast effect occurs (Payton *et al.*, 2003).
4. **Negative theory:** It was introduced by Anderson (1994). It postulates that if the customer has strong expectations then consumer will respond negatively to both circumstances i.e., dissatisfaction would result if perceived performance is either less than or greater than the expectations.

II. Recent approaches to the study of satisfaction

1. **Expectancy-Disconfirmation paradigm:** Expectancy theory was developed by Oliver (1980) and it is the most acknowledged conceptualization of customer satisfaction. It explained satisfaction as expected and perceived product performance difference.
2. **Value-percept theory:** According to this theory, satisfaction is an emotional reaction and also, explained that customers may be satisfied by products and services for which expectations never existed.
3. **Equity theory:** As per equity theory, individual compares their input/output ratio with others and satisfaction exists when consumer perceive their output/ input ratio as being fair.
4. **Satisfaction Indices:** The meaning of satisfaction varies from different products and services point of view. Thus, many organizations used standards for comparing consumer satisfaction which includes the following:

- (a) **ACSI:** It assumes that consumer's experiences influences the evaluation of quality and predicts the performance of that particular product or services. In ACSI model, the perceived quality is the degree a particular product and/or service fulfills the expectations of customers.
 - (b) **ECSI:** This framework includes the core concepts of reputation, expectation, perception quality, perception value, satisfaction and loyalty.
 - (c) **SAS:** It is based on the ACSI & ECSI indices.
5. **GAP Analysis Model:** It was developed by Parashuraman et al.(1985). GAP analysis states that the gaps in customer experiences and expectations direct the consumers' perceptions to enhance satisfaction, which is important for policy performances.

THE CONCEPTUALIZATION OF STUDENT SATISFACTION

Higher education institutions consider students as the major stakeholders or customers of higher education programs and services (Ravindran & Kalpan, 2012). Earlier the concept of satisfaction was mainly concerned with customer satisfaction. The first and foremost concept of student satisfaction was taken from the Parashraman's work, popularly known as SERVQUAL or the GAP model, based on confirmation of consumer's expectations. Appleton-Knopp & Krentler (2006) confirmed the adequacy of GAP model in predicting student satisfaction at the end of semester however, it has little predictive power prior to educational experience.

The second concept for student satisfaction has been taken from Herzberg's two factor theory of motivation (Herzberg et al, 1967). The theory states that factors causing satisfaction are different from those causing dissatisfaction. Satisfiers are under the self-control whereas dissatisfiers are the part of the environment.

Kano (1984) has given the third concept for student satisfaction as the author further extended the categorization of satisfaction causing factors into three groups of dissatisfiers or must be factors, satisfiers or more is better factor and delighters. Although there are several approaches for measuring student satisfaction, yet it is quiet difficult to measure this construct. Many researchers explained the value of service quality in driving student satisfaction. Satisfaction construct is well rooted and eventually evolved from the theoretical foundation of service marketing literature. If we take into consideration the expectancy-disconfirmation paradigm in higher education, then, satisfaction can be explained as student's perceptions meeting or exceeding their expectations.

DISCUSSION

Earlier satisfaction has been explored in marketing literature; not much attention has been given in the area of student satisfaction. Past studies on student satisfaction have been done in developed countries context. There is an increasing emphasis

TABLE 1: STUDENT SATISFACTION WITH SERVICE QUALITY DIMENSIONS IN HIGHER EDUCATION RESEARCH AS IDENTIFIED BY VARIOUS RESEARCHERS

