

Determining Mediating Effects of Student Attitude and Satisfaction on Re-enrollment Behavior in Malaysia Higher Education Institutions: Nigerian Students Experience

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Abstract

The wind of globalization has swept across all sectors of human endeavors in the knowledge driven economy propelled by information and communication technology. Internationalization of education is no doubt the greatest challenge for universities/colleges as a result of international student's mobility across the globe. International education business is a fortune capable of moving the entire economy of a destination country, thus emerging market is in the Asia and the Pacific where source countries are turning to host countries. A typical example is Malaysia who hitherto feed many western countries like UK, US and Australia and today playing host to substantial number of students from the Arabian Gulf (Middle East) and Africa. Loyalty has been identified as a strategic market plan; Malaysia will never wish to loss her customer (Students) in the international education market, especially key source countries like Nigeria. This study aimed at focusing the service quality attributes that arouse Nigerian students' attitude and satisfaction to keep faith with Malaysia Higher Education Institutions by spreading positive words of mouth and re-enrolling for further studies. The study has practical implication for university management and Government of Malaysia to identify their customer's need in order to serve them better thereby achieving the goal of becoming Centre for education excellence in the sub-region.

Keywords: Re-enrollment behavior, Higher Education Institutions, Malaysia, Nigerian Students, Service Satisfaction, Attitude

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1. Introduction

This study wish to analyze the pre-determined feelings of international students from Nigeria and presumed their post consumption attitude with educational and non-educational services provided by the Higher education institutions in Malaysia, and to suggest strategic implications for Malaysia Government to meet the target set for internationalization in view of the competitive nature of the globalized education market. The Government of Malaysia has since set an ambitious target of becoming Centre for education excellence in the South East Asia sub-region and working towards its attainment. A target of 100,000 international students set for the year 2010 was surpassed which lead to setting of another target of 200,000 by the year 2020 for international students and at least 20,000 per public university for local students. Similarly, Nigerian students are trooping to Malaysia for their higher education thereby contributing significantly to the number of international students in Malaysia (MOHE, 2010)

The increasing mobility of students, academics and programs worldwide has become a major challenge to universities/colleges which is the hallmark of internationalization(Arambewela and Hall, 2009). These could be interpreted to possess both positive and negative implications for institutions of higher learning worldwide, for the emerging market like Malaysia, Singapore, Hong Kong, New Zealand and others it is a golden opportunity to feel international presence and reap the economic benefits that comes with it. However, same cannot be said of established international education market destinations like the USA, UK, Australia Canada and the likes who felt threatened by population explosion, security challenges, reduced market share and increased market-driving strategies to maintain competitive advantage.With the adoption of marketing variables into education system, especially the 7Ps, conscious efforts must be applied not only to the services rendered but also the way and manner it is delivered to appease the customer and lead the market (Kotler and Fox, 2002). Therefore, Student delight becomes one of the target of universities and indeed other higher institutions. A satisfied student population like any other customer has been empirically established to promote retention, loyalty and spreading positive word of mouth (WOM) (Arambewela and Hall, 2009).

A number of micro and macro-economic factors interacted for Nigerians to choose Malaysia as their study heaven in view of multiple alternatives around the world. Socio-budgetary and ecological elements/variables, for example, security, life-style, typical cost for basic items, transportation, racial separation, visas and movement potential, loved ones, atmosphere and society (Veloutsou et al., 2005; Arambewela, 2003; Lawley, 1998; Duan, 1997) are connected with the decision of a nation as a study end of the line, while individual level components, for example are, study projects and courses, expenses, offices and help administrations, erudite atmosphere, showing quality, showing staff and routines, uniqueness of courses, picture and esteem of the college (Veloutsou et al., 2005; Arambewela, 2003; Smith et al., 2002; Townley, 2001; Geall, 2000; DETYA, 2000) have been recognized in the decision of a college as a study terminus.

The crux of the matter is the negative relationship between image and patronage in the case of Nigerian students in Malaysia. Image has being found to be a significant individual factor or micro-economic variable in selection of study destination (Arambewela, 2003; Gronroos, 1984; Lethinen and Lethinen, 1982) where reputation and prestige is treated as having positive influence on constructs such as satisfaction, positive words of mouth, loyalty and repurchase intentions (Herbig et al, 1994). In the Nigerian case in Malaysian it has being a very bad image associated with issues such as black money, scam, fraud, drugs and violent crime against humanity (Abdullateef et al, 2012) yet the student population keep swelling despite these negative challenges as indicated in the number of Nigerians carrying students visa in Malaysia (MOHE, 2010). Therefore, the aim of this paper is to gauge attitude formed from satisfaction that triggers re-enrollment behavior and positive words of mouth that has been found to be the main recruitment strategy pulling Nigerians to Malaysia (Abdullateef et al, 2012).

