



## Path Analysis of Customer Satisfaction about Quality Education in Pakistani Universities

**Dr. Saghir Ahmad Ch**, Department of Education, Hazara University Mansehra, Pakistan, [saghir.edu786@gmail.com](mailto:saghir.edu786@gmail.com)

**\*Dr. Ayesha Batool**, Assistant Professor, Lahore College for Women University Lahore, Pakistan, [drayesharana19@gmail.com](mailto:drayesharana19@gmail.com)

**Dr. Sadaf Naz**, Assistant Professor, Department of Education, Hazara University Mansehra, Pakistan

**Anjum Qayyum**, Department of Education, Hazara University Mansehra, Pakistan

---

**Abstract-** Quality education demand is increasing day by day and people are showing more interest to get it. Customers demand high service quality and they have also high expectations that institutional administration may provide them standardized services. The word customer is used frequently for students in the educational institutions now a day. Students' satisfaction assumes a fundamental part in promoting, as well as a basic factor in inducing students to learn effectively. The basic purpose to conduct this study was to explore the customer satisfaction about quality education in universities. The study was quantitative and survey type in nature. University students were the population of the study. Random sampling technique was employed to select two hundred and thirty students as sample from different universities. Self-developed questionnaire on likert scale was used to explore the level of customer satisfaction regarding quality education. Instrument was consisted of different factors of quality education. It was validated by experts opinions and reliability ensured to check the internal consistency among items by applying cronbach's alpha. Structural equation modeling was used for path analysis of customer satisfaction regarding quality education in universities. Results show that students are satisfied from classroom management of teachers. They are provided opportunities to interact with each other and discuss things with in groups as well as with teacher for better and effective learning. They are also satisfied because their performance is assessed by fair evaluation. Universities administration may focus on teaching quality and revise curriculum with the passage of time for more customer satisfaction and compete the academic world. There is need in institutions to take some positive initiatives to provide better quality education to customers.

**Keywords:** quality education, customer satisfaction, structural equation modeling, and path analysis.

### I. INTRODUCTION

Education plays a vital role in the progress and development of the country. The nations concentrate on the education sector to achieve the desired goals and destinations. Brunat (2006) said that there is positive association between education and financial development. Around the world, human capital is the most grounded component that signifies to a country's financial development. The nations become strong when the resources are used for the improvement of academic condition of the educational institutions and this kind of investment has positive effect on the economy of country (Coleman, 2005). Education demand is increasing with the passage of time and people are showing more interest to get it. And customers demand high service quality and they have also high expectations that institutional administration may provide them standardized services. The clients need exclusive academic and management services from institution (Petruzzellis & Romanazzi, 2010). From a research point of view, an educational field characterizes a fascinating discipline to inspect. Not just in light of its effect on the nation's economy, as well as one would need to think and recognize about the nature and standard of instruction being given to clients, their level of satisfaction, achievement and absorbing limit, as these people answerable to the general public and nation's future. Beyond any doubt this extremely focused sector is able to adapt changes and compete with globally challenges and dealing with customers increasing desires and their expectations about educational services and quality (Sohail & Shaikh, 2004).

#### **Students as Customers**

Crawford (1991) laid stress upon students studying in higher education institutions as primary customer. His study focused on the customer ship of students alone. According to William (2002), although students were not customers, yet keeping in view the market place scenario of educational institutions, the students were regular payers and could be considered as customers who have the right to know what they were buying.

## **Student Satisfaction**

Satisfaction is the sentiment delight or frustration which is achieved by comparing an item's apparent performance (result) in connection to his or her desires. If the performance misses the mark regarding desires, the client is disappointed. The clients are full filled and feel satisfaction with their performance and achieve goals. In this specific circumstance, the customer satisfaction is characterized as the students' satisfaction about their academic achievements in the specific educational institution. Generally, it is the personal perception of an individual subjective assessment and knowledge of a product include the expected management services and the received services from the organization (Oliver, 1999). Hence, expectations mean belief about the nature, quality and performance of the institution. Customer satisfaction which is applied to portray whether customers are happy and mollified and satisfying their desires and needs during the degree in institution. Different elements contribute to satisfy the customer; to give respect the students, giving acknowledgment, offering required advantages and positive administration inside the institution, assessments, and meeting desires. The idea of a student satisfaction is derived from customer satisfaction. The word customer is used frequently for students in the educational institutions now a days. Students' satisfaction assumes a fundamental part in promoting, as well as a basic factor in inducing students to learn effectively. Kuh and Hu (2001) had claimed that effective interaction between students and faculty is a strong predictor of student satisfaction. Student satisfaction is an important issue. Satisfaction is a state of mind in which a person feels pleasure or happiness. Elliott and Healy (2001) describe that concentrating on customer satisfaction not just empowers institutions to re-build their associations to care the customer needs, as well as enables them to build up a framework for persistent observing of how viably they meet or surpass customer needs. In this way, the customer satisfaction approach is necessary to achieve the goals and promote the institutional product in internal and external market. Their satisfaction develops quality culture that is favorable for the progress.