<i>S. No</i>	<i>Researchers</i>	<i>Theoretical approach/measure to study student satisfaction</i>	<i>Findings of the studies(Satisfaction with service quality dimensions)</i>
1	Kitcharoen (2004)	modified IPA model (Integration of SERVQUAL & IPA models)	Students' satisfaction was significantly explained by age, tangible importance, empathy importance, reliability performance, and empathy performance.
2	Thomas and Galambos (2004)		Student satisfaction is significantly influenced by precollege attitude as well as campus experiences.
3	Arambewela and Hall (2006)	Modified SERVQUAL	All SERVQUAL constructs had an impact on student satisfaction, tangibles construct was the most significant.
4	Jurkowitz, Vignali & Kaufmann (2006)	Relationship marketing approach	Student satisfaction consisted of two components of students learning experiences: Teaching and Factors of university experiences.
5	Keok and Thong (2007)	SERVQUAL-TRANS instrument	Significant positive relation was found between satisfaction and contributing factors including course-curriculum, tangibles and leadership.
6	Zhang <i>et al.</i> (2008)	student satisfaction model, based on ECSI	Researchers proposed CSI, using the theoretical framework of ASCI and ECSI models. CSI model possess strong applicability in higher education setting.
7	Bagchi (2010)	GAP Model & QFD approach	QFD was found suitable for delivering student satisfaction in higher education context.
8	Butt and Rehman(2010)	Student satisfaction(Likert scale).	Factors like teacher's expertise, courses offered, study environment and facilities of classroom were found positively influencing to the student's satisfaction.
9	Moro-Egido & Panades (2010)	student opinion survey	Decision to do job while studying emerged as a key determinant of student-satisfaction.
10	Thiuri (2010)	GAP Model	The results showed that Academic services are found as the important predictor of student satisfaction.
11	Vaniarajan & Vijayadurai (2010)	modified SERVPERF scale	The results confirmed service quality as a strong predictor of student satisfaction.

contd. table 1

S. No	Researchers	Theoretical approach/measure to study student satisfaction	Findings of the studies(Satisfaction with service quality dimensions)
12	Arshad <i>et al.</i> (2011)	modified SERVQUAL model	All the five SERVQUAL dimensions are found as significant predictor of service quality for the business institutes.
13	Dimas <i>et al.</i> (2011)	Satisfaction indices	Students considered image as the high importance criterion and the study program, academic staff, administrative services and equipment (Tangibles) of low importance criteria.
14	Hanaysha, Abdulla, & Warokka (2011)	adopted SERVQUAL	SERVQUAL dimensions were found correlated with student satisfaction
15	Hotami and Yuruk (2011)	expectancy-disconfirmation paradigm	Study explored stream-wise differences in student satisfaction levels.
16	Jalali <i>et al.</i> (2011)	SURVEY QUESTIONNAIRE	Academic-related activities found more important than non-academic activities in determining student satisfaction.
17	Khan <i>et al.</i> (2011)	SERVQUAL	Reliability, Assurance Responsiveness and Empathy have significant positive relation with satisfaction while Tangible (physical appearance of institution) was having an insignificant relation.
18	Lim, Yap & Lee(2011)	IPA(P-1)	Explored that ethnicity determines the international students choice of factors in selecting Malaysia as a host country for higher education.
19	Sumaedi <i>et al.</i> (2011)	Questionnaire	Student satisfaction is positively influenced by perceived quality and perceived price.
20	Arokiasamy and Abdulla (2012)		The satisfaction level at higher learning institutions in Malaysia were found to be correlated with the service quality offered.
21	Dadoa, Petrovicovaa and Rajicc (2012)	SERVQUAL	Study explored that service quality is indirectly related to behavioral intentions, through satisfaction.
22	Faruky, Uddin and Hossain (2012)	LIKERT SCALE	Faculty credentials are found as the most influential factor affecting the student's satisfaction of the private universities in Bangladesh.
23	Ibrahim <i>et al.</i> (2012)	Scale (based on literature review)	Students in public institutes are more satisfied with the services that they received compare to private institutes

contd. table 1

S. No	Researchers	Theoretical approach/measure to study student satisfaction	Findings of the studies(Satisfaction with service quality dimensions)
24	Mustafa <i>et al.</i> (2012)	Disconfirmation paradigm	Student satisfaction is directly influenced by service performance, university performance, relationship and university standing.
25	Raj and Arokiasamy (2012)	SERVQUAL	Results confirmed the positive influence of core administrative and teaching services, library & lab facilities, accommodation, medical and sports facilities on student satisfaction.
26	Solinas (2012)	LIKERT SCALE	Gender-based differences found in student satisfaction. In male students, satisfaction is linked with always achieving high grades while in females, the interest in subject, degree to acquire social prestige & the possibility of future work.
27	Temizer and Turkilmaz (2012)	Student Satisfaction Index (SSI) based on ECSI	The results confirmed the suitability of student satisfaction index (SSI) model for exploring student satisfaction.
28	Awan and Rehman(2013)	Questionnaire	Overall satisfaction attributed to two significant predictors of student's academic involvement and excellence of campus climate.
29	Mehdipour and Zerehkafi(2013)	QUESTIONNAIRE	Majority of students of Osmania University informed about good rapport between faculty and students, availability of principle when needed, warm staff and supportive students. Students were found satisfied with the University services.
30	Prasad and Verma (2013)	modified SERVQUAL	University service quality can be measured with eight dimensions scale where employability and industry institute interaction were found as the most important factor contributing to student satisfaction for management graduating students.
31	Yeh and Tao(2013)	Personal Response System (PRS)	Class environment and learning benefits positively affect student satisfaction.
32	Al-Asmi and Thumiki(2014)	questionnaire	Significant positive correlation was found between student satisfaction and training on advising.
33	Arambawala and Hall (2014)	SERVQUAL	Role of teaching staff and teaching quality have strong influence in generating student satisfaction.
34	Asgari and Borzoocoi(2014)	SERVQUAL	Price is found as a predictor variable of students' satisfaction.