International education market is being run purely like commercial enterprise attaching more value to customer interest simply for their economic gains (Seymour, 1992). This customization is the resultant effect of globalization and internationalization on the one hand, and deliberate reduction on government funding of education globally on the other hand has forced public institutions to seek argumentation from other sources like internally generated revenue (Freeman, 1993). This has led to innovation, diversification and other modern ways of effective service delivery being experimented in higher education (Jain, Sinha and Sahney, 2011).

Globalization becomes interesting as a result of level playing ground provided which allowed for the survival of the fittest with the increased customer value and demands. The globalization of knowledge and Malaysian drive to attain higher education status compel her higher educational institutions to constantly improve its service quality and adapting all known global best practices in order to sustain the tempo and the standard established (Sharma and Kaur, 2004).

Thus the aim of these researchers is to conceptualize the antecedence and consequence of Nigerian students' satisfaction with the education services provided by Malaysian HEIs. The focus:

- What are the variables that influence Nigerian students' satisfaction with Malaysian higher education services?
- What is the strength of attitude that results in to the behavioral intention to continue in Malaysia higher education?

To provide framework that will contribute to theory and practice, the following research objectives are formulated:

- To identify the mediating effects of service satisfaction and attitude in Malaysia HEIs.
- To propose based on extant literature a conceptual model of service satisfaction in line with American customer satisfaction index (Fornel et al, 1996) and attitudinal behavior in higher education (Ajzen, 1990).

The importance of international higher education is dual purpose benefit; economic and social to both customer (student) and destination. The status attained and its economic benefits in terms of monetary gains after achieving higher academic qualification is what economists referred to as 'human capital model' (Rosen, 1980). The social benefits to student is on cultural exchange which considered education to have both transitional (which has to do with movement), and transformative (changing attitude) functions (Nash, 1974). To the host countries, the economic benefits are substantial favorably competing and in most cases surpassing many traditional exports commodities of the destination countries. However having identified the competitive environments in which institutions of higher education are operating, service quality researchers search for a service delivery and satisfaction model specific to higher education become paramount (Jain, Sinha&Sahney, 2011).

The importance of this study to concerned governmental body overseeing higher education to continuously make policies that will impact on the general delivery of services according to need of customers (students), with implementation and appraisals techniques cannot be over emphasized.

2. Literature Review

2.1 Service Delivery

The delivery of service and aftermath of service enjoyed has been categorized into: technical and functional (Groenroos, 1984; Parasuraman et al., 1985, 1988, 1991; Lewis, 1989). The technical aspect measures the outcome of assessment after consumption and the functional aspect is how the service was administered or delivered. No doubt there is consensus among service quality researchers that service quality is dimensional. The most popular service quality dimension is SERVQUAL proposed by Parasuraman et al. (1985) and Zeithaml et al. (1996). Some reviews were made after testing the proposal in different study and accommodate some criticism of their original ten dimensions, reduced the framework to five dimensions which are: tangible, assurance, empathy, responsiveness and reliability (Berry and Parasuraman, 1991). The argument on multidimensional or uni-dimension of service quality is one of the contentious academic works in service marketing. While some authors like Mels et al (1997); Groenroos (2000) favors seven criteria of service quality; Carman, (1990); Parasuraman et al (1985); Lewis (1989) insisted on just two dimensional service qualities. But Cronin and Taylor (1992) advocated a single unit construct for service quality which is perception only-SERVPERF. However, the conclusion on whether or not service quality can be measured using multidimensional variables depends on the situation (Holdford and patkar, 2003). The theoretical framework of measuring service quality is in line with the expectancy-disconfirmation paradigm argued by Groenroos.

The variable of worth of engagement is measured in relation to the predetermined judgment taking in to account the total rating. The proposal is that student's feeling is connected to the quantity and relationship of disconfirmation, usually taken as the difference between customer's before consumption belief (when compared with other known standard) and the after consumption evaluation of the product or service encountered (Oliver, 1980; Anderson, 1973).

When what is expected are attained or surpassed, the customer are delighted or feel good but when expectation falls below standard, dissatisfaction results.

2.2 Higher Education System

Although higher education institutions and commercial enterprises operated in independent environment, some studies (Brown and Mazzarol, 2009; Chitty and Soutar, 2004) confirmed European Customer Satisfaction Index (ECSI) model to be applicable in higher education as commercially driven venture because of fee paying system (Fornell et al., 1996). These studies could not establish cause and effects linkage in some of the variables when applied to higher education market.