### **A Glimpse of Customer Satisfaction Models**

Hom (2000) stated two models of customer satisfaction:

1. Macro Models
2. Micro-models.

Macro-models observed at how students satisfaction associated with different features of educational institutions. They used strategies like comparing the standards of quality and performance of different university facilities and administration services which could influence student satisfaction.

Micro-models have directly link more specifically at various components of students' satisfaction and loyalty. There were seven models:

1. Expectations
2. Perceived performance
3. Norms
4. Multiple process
5. Attribution
6. Affective
7. Equity.

Every one of the seven models relied upon feedback and good relations with clients or customers in the case of higher educational universities. The decision of model decides if the university might be keen on setting up standards, influencing customer feelings or emotions, or upgrade the quality performance.

### **Factors Affecting Students' Satisfaction**

Customers, for example, students more often take decision in view of their own observation and notice the performance of academic organizations. However, their fulfillment relies upon their evaluation of the products, things and organization services utilized and paying little mind to whether their wants or needs were fulfilled (Athanasopoulos, Gounaris, & Stathakopoulos, 2001). If the universities identify the factors that enhance the customers' satisfaction, it will be able to improve the institutional services and promote academic quality. Researchers prescribed that higher educational institutions highlight the planned significance of social principles picked up by students when going along with them to compete the market. Furthermore, they contended that colleges must show the methods by which they offer help to their customer' goals accomplishment. Fundamentally, this would influence the student impression of academic satisfaction therefore the institution's competitiveness. A few variables impact customers' level of satisfaction and also their accomplishment and ingestion capacity (Petruzzellis & Romanazzi, 2010).

A lot of researches related service quality of customer satisfaction. To compete the global and national

market, universities are bust to improve the service quality through different factors for example, reliability, assurance, empathy, responsiveness and tangibles (Zeithaml, Bitner, & Gremler, 2009). Reliability means provide facilities guaranteed (Parasuraman, Zeithaml, & Berry, 1988). This is the basic factor in academic organization Danish, Malik, and Usman (2010) where it could be an arrangement of a brisk remedial activity when errors happen keeping in mind the end goal to recapture the trust and certainty of customers. Alexandris and James (2002) expressed that this element is vital component in the administration quality. Affirmation shows the friendliness and data of clients which stimulates customers' trust and conviction (Parasuraman, Zeithaml, & Berry, 1988). Passing the reliable information and having suitable instruction and training criteria or standards are of centrality to clients as mentioned by Alves and Raposo (2007).

Compassion in the scholastic zone will be taken as giving the regard for the individual customers. For them, compassion is imperative because they are searching for a special care and attention to accomplish their own objectives. To have the capacity to give good administrative and academic services to customers, universities' establishment ought to concentrate to serve the customer and give them the required facilities quickly, while in the meantime endeavoring to tackle any issue which may happen instantly; it is consider the key element of the organization quality (Zeithaml, Bitner, & Gremler, 2009). Latter three measurements significantly rely upon the faculty, particularly forefront staff; in this manner, the relational abilities and responses towards clients' issues signify to the premise of the apparent satisfaction of institutional facilities quality (Danish, Malik, & Usman, 2010). In educational organizations, clients cannot pass judgment on an administration before its use (Padma, 2006), the physical assets measurement, though, can give assistance by perceiving that consideration. Hill and Epps (2010) described that alongside workers' abilities and their presence, physical arrangement, tools and constituents incorporating them greatly affect students' satisfaction. Expectedly, academic organizations invest a considerable amount on enhancing services and renovating classrooms' and labs. The students feel satisfaction with comfortable seats, lighting, work areas and labs in which internet is available. Different variables influencing customers' satisfaction, attainment and absorbing limit integrate status, or fairness. This component is vital as the services of the organization. Brown and Mazzarol (2009) mentioned that in the field of education, irrespective of the movement to getting to be industry oriented in addition to the business center, the brand building inside the institutions faces problems. Ivy (2001) simplified that clients of business organizations consider the foundations' status as a basic sign as opposed to the quality of universities and its education.