contd. table 1

<i>S. No</i>	<i>Researchers</i>	<i>Theoretical approach/measure to study student satisfaction</i>	<i>Findings of the studies(Satisfaction with service quality dimensions)</i>
35	Chen (2014)	Questionnaire	Student's were satisfied with extra-curricular learning technologies and relied more on ICT for knowledge acquisition.
36	Hui(2014)	scale	Results confirmed the impact of nationality on student satisfaction.
37	Kuwaiti and Maruthamuthu (2014)	course evaluation survey (CES) questionnaire	Instructor's effectiveness is found as the strongest predictor of the overall satisfaction of the students.
38	Makewa and Ngussa (2014)	questionnaire	BBA and B.Ed. students have high satisfaction than the diploma in education students.
39	Mazumdar (2014)	modified Noel-Levitz student satisfaction survey(imp-sat)	Students from private universities in Bangladesh were found more satisfied than students of public universities.
40	Negricea, Edu and Anram(2014)	SERVPERF model	Tangible elements of the university, the compliance with university values and the reliability are variables with a significant impact on student satisfaction.
41	Nell and Cant (2014)	SERVQUAL	Students were found the most satisfied with the assurance dimension and least satisfied with empathy dimension.
42	Songsathaphorn, Chen and Ruangkanjanases (2014)	LIKERT SCALE	The educational level, safety and image factors were found strongly influencing student satisfaction.
43	Wang (2014)	questionnaire	The quality of teaching staff has positive and significant influence on overall student satisfaction.
44	Workie, (2014)	questionnaire	Faculty advising has the strongest influence in increasing the student satisfaction.
45	Celik and Akyol (2015)	5-point scale questionnaires	Age group is found as a significant determinant of student satisfaction.
46	Kacire <i>et al.</i> (2015)	scale developed by Sheau-yuen Yeo (2006)	Significant positive correlation is found between perceived diversity climate and student satisfaction.
47	Suarman(2015)	5-point scale questionnaires	Study confirmed that the lecturer-student relationship contributed to student satisfaction.

on student satisfaction because it can help the HEIs in winning a stronger competitive position and also is an indicator of student retention and loyalty. Student satisfaction contributed to decreased student attrition rate and contributed in many ways including financial contribution, academic contribution and promoting positive word of mouth, which affect the university reputation. Higher education needs to explore student satisfaction in order to create a solid foundation for quality control. Student satisfaction is an important area of consideration while formulating strategies of HEIs.

Satisfaction is basically the concept of marketing. Although, it has been applied in the context of higher education by many researchers, still it is in infancy. If educational institutions apply the consumer behavior theory in education and regards students as customers, purchasing the educational services, then, institutions have to ensure their satisfaction with services provided therein. SERVQUAL is the most widely used service quality methodology and is also modified by many researchers in educational context. Past studies focused mainly on service quality dimension as determinants of student satisfaction, but studies regarding the contribution of academic engagement are not evident from literature. The satisfaction is subjective, varies from individual to individual and it seems to be dependent on the socio-cultural background of the respondent as well as on their demographic characteristics. Also, student satisfaction may be subjective in terms of support provided by the learning environment for their academic achievement. Thus, a comprehensive student satisfaction model is needed because students are the main stakeholder in higher education context as they may be considered as product of educational services. There is a lot of scope for extensive research in the area of student satisfaction at the higher education as well as at school level, in order to ensure quality practices in education, right from its beginning. If we have to maintain the fundamental principles of TQM in education sector, we must explore student satisfaction right from the school level along with performances and experiences of students in school to maintain quality within institutions.