The studies on service quality in higher education created pertinent scales conceptualizing either SERVQUAL or SERVPERF. The widely used Parasuraman confirmed that the SERVQUAL scale is dependable and legitimate when it is connected to a specific perspective (Stodnick and Rogers, 2008). Then again, various studies (O'Neill, 2003; Oldfield and Baron, 2000; Sahney et al., 2004) inspected the SERVQUAL scale in the college environment and none of those studies could imitate the five-element structure of the SERVQUAL scale. Essentially, discoveries from investigations of business endeavors, Li and Kaye (1998) found that the SERVPERF scale beats its partner, the SERVQUAL scale, in the area of higher education measurement.

2.3 Service Quality in Higher Education

Higher education institutions nowadays are being run like commercial ventures operating in competitive environment since the development of global market for higher education and general reduction of government funding on education worldwide. Therefore, HEIs have to be concerned with both academic output (skills and abilities of their graduates) and the feelings of those the services are being provided (Ginsberg, 1991; Clemes, Cohen and Wang, 2013). Thus, measuring service quality dimensions in higher institutions becomes complex without single definition (Marshall, 1998). Different definitions have been given to quality in higher education by various researchers in accordance with their research objectives or findings.

A compendium of some of the definitions as put together by Sahney (2002) are: "esteem expansion in training" (Feigenbaum, 1951), "conformance of instruction yield to arranged objectives, particulars and prerequisites" (Gilmore, 1974; Crosby, 1979), "deformity evasion in instruction activities" (Crosby, 1979) and "perfection in instruction" (Peters and Waterman, 1982). Later, Parasuraman et al. (1985) have characterized quality in training as "gathering or surpassing client's desires of instruction"; and Reynolds (1986) and Tang and Zairi (1998) have characterized it as "wellness for reason." "Wellness of instructive conclusion and experience for utilization" is the meaning of value in training given by Juran (1988). The definition given by Gordon and Partigon (1993) underlines the general methodology to instruction quality: "The accomplishment with which an organization gives instructive situations which empower learners successfully to attain advantageous taking in objectives including suitable scholarly guidelines." Allen and Davis (1991) and Holdford and Patkar (2003) have characterized instructive administration quality as a scholar's general assessment of administrations accepted as a major aspect of their instructive experience. Whatever the case may be the consequence of good or bad quality is satisfaction or dissatisfaction. This study thus adapted two service quality dimensions similar to input and output in production process. The first is the program quality as conceptualized by Jain et al, (2011) with sub-dimensions and the second is the interaction quality empirically validated in Clemes et al, (2013) model which also has sub-dimensions. Service products in higher education is the undergraduate and postgraduate programs offered to students, the perception of the content as measured by the outcome (degree) is the program quality (Joseph and Joseph, 1997; Abdullah, 2006) and the interaction of students with lecturers and faculty administrators (interaction quality) play a critical role in shaping students' perceptions of service quality (LeBlanc and Nguyen, 1997; Ling et al., 2010; Mai, 2005).

3. Student Satisfactions

In a competitive market like international education where service providers are numerous providing homogeneous products/services, the sure means to create a market niche is by having satisfied clients. Customer satisfaction largely is a function of how a product is supplied or service rendered by an organization. If met, they become satisfied and if surpassed they will be delighted.

The bench mark for the success or other wise of organization performance is by measuring customer satisfaction. Therefore all destination countries and institutions most constantly measure the level of satisfaction at interval to assess whether or not they are safe in the market. Student satisfaction is a cumulative evaluation summary of interaction with all service specific educational experience, based on the discrepancy between what he/she expected and what he/she got at the end of the encounter (Corneliu, Ciprian, Clendia and Oana, 2010). This study aimed to conceptualize the synergy between satisfaction and some of the psychological variable like attitude in predicting international student's behavior to reenroll in Malaysia HEIs particularly Nigerian students.

4. Attitude Towards Behavior

In behavioral study psychological variables such as subjective norms and perceived behavioral control linked attitude to customer satisfaction to determine the behavior intention (Ajzen and Fishbein, 1980). For the purpose of this research, attitudes are formed based on cumulative experiences and to a large extent determine the satisfaction level of individual. According to Oliver (1981), customer satisfaction is instant and direct to a particular encounter, whereas attitudes are develop over a fairly long period. Along these lines, Westbrook and Oliver (1981) argued that satisfaction is an appraisal of overall purchase situation compared to expectations, whereas an attitude is an emotional attachment for a product or service without any form of comparison. This implies satisfaction level may differ based on the availability of other options to customers. Since international education operate in competitive market, attitude form after consumption and satisfaction becomes very important. It is conceptualize along this line of argument that Nigerian student's continuous study in Malaysia result from attitude form after satisfaction with the services enjoyed. The impression formed by students about service execution are the consequence of understudy state of mind which will be communicated either as constructive or antagonistic (Keaveney, 1999; Boshoff, 1997) focused around how far student desires on the conveyance of the services have been met by the college. In the event that a negative demeanor is formed it will be troublesome to attain general fulfillment and could bring about protests, diminishing devotion and negative WOM advancement (Kau and Loh, 2006; Maxham and Netemeyer, 2002). It is very important colleges to oversee student observations and feelings of service execution so as to enhance their state of mind towards the institution (Bagozzi, 1992)