Ivy (2001) agreed that to select the university, most students consider the institution's reputation. It may difficult for the teachers to adopt and change the teaching methods according to nature of the topic and subject. Students are comfortable and give prefer to change the teaching technique conferring the subject demand (Douglas, McClelland, & Davies 2008). The important elements to provide quality knowledge are the competent teachers, delivering methods and academic facilities that are helpful during teaching (Petruzzellis & Romanazzi, 2010). Therefore, as to adapt to rivalry and the quick evolving trend, Kwek, Lau, and Tan (2010) contained that students enroll in commerce institutions ought to overhaul their offerings and scholastic projects to profit by rising opportunities, keep up scholarly values and fulfill their partners' beliefs. Arif and Ilias (2011) elaborated as well as the students go to higher classes then they demand the high satisfaction level regarding the quality and facilities in the institution. This thing enhances students' proficiency and adequacy. Gibson (2010) described the factors of students' satisfaction in universities. When students enter in higher educational institutions they observe the things deeply. To satisfy the customer universities may provide car stand facility. This element highlights the quality of administrative services set apart by Hoque, Abdul Razak, Othman, Mishra, and Samad (2013) study. And it also found by Petruzzellis & Romanazzi, 2010) that higher educational institutions and university management may consider these elements in the planning and decision making because administrative services quality depends on it. Organizations may give importance to the necessary factors that increase the quality of institution and customer satisfaction. The students observe the university keenly before taking admission because institution plays a significant role to enhance their academic performance (Gibson, 2010). Fredrickson (2012) states that as higher educational institutions' launch different programs to fulfill the demands of the changing environment. Universities mention the scope, benefits of the degree and amount that is required to get it. They elaborated advance just to satisfy the customers. Institutions also provide such a cooperative environment in which students discuss things with class fellows and share their problems with teaching staff. All these things help out to increase the satisfaction of customers. Astin (1999) stated that students measure the quantity and quality of the institution through physical facilities and academic progress. They take interest in institutions according to their psychological level. They contribute in different activities and this

contribution enhances their learning level and promotes the educational quality (Wiers-Jenssen, Stensaker, & Groggaard, 2002). Institutions offer the academic and management quality to their students and this function is appreciated by them because they are customer of that institutions. The customers demand the quality of products, same the students like the institution which provides standard education (Petruzzellis & Romanazzi, 2010). There is a distinction amongst organizations and subject-fields concerning the most imperative factors of customer satisfaction. Moreover, education quality, Wiers-Jenssen, Stensaker, and Groggaard (2002) narrated that universities satisfy the customers and invest the time, finance, and many other things just to facilitate the students. Organizations analyze that how customer fulfillment can be separated into part appraisals, alluding to more extensive parts of the learner's learning experience. Assessment of the institutions based on the infrastructure quality and customer satisfaction. They divided the idea into a few sub-factors, for example,