CONCLUSION

Although many researches has been done in recent years, yet the struggle to rightly unfold the concept of student satisfaction is still in progress. Most of the previous studies explored the causes of student satisfactions and dissatisfactions and proposed several models based on service marketing literature. These studies explored that service quality features (teacher's expertise, courses offered, university management, campus life, academic as well as administrative services and infrastructure) of the universities influence student satisfaction. In education sector, HEIs deal with different groups of students, each has given the same quality services, but the level of student satisfaction is a subjective interpretation. Thus, it is strongly recommended that researchers should explore student satisfaction beyond the service quality dimensions, in relation to other variables like student engagement.

References

- Al-Asmi, K. & Thumiki, V. (2014). Student satisfaction with advising systems in higher education: an empirical study in Muscat. *Learning and Teaching in Higher Education: Gulf Perspectives*, 11(1), 1-19.
- Anderson, E.W. & Fornell, C. (1994). A customer satisfaction research prospectus in Rust, R. T., Oliver, R. L. (eds), *S. q. N. d. i. t. & practice* (ed.) CA. Sage. 241-68.
- Appleton-Knapp, S. L., & Krentler, K. A. (2006). Measuring student expectations and their effects on satisfaction: The importance of managing student expectations. *Journal of Marketing Education*, 28(3), 254-264.
- Arambewala, R. & Hall, J. (2014). A model of student satisfaction: International postgraduate students from Asia. *Journal of Chemical and Pharmaceutical Research*, 6(6), 164-169.
- Arambewala, R., & Hall, J., (2006). A comparative analysis of international education satisfaction using servqual. *Journal of Services Research*, 6, 141-163.
- Arokiasamy & Raj, A. (2012). Literature review: service quality in higher education institutions in Malaysia." *Contemporary Business Studies* 3(4), 227-44.
- Arokiasamy, A. & Abdulla, A. (2012). Service quality and students' satisfaction at higher learning institutions: A case study of Malaysian university competitiveness. *International Journal of Management and Strategy (IJMS)*, 3(5), 6-14.
- Asgari, M. & Borzooei, M. (2014). Effects of service quality and price on satisfaction and the consequent learning outcomes of international students. *International Journal of Information, Business and Management*, 6(3), 132-145.
- Arshad, I., Bhutto, N., Sarki, I. & Khuhro, R. (2011). Students perception about service quality level and significant determinants of service quality for business institutes/universities in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 3(8), 1062-1076.
- Awan, M. & Rehman, M. (2013). Antecedents of Higher Degree Students' Satisfaction: A Developing Country Perspective. *Middle-East Journal of Scientific Research*, 18 (5), 651-659.
- Bagchi, U. (2010). Delivering student satisfaction in higher education: A QFD approach. *IEEE*
- Butt, B. Z., & Rehman, K. U. (2010). A study examining the students satisfaction in higher education. *Procedia Social and Behavioral Sciences*, 5446-5450.
- Celik, A. & Akyol, K. (2015). Predicting student satisfaction with an emphasis on campus recreational sports and cultural facilities in a Turkish university. *International Education Studies*, 8(4), 7-22.
- Chen, G. (2014). Empirical study of engineering student's with modern educational technology, *World Transactions on Engineering and Technology Education*, 12(3), 490-494.
- Cronin, J. J. J., & Taylor, S. A. (1992). Measuring Service Quality: A reexamination and extension. *Journal of Marketing*, 56(3), 55-68.
- Cronin, J. J. J., & Taylor, S. A. (1994). SERVPERF versus SERVQUAL: Reconciling performance-based and perceptions-minus-expectations measurement of service quality. *Journal of Marketing*, 58(1), 125-131.
- Dadoa, J., Petrovicovaa, J., Cuzovicband, S. & Rajicc (2012). An empirical examination of the relationships between service quality, satisfaction and behavioural intentions in higher education setting. *Serbial Journal of Management*, 7(2), 203 – 218.