The impression formed at the first consumption point about service performance, do inform attitudinal behavior that could either be encouraging or discouraging (Keaveney, 1999; Boshoff, 1997) depending on their pre-judgment in conformity with both the service and service handlers in the institution. If the impression is below expectation, negative attitude will be expressed which will make it complicated to achieve overall satisfaction and the consequences will be dissatisfaction, reduced interest and negative attitude (Kau and Loh, 2006; Maxham and Netemeyer, 2002). However, for any higher institution to survive in the competitive education market issues relating to student's perceptions of service performance must be given top priority to guaranty positive attitude and satisfaction (Bagozzi, 1992).

5. Re-Enrollment Intentions

This is a behavioral intention resulting from satisfaction and consequence of attitude form towards the action (behavior). Higher Education Institutions most take cognizance of their target market being re-enroll students who are different from freshman, because they all have an encounter with a university or college service environment before now (compared to freshman students), thus, their evaluation of educational service will be different and the formation attitudes towards service performance will also be different (Arambewela and Hall, 2009). In the context of this study, students' previous educational experience, including short courses class, bachelor degree and master's program, students' former experience with their alma Mata within Malaysia, and their previous service consumption experiences at transaction-specific with staff and friends affect their perceptions of service quality. This is because students' past experience affects the way they standardize their quality evaluation since they have opportunity to make compares with their previous encounter (Sultan and Wong, 2013).

6. Research Model and Hypotheses Development

Higher education service is regarded as part of marketing study, where service performances are usually view on the aspect of consumption (Schoefer and Ennew, 2005) which implies that different judgment can result from service perform by different individuals in similar settings or different circumstances (Lovelock et al., 2003; Zeithaml and Bitner, 2000).

Therefore, attitudes and behaviors of customer-contact employees can positively or negatively influence customers' judgments of service quality (Hartline and Ferrell, 1996). Services are intangible and often inseparable from the service provider to the customer, interpersonal interactions often exert the greatest influence on customers' perceptions of service quality (Brady and Cronin, 2001). As stated earlier, student's interaction with academic and non-academic staff play a critical role in shaping students' perception of service quality in HEIs (LeBlanc and Nguyen, 1997; Ling et al., 2010; Mai, 2005).

The multi-dimension service quality in higher education is presumed to positively influence student's perception. We therefore, hypothesises that:

H1. Perceptions of each of the interaction quality sub-dimensions will have a positive effect on interaction quality.

The interaction of antecedence of satisfaction generate outcome which refers to what customer actually received as a result of service transaction (Chen and Kao, 2009). Powpaka (1996) believes that outcome quality plays an important role in determining perceptions of overall service quality. When measuring students' university/college experience, students' gains can be conceptualized as the outcome dimension of service quality (Clemes et al., 2007). Brady and Cronin (2001) have interpreted service product and outcome quality as the same concept. However, because of the peculiarity of services provided in higher education, program quality has been identified as an important dimension of service quality in most service quality literatures. Some of the empirical and conceptual analyses that support the program quality dimension are available in the higher education literature (Joseph and Joseph, 1997; Abdullah, 2006). Thus program quality has sub-dimension which is presumed to affect over all service quality. This lead to the second hypothesis:

H2. Perceptions of each of the program quality sub-dimensions will have a positive effect on program quality.

The perception of interaction quality and program quality will affect the overall quality (Clemes et al, 2007). Two hypothesis are formulated from this to test the impact on overall service quality.

H3. Perceptions of interaction quality will positively affect overall service quality.

H4. Perceptions of program quality will positively affect overall service quality.

Studies have established a mediating effect of perceived value on the relationship between service quality and satisfaction (Caruana et al. 2000, Clemes et al. 2010 and Wang et al. 2004). We therefore test hypotheses 5 in the study of Nigerian students in Malaysia:

H5. Perceptions of value will moderate the relationship between service quality and satisfaction.

The relationship between attitude and satisfaction has also been established theoretically and empirically (Ajzen and Fishbein, 1980; Westbrook and Oliver, 1981; Hartline and Ferrell, 1996). We formulate hypotheses 6 based on this relationship:

H6. Higher perception of attitude will have a positive effect on satisfaction.

Studies on the relationship between satisfaction and behavioral intentions show that satisfaction is a strong driver of behavioral intentions (Olorunniwo et al., 2006). Therefore, two hypotheses on favorable behavioral intentions are:

H7. A higher level of satisfaction will have a positive effect on recommending the university/college to others.