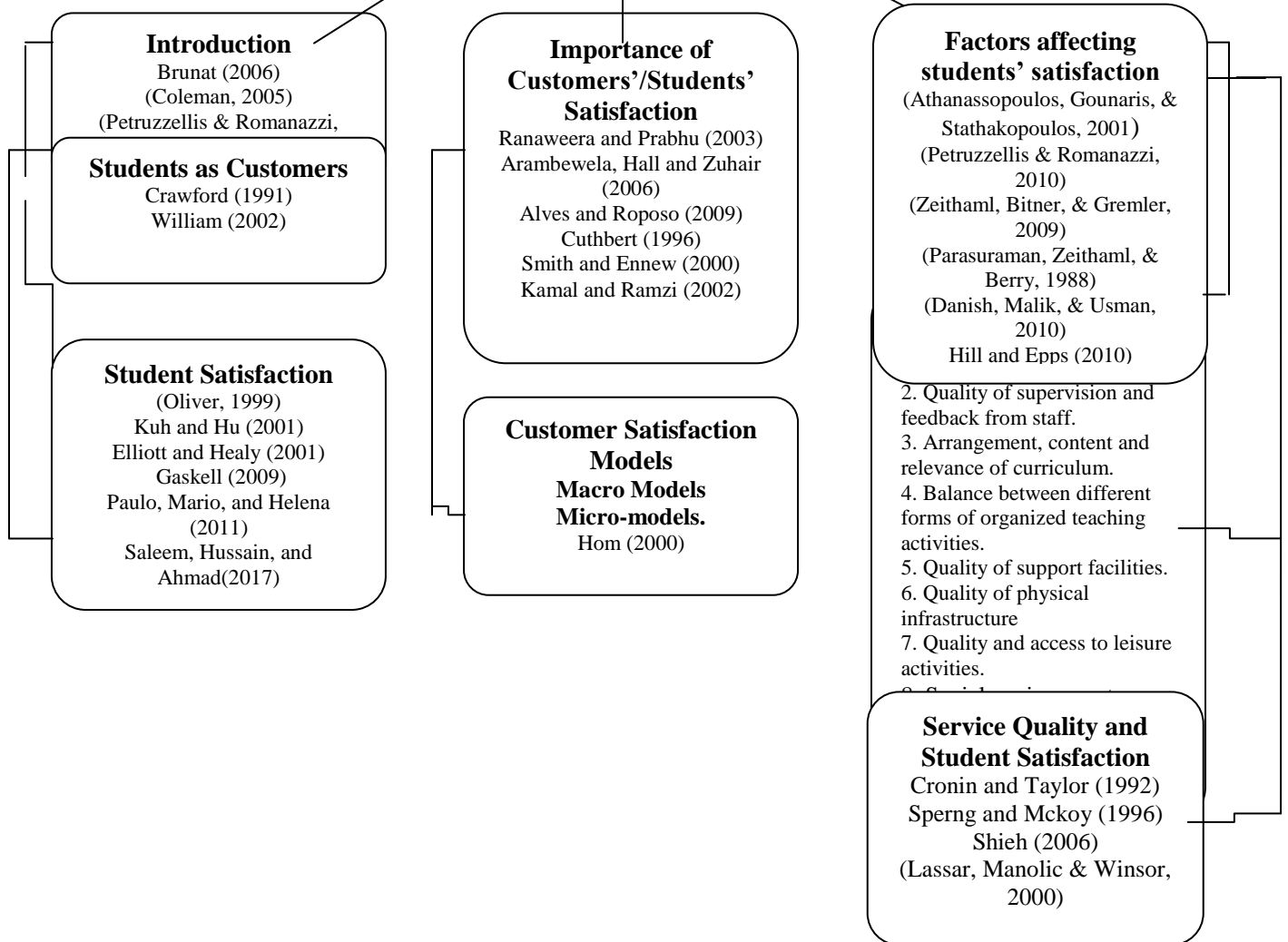
1. Quality of teaching.
2. Quality of supervision and feedback from staff.
3. Arrangement, content and relevance of curriculum.
4. Balance between different forms of organized teaching activities.
5. Quality of support facilities.
6. Quality of physical infrastructure
7. Quality and access to leisure activities.
8. Social environment.

Letcher and Neves (2015) suggested that there are mainly seven factors which are used as standardized instruments for the student satisfaction. They are like: (1) satisfaction with the curriculum instruction and classes, (2) satisfaction with the quality of teaching, (3) satisfaction with the extra curricula activities and career opportunities, (4) satisfaction with the student advising, (5) satisfaction with the quality of teaching feedback, (6) satisfaction with the computing facility and (7) satisfaction with student interaction. Another factor that can improve students' satisfaction was by increasing students' interest while teaching the material. For learners to retain the learning they get from their teachers effectively, they should be satisfied. We accept that variables like general administration, institution's reputation, teaching techniques, launching programs, access and accommodation to offices, educational costs charges, and involvement of the students and communication with the institution's staff, will all fundamentally effect on their level of academic fulfillment and also their accomplishment and adjustment capacity.

### **Service Quality and Student Satisfaction**

Administration service quality is normally seen as a significant imperative for keeping up associations with important clients. The connection between provision quality and consumer loyalty as showed up as indicated by Cronin and Taylor (1992) was a subject of key concern. Sperng and Mckoy (1996) researched administration quality as a pre-cursor to fulfillment. Shieh (2006) made sense of in his examination that all service measurements aside from "responsiveness" significantly affected customers' fulfillment. He in this way distinguished there was a positive connection among quality measurements and students' satisfaction. In addition, legitimate information of determinants of consumer loyalty can bring high financial increases for an organization in an economical market (Lassar, Manolic, & Winsor, 2000).

# Path Analysis of Customer Satisfaction about Quality Education in Pakistani Universities



## Research Objectives

The study was conducted to achieve the following objectives:

1. Explore path analysis of customer satisfaction about quality education in universities.

To check the construct reliability and validity of customer satisfaction about quality education in universities scale.