- Dimas, G., Gaulla, A. & Peirrakos, G. (2011). Quality issues in higher education: A multicriteria framework of satisfaction measures. *Creative Education*, 2(3), 305-312.
- Faruky, K.N., Uddin, M.A. & Hossain, T. (2012). Students' satisfaction: A study among private university students of Bangladesh. *World Journal of Social Sciences*, 2(4), 138-149.
- Firdaus, A. (2005). HEdPERF versus SERVPERF: The quest for ideal measuring instrument of service quality in higher education sector, *Quality Assurance in Education*, 13(4), 305 – 328.
- Hanaysha, J., Abdulla, H. & Warokka, A. (2011). Service quality and student's satisfaction at higher learning institutions: The competing dimensions of Malaysian universities's competitiveness. *Journal of Southeast Asian Research*, 1-10.
- Harvey, L. (1995). Beyond tqm. *Quality in Higher Education*, 1(2), 123-146.
- Hotami, M. & Yuruk, S. (2011). Academic service perception: A comparative research towards university students in Turkey. *Educational Research and Reviews*, 6 (6), 462-471.
- House, R. J., & Wigdor, L. A. (1967). Herzberg's dual factor theory of job satisfaction and motivation: A review of the evidence and a criticism. *Personnel psychology*, 20(4), 369-390.
- Hovland, C. I., Harvey, O. J., & Sherif, M. (1957). Assimilation and contrast effects in reactions to communication and attitude change. *The Journal of Abnormal and Social Psychology*, 55(2), 244.
- Hui, O. (2014). *Determinants international student's satisfaction in UUM*. Doctoral dissertation, University of Utara, Malaysia.
- Ibrahim, M. Z., Rahman, M. N. & Yasin, R. M. (2012). Assessing student perceptions of service quality in technical educational and vocational training (TEVT) institutions in Malaysia, *Procedia - Social and Behavioral Sciences*, 56, 272 – 283.
- Jalali, A., Islam, Md. & Ariffin, K.(2011). Service satisfaction: The case of a higher learning institution in Malaysia. *International Education Studies*, 4(1), 182-192.
- Jurkowitch, S., Vignali, C. & Kaufmann, H. (2006). A student satisfaction model for Austrian higher education providers considering aspects of marketing communications. *Innovative Marketing*, 2(3),9-23.
- Kacire, I., Kurtulmus, M. & Karabiyik, H. (2015). The effects of perceived diversity climate on general satisfaction of university students. *International Journal of Learning & Development*, 5(2), 20-31.
- Kano, N., N. Seraku, F. Takahashi and S. Tsuji (1984). Attractive Quality and Must-be Quality, Hinshitsu. *Journal of the Japanese Society for Quality Control*, 39 -48.
- Keok, C. & Thong, L. (2007). Linking transnational engineering student's satisfactions with perceptions of education quality. 37th ASEE/IEEE Frontiers in Education Conference.
- Khan, M., Ahmed, I., & Nawaz, M. (2011). Student's perspective of service quality in higher learning institutions; An evidence based approach. *International Journal of Business and Social Science*, 2 (11), 159.
- Kitcharoen, K. (2004). The importance-performance analysis of service quality in administrative departments of private universities in thailand. *ABAC Journal*, 24(3), 20-46.
- Kumar , J., & Yang, C. L. (2014). Service quality and loyalty of international students studying in the field of hospitality and tourism. *Malaysian Online Journal of Educational Management*, 2(3), 97-118.