H8. A higher level of satisfaction will have a positive effect on intentions to attend the university/college in the future.

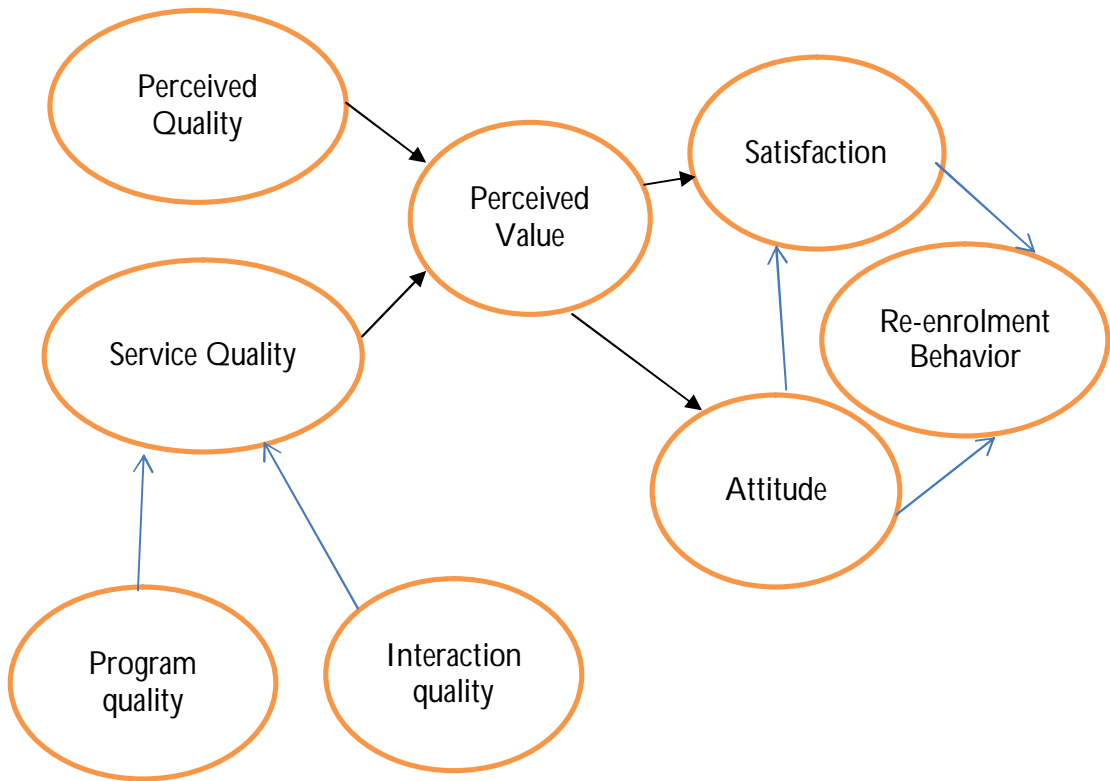


Figure 1: Conceptual Model of Student's Re-Enrolment Behavior

7. Conclusion

In the international education market environment, quality cannot be compromise instead its improvement is a key strategy for the success of the organizations (Babakus and Boller, 1992; Cronin and Taylor, 1992; Parasuraman et al., 1988). However, service quality researchers has approach the issue of service quality from different perspective thereby making it complex to arrive at the determining factors in a particular market situation. The study attempt to gain a better insight of the dimensions that determined international students' perceptions of service quality in higher education particularly Nigerian students in Malaysia HEIs by conceptualizing the input-output approach. The conceptual model has two dimensions, namely, program quality and interaction quality. These two dimensions are comprised of multiple sub dimensions required to measure the construct which could be validated through empirical study.

This study has some managerial implication for Malaysia HEIs to actualize the ambition of the country to become international students delight destination in the 21st century. Firstly, the study will help managers to shape quality to what the student call it. Usually, a well package and delivered service is called delighted by the students and has consequences such as re-enrolment and positive words of mouth to friends and relations. This has being the most effective recruitment strategy for Nigerian students in Malaysia and could be consolidated if this study is validated.

Secondly, this study also provides practitioners with valuable information about the complex relationships among service quality, perceived quality, perceived value, attitude, satisfaction and favorable behavioral intentions in Malaysia's higher education sector. The information will assist university management to develop successful marketing strategies to keep their customers (students) by constantly improving the quality of services provided. Moreover, university management should carefully formulate their pricing strategies, as the extent to which the student's level of satisfaction is increased as a result of an improved level of service quality is largely influenced by the moderating effect of perceived value which is inherent in cost-benefits analysis.

Lastly, students seek international education for different reasons, this study conceptualize outcome quality as the measure of program quality which can be investigated to justified the socio-economic reasons for Nigerian students in Malaysia and other source countries feeding the HEIs. These help university managers to design theoretical and practical programs in line with opportunities to improve personal abilities and gain academic knowledge since the target population is not freshmen but students who have had a previous higher institution experience in Malaysia and interested in continuing their program in the same institution or another institution within Malaysia.

Reference

- Aliyu, B. B., Abdulkadir, H. D. and Aliyu, O. A. (2013): The relationship between Tourist Expectation, Perceived Quality and Satisfaction with Tourism Products. *International Business Management* 7(3), pp 158-164
- Allen, J. and Davis, D. (1991), "Searching for excellence in marketing education: the relationship between service quality and three out-come variables", *Journal of Marketing Education*, Vol. 13, pp. 47-54.
- Ajzen, I. and Fishbein, M. (1980), *Understanding Attitudes and Predicting Social Behavior*, Prentice-Hall, Englewood Cliffs, NJ
- Anderson, R.E. (1973), "Consumer dissatisfaction: the effect of disconfirmed expectancy on perceived product performance", *Journal of Marketing Research*, 10 February, pp. 38-44.
- Arambewela, R.A. (2003), "Post-choice satisfaction of international postgraduate students from Asia studying in Victorian universities", doctoral thesis, Victoria University, Melbourne
- Arambewela, R. A. and Hall, J. (2009): An empirical model of international student satisfaction. *Asia pacific journal of marketing and logistics*, vol 21, No 4
- Babakus, E. and Boller, G.W. (1992), "An empirical assessment of the SERVQUAL scale", *Journal of Business Research*, Vol. 24 No. 3, pp. 253-68
- Bagozzi, R.P. (1992), "The self-regulation of attitudes, intentions, and behavior", *Social Psychology Quarterly*, Vol. 55, pp. 178
- Berry, L.L. and Parasuraman, A. (1991), *Marketing Services: Competing through Quality*, The Free Press, New York, NY.
- Boshoff, C. (1997), "An experimental study of service recovery options", *International Journal of Service Industry Management*, Vol. 8 No. 2, pp. 110-30
- Brady, M.K. and Cronin, J.J. (2001), "Some new thoughts on conceptualizing perceived service quality: a hierarchical approach", *Journal of Marketing*, Vol. 65 No. 3, pp. 34-50
- Brown, R. and Mazzarol, T. (2009), "The importance of institutional image to student satisfaction and loyalty within higher education" *Higher Education*, Vol. 58, pp. 81-95
- Carman, J.M. (1990), "Consumer perception of service quality: an assessment of the SERVQUAL dimensions", *Journal of Retailing*, Vol. 66, Spring, pp. 35-55

- Caruana, A., Money, A.H. and Berthon, P.R. (2000), "Service quality and satisfaction: the moderating role of value", *European Journal of Marketing*, Vol. 34 Nos 11/12, pp. 1338-1353.
- Chen, C. and Kao, Y. (2009), "Relationships between process quality, outcome quality, satisfaction, and behavioral intentions for online travel agencies – evidence from Taiwan", *The Service Industries Journal*, Vol. 30 No. 12, pp. 2081-2092
- Chitty, B. and Soutar, G.N. (2004), "Is the European Customer Satisfaction Index Model applicable to tertiary education?" paper presented at Marketing Accountabilities and Responsibilities, Australian and New Zealand Marketing Academy Conference, Wellington
- Clemes, M.D., Gan, C.E.C. and Kao, T. (2007), "University student satisfaction: an empirical analysis", *Journal of Marketing for Higher Education*, Vol. 17 No. 2, pp. 292-325.
- Clemes, M.D., Gan, C.E.C. and Ren, M. (2010), "Synthesizing the effects of service quality, value, and customer satisfaction on behavioral intentions in the motel industry: an empirical analysis", *Journal of Hospitality & Tourism Research*, Vol. 35 No. 4, pp. 530-568
- Clemes, M. D., Cohen, D. A. and Wang, Y. (2013) Understanding Chinese university students' experiences: an empirical analysis, *Asia Pacific Journal of Marketing and Logistics* Vol. 25 No. 3, 2013pp. 391-427
- Corneliu, M., Ciprian, C., Claudia, B. and Oana, A. (2010): An analysis of customer satisfaction in a higher education context, *International Journal of Public Sector Management* Vol. 23 No. 2, 2010 pp. 124-140
- Cronin, J. and Taylor, S. (1992), "Measuring service quality: a re-examination and extension", *Journal of Marketing*, Vol. 56 No. 3, pp. 55-68.
- Cronin, J. and Taylor, S. (1994), "SERVPERF versus SERVQUAL: reconciling performance-based and perceptions-minus-expectations measurement of service quality", *Journal of Marketing*, Vol. 58 No. 1, pp. 125-31.
- Crosby, P.B. (1979), *Quality is Free*, McGraw Hill, New York, NY.
- Chua, C. (2004), "Perception of quality in higher education", *Proceedings of the Australian Universities Quality Forum*
- Cuthbert, P. (1996a), "Managing service quality in HE: is SERVQUAL the answer (Part - II)?" *Managing Service Quality*, Vol. 6 No. 3, pp. 31-5.
- Department of Foreign Affairs and Trade (DFAT) (2005), *EAU Education*, available at: www.dfat.gov.au/publications/eau_education/exec_summary.pdf
- Duan, P. (1997), "The influence of various factors on international students in selecting universities: a south Australian study of Chinese students from Hong Kong and Malaysia", PhD thesis, University of South Australia, Adelaide
- Feigenbaum, A.V. (1951), *Quality Control: Principles, Practice and Administration*, McGraw-Hill, New York, NY.
- Fornell, C., Johnson, M.D., Anderson, E.W., Cha, J. and Bryant, B.E. (1996), "The American customer satisfaction index: nature, purpose and findings", *Journal of Marketing*, Vol. 60 No. 4, pp. 7-18.
- Geall, V. (2000), "The expectations and experience of first year students at City University of Hong Kong", *Quality in Higher Education*, Vol. 6 No. 1, pp. 77-89.
- Gilmore, H.L. (1974), "Product conformance", *Quality Progress*, Vol. 7 No. 5