- Kuwaiti, A. & Maruthamuthu, T. (2014). Factors influencing student's overall satisfaction in course evaluation surveys: An exploratory study. *International Journal of Education and Research*, 2(7), 661-674.
- Lim, Yap, C. and Lee, T. (2011). Destination choice, service quality, satisfaction, and consumerism: International students in Malaysian institutions of higher education. *African Journal of Business Management* 5(5), 1691-1702.
- Mazumder, Q. (2014). Analysis of quality in public and private universities in Bangladesh and USA. *International Journal of Evaluation and Research in Education (IJERE)*, 3(2), 99-108.
- Makewa, L. & Ngussa, B. (2014). Students demographics and satisfaction with selected academic experiences: University of Arusha-Musoma, Tanzania, *International Journal of Education and Research*, 2(6), 551-566.
- Mehdipour, Y. & Zerehkafi, H. (2013). Student satisfaction at Osmania university. *International Journal of Advancements in Research & Technology*, 2(6), 233-240.
- Moro-Egido, A. & Panades, J. (2010). An analysis of student satisfaction: Full-time vs. part-time students, 96(2), 363-378.
- Negricea, C., Edu, T. & Avram, M. (2014). Establishing influence of specific academic quality on student satisfaction. *Procedia-Social and Behavioral Sciences*, 116, 4430-4435.
- Nell, C. & Cant, M. (2014). Determining student perceptions regarding the most important service features and overall satisfaction with the service quality of a higher education institution. *Management*, 19 (2), 63-87.
- Oliver, R. L. (1980). *Theoretical Bases of Consumer Satisfaction Research: Review, Critique, and Future Direction*. In Charles W. Lamb, Jr. and Patrick M. Dunne (eds.) *Theoretical Developments in Marketing*, Chicago, All-American Marketing Association, 206-210.
- Parasuraman, A., Zeithaml, V. A. and Berry, L. L. (1988). "Servqual: a multiple-item scale for measuring consumer perceptions of service quality", *Journal of Retailing*, 64 (1), 12-40.
- Peyton, R.M., P.S. & Kamery, R.H. (2003). *Consumer Satisfaction/Dissatisfaction (CS/D): A review of the literature prior to the 1990s, Proceedings of the Academy of Organizational Culture, Communications and Conflicts*, 7(2). Allied Academies International Conference. Las Vegas, 41-46.
- Prasad, R. & Verma, S. (2013). Measuring the satisfaction gap in management education: A roadmap for achieving excellence. *IOSR Journal of Business and Management (IOSR-JBM)*, 7(6), 96-108.
- Ravindran, S. D., & Kalpana, M. (2012). Student's Expectation, Perception and Satisfaction towards the Management Educational Institutions. *Procedia Economics and Finance*, 2, 401-410.
- Rust, R. T., & Oliver, R. L. (1994). Service quality: Insights and managerial implications from the frontier. In R. T. Rust & R. L. Oliver (Eds.), *Service quality: New Directions in theory and practice*, Thousand Oaks: Sage Publications, 1-19.
- Shank, M. D., Walker, M., & Hayes, T. (1995). Understanding professional service expectations: Do we know what our students expect in a quality education? *Journal of Professional Services Marketing*, 13(1), 71-89.
- Shostack L. G. (1977). Breaking free from product marketing, *Journal of Marketing*, 41, 73-80.

- Solinas, G., Masia, M., Maida, G., & Muresu, E. (2012). What Really Affects Student Satisfaction? An assessment of quality through a university-wide student survey. *Creative Education*, 3(1), 37-40.
- Songsathaphorn, P., Chen, C., & Ruangkanjanases, A. (2014). A Study of Factors Influencing Chinese Students' Satisfaction toward Thai Universities. *Journal of Economics, Business and Management*, 2(2), 105-111.
- Sumaedi, S., Bakti, G., & Metasari, N. (2011). The Effect of students' perceived service quality and perceived price on student satisfaction. *Management, Science and Engineering*, 5(1), 88-97.
- Suarman (2015). Teaching quality and students satisfaction: The intermediary role of relationship between lecturers and students of higher learning institutes. *Mediterranean Journal of Social Sciences*, 6(2), 626-632.
- Sureshchandar, G. S., Chandrasekharan, R., & Anantharaman, R. N. (2002). The relationship between service quality and customer satisfaction - A factor specific approach. *The Journal of Services Marketing*, 16(4), 363-379.
- Thiuri, P. (2010). International Student Satisfaction with Student Services at the Rochester Institute of Technology. Ph.D. Thesis
- Thomas, E. & Galambos, N. (2004). What satisfies students? Mining student-opinion data with regression and decision tree analysis. *Research in Higher Education*, 45(3), 251-269.
- Vaniarajan, T. & Vijayadurai, J. (2010). Service quality in higher management education: A comparative study on three group of institutions. *International Journal of Management & Strategy*, 1(1).
- Wang, Y. W. (2007). International Students' Satisfaction with International Student Services and Their College Experience. ProQuest.
- Workie, D. (2014). Student's satisfaction with service quality in higher education institutions: An empirical study in university of Gondar. *Journal of Education and Practice*, 5(23), 24-32.
- Yeh, C. R., & Tao, Y.-H. (2013). How Benefits and Challenges of Personal Response System Impact Students' Continuance Intention? A Taiwanese Context. *Educational Technology & Society*, 16 (2), 257-270.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *the Journal of Marketing*, 31-46.
- Zhang, L., Han, Z., & Gao, Q. (2008). Empirical study on the student satisfaction index in higher education. *International Journal of Business and Management*, 3(9), 46-51.
- Zhao, X. (2012). A Review on Service Quality and Student Satisfaction of Higher Education *Soft Computing in Information Communication Technology*, 115-122.