- Gronroos, C. (1984), "A service quality model and its marketing implications", *European Journal of Marketing*, Vol. 8, pp. 36-44
- Gronroos, C. (2000), *Service Management and Marketing*, Lexington Books, Lexington, KY
- Hartline, M.D. and Ferrell, O.C. (1996), "The management of customer-contact service employees: an empirical investigation", *Journal of Marketing*, Vol. 60 No. 4, pp. 52-70
- Herbig, P., Milewicz, J. and Golden, J. (1994), "A model of reputation building and destruction", *Journal of Business Research*, Vol. 31, pp. 23-31
- Holdford, D. and Patkar, A. (2003), "Identification of the service quality dimensions of pharmaceutical education", *American Journal of Pharmaceutical Education*, Vol. 67 No. 4
- Jain, R., Sinha, G. and Sahney, S. (2011): Conceptualizing service quality in higher education. *Asian journal on quality*, vol 12, No 3
- Joseph, M. and Joseph, B. (1997), "Service quality in education: a student perspective", *Quality Assurance in Education*, Vol. 5 No. 1, pp. 15-19
- Juran, J.M. (1988), *Juran on Planning for Quality*, The Free Press, New York, NY
- Kau, A.K. and Loh, E.W.-Y. (2006), "The effects of service recovery on consumer satisfaction: a comparison between complainants and non-complainants", *Journal of Services Marketing*, Vol. 20 No. 2, pp. 101-11.
- Keaveney, S.M. (1999), "Customer switching behavior in service industries: an exploratory study", *Journal of Marketing*, Vol. 59 No. 2, pp. 71-82.
- Kotler, P. and Fox, K.F. (1995), *Strategic Marketing for Educational Institutions*, Prentice-Hall, Englewood Cliffs, NJ.
- Lawley, M. (1998), "Choice of destination in international education: a cross national model", PhD thesis, University of Southern Queensland, Toowoomba
- LeBlanc, G. and Nguyen, N. (1997), "Searching for excellence in business education: an exploratory study of customer impressions of service quality", *International Journal of Educational Management*, Vol. 11 No. 2, pp. 72-79.
- Lethinen, U. and Lethinen, J. (1982), "Service quality: a study of quality dimensions", unpublished working paper, Service Management Institute, Finland Oy, Helsinki
- Lewis, B.R. (1989), "Quality in the service sector: a review", *International Journal of Bank Marketing*, Vol. 7 No. 5, pp. 4-12.
- Li, R.Y. and Kaye, M. (1998), "A case study for comparing two service quality measurement approaches in the context of teaching in higher education", *Quality in Higher Education*, Vol. 4 No. 2, pp. 103-13
- Ling, K.C., Chai, L.T. and Piew, T.H. (2010), "The 'inside-out' and 'outside-in' approach on students' perceived service quality: an empirical evaluation", *Management Science and Engineering*, Vol. 4 No. 2, pp. 1-26.
- Mai, L. (2005), "A comparative study between UK and US: the student satisfaction in higher education and its influential factors", *Journal of Marketing Management*, Vol. 21 No. 7, pp. 859-878
- Marshall, S.J. (1998), "Professional development and quality in higher education institutions of the 21st century", *Australian Journal of Education*, Vol. 42 No. 3, pp. 321-34
- Mels, G., Boshoff, C. and Nel, D. (1997), "The dimensions of service quality: the original European perspective revisited", *Service Industry Journal*, Vol. 17, pp. 173-89.
- Olorunniwo, F., Hsu, M.K. and Udo, G.J. (2006), "Service quality, customer satisfaction, and behavioral intentions in the service factory", *Journal of Services Marketing*, Vol. 20 No. 1, pp. 59-72

- Parasuraman, A., Zeithaml, V. and Berry, L. (1985), "A conceptual model of service quality and its implications for future research", *Journal of Marketing*, Vol. 49, Fall, pp. 41-50.
- Parasuraman, A., Zeithaml, V. and Berry, L. (1988), "SERVQUAL: a multi-item scale for measuring consumer perception of service quality", *Journal of Retailing*, Vol. 64, Spring, pp. 12-40.
- Parasuraman, A., Zeithaml, V. and Berry, L. (1991), "Refinement and reassessment of the SERVQUAL scale", *Journal of Retailing*, Vol. 67 No. 4, pp. 420-50
- Oliver, R.L. (1980), "A cognitive model of the antecedents and consequences of satisfaction decisions", *Journal of Marketing Research*, Vol. 17, November, pp. 460-69
- Oliver, R.L. (1981), "Measurement and evaluation of satisfaction process in retail setting", *Journal of Retailing*, Vol. 57, pp. 25-48.
- O'Neill, M. (2003), "The influence of time on student perceptions of service quality: the need for longitudinal measures", *Journal of Educational Administration*, Vol. 41 No. 3, pp. 310-24
- Oldfield, B. and Baron, S. (2000), "Student perceptions of service quality in a UK university business and management faculty", *Quality Assurance in Education*, Vol. 8 No. 2, pp. 85-95
- Powpaka, S. (1996), "The role of outcome quality as a determinant of overall service quality in different categories of services industries: an empirical investigation", *Journal of Services Marketing*, Vol. 10 No. 2, pp. 5-25.
- Sahney, S. (2002), "Total quality management in higher education in India – a diagnostic study of select engineering and management institutions", unpublished, Department of Management Studies, IIT.
- Sahney, S., Banwet, D. and Karunes, S. (2004), "A SERVQUAL and QFD approach to total quality education", *International Journal of Productivity and Performance Management*, Vol. 53, pp. 143-66.
- Schoefer, K. (2008), "The role of cognition and affect in the formation of customer satisfaction judgments concerning service recovery encounters", *Journal of Consumer Behaviour*, Vol. 7 No. 3, pp. 210-221
- Schoefer, K. and Ennew, C. (2005), "The impact of perceived justice on consumers' emotional responses to service complaint experiences", *Journal of Service Marketing*, Vol. 19 No. 5, pp. 261-70
- Seymour, D.T. (1992), *On Q: Causing Quality in Higher Education*, Macmillan Press, New York, NY.
- Smith, G., Morey, A. and Teece, M. (2002), "How international students view their Australian experience: a survey of international students who finished a course of study in 1999", Special Report, DETYA, Australian Education International, Canberra
- Stodnick, M. and Rogers, P. (2008), "SERVQUAL to measure the quality of the classroom experience", *Decision Sciences Journal of Innovative Education*, Vol. 6 No. 1, pp. 115-33
- Tang, K.H. and Zairi, M. (1998), "Benchmarking quality implementation in a service context: a comparative analysis of financial services and institutions of higher education – Part III", *Total Quality Management*, Vol. 9 No. 8, pp. 666-79

- Townley, P. (2001), "The construction of a model of qualitative evaluation to support the development of the policy and practice of raising student satisfaction in an institution in the higher education sector", Conference Proceedings, Higher Education Close Up Conference 2, Lancaster University, UK, 16-18 July.
- Veloutsou, C., Paton, R.A. and Lewis, J. (2005), "Consultation and reliability of information sources pertaining to university selection", *International Journal of Educational Management*, Vol. 19 No. 4, pp. 279-91
- Westbrook, R.A. and Oliver, R.L. (1981), "Developing better measures of consumer satisfaction:some preliminary results", in Monrow, K.B. (Ed.), *Advances in Consumer Research*, Association for Consumer Research, Ann Arbor, MI, pp. 94-9.
- Wang, Y., Lo, H. and Yang, Y. (2004), "An integrated framework for service quality, customer value, satisfaction: evidence from China's telecommunication industry", *Information Systems Frontiers*, Vol. 6 No. 4, pp. 325-340
- Zeithaml, V.A. and Bitner, M.J. (2003), *Services Marketing: Integrating Customer Focus across the Firm*, Irwin McGraw-Hill, Boston, MA.
- Zeithaml, V.A., Parasuraman, A. and Berry, L.L. (1996), "The behavioral consequences of service quality", *Journal of Marketing*, April, pp. 31-46