## II. METHODOLOGY

There are different types of studies in social sciences. Empirical studies demand clear methodology and this thing enhances its worth and validness. The effectiveness of any study depends upon its methodology, in which researcher describes detail method and procedure. This study was quantitative correlation and survey type in nature. The population of the study was students of Pakistani universities of Punjab province. From



population two hundred and thirty students selected as a sample of study conveniently. Instrumentation is considered a backbone of any study. Researchers are unable to conduct research without valid instrument. However, researchers released their energy and time on instrument development. Questionnaire was developed regarding customer satisfaction about quality education on five point likert scale to collect relevant information from participants. Questionnaire regarding quality education was consisted of seven factors namely; curriculum content, teaching quality, class management, group interaction, individual rapport, breadth discussion, and fair evaluation. Tools are vague and unreliable without taking experts opinions on its. The worth of tool is made by approval of experts. Thus, scale was validated by field experts. And after that reliability was ensured by follow the process of pilot testing. Reliability was ensured to ensure the internal consistency among items by applying Cronbach's Alpha initially. There were twenty five items in scale and value of Alpha was .928, which is statistically significant and acceptable. It was the hard task to collect data from students. A big amount of physical and mental energy, time, as well as finance quantity spent to visit universities for data collection from students. Therefore, researchers drove a great effort to conduct this study especially in data collection procedure and made it successful. After data collection the main thing is to handle data and analyse it properly. Path analysis is difficult task. Data were analysed by using smartpls software for structural equation modelling, in which different tests were applied. Path analysis with help of  $r$  value, Path average variance extracted, and constructs validity and reliability were calculated in this study. A detail of data analysis is under follow.

### III. FINDINGS AND RESULTS

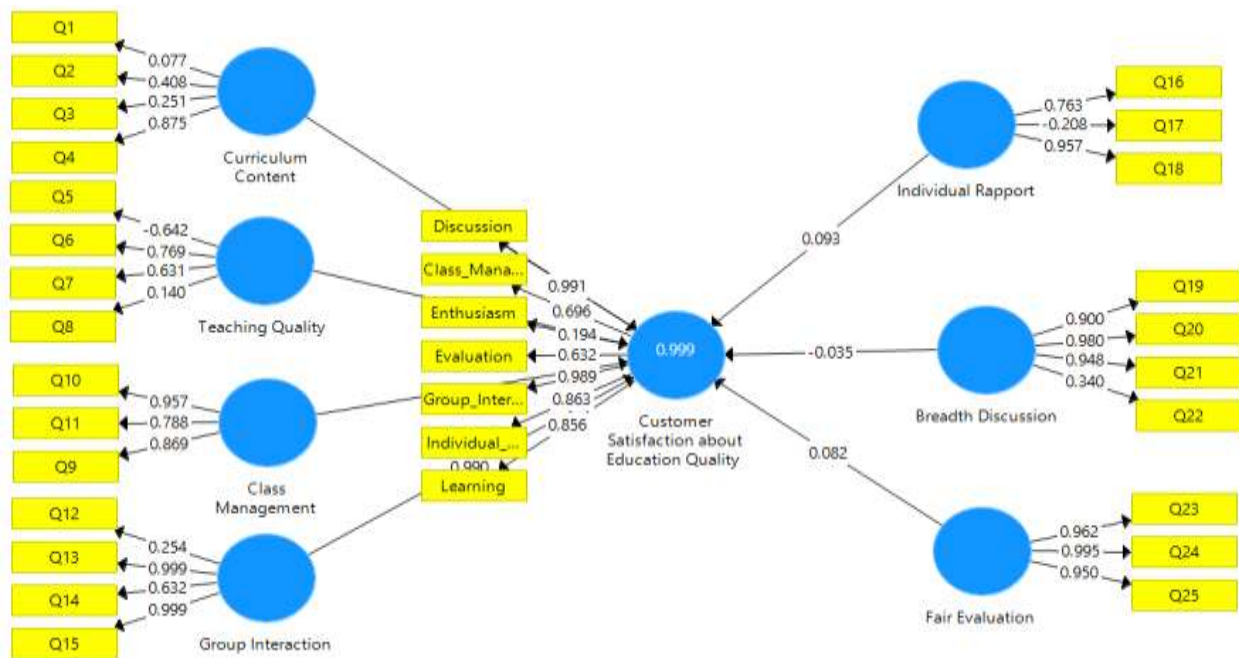


Figure 1: Path relationship between quality education and its dimensions

Above figure shows path relationship between customer satisfaction about quality education and its dimensions. The main construct quality education contained twenty five items. There is main construct in blue circle in central position. Items loading in yellow colour displayed in left and right sides of each dimension and variable. There were significant positive association between quality education and its sub-dimensions. Items loading confirmed that all dimensions are important to check the customer satisfaction about education quality in higher educational institutions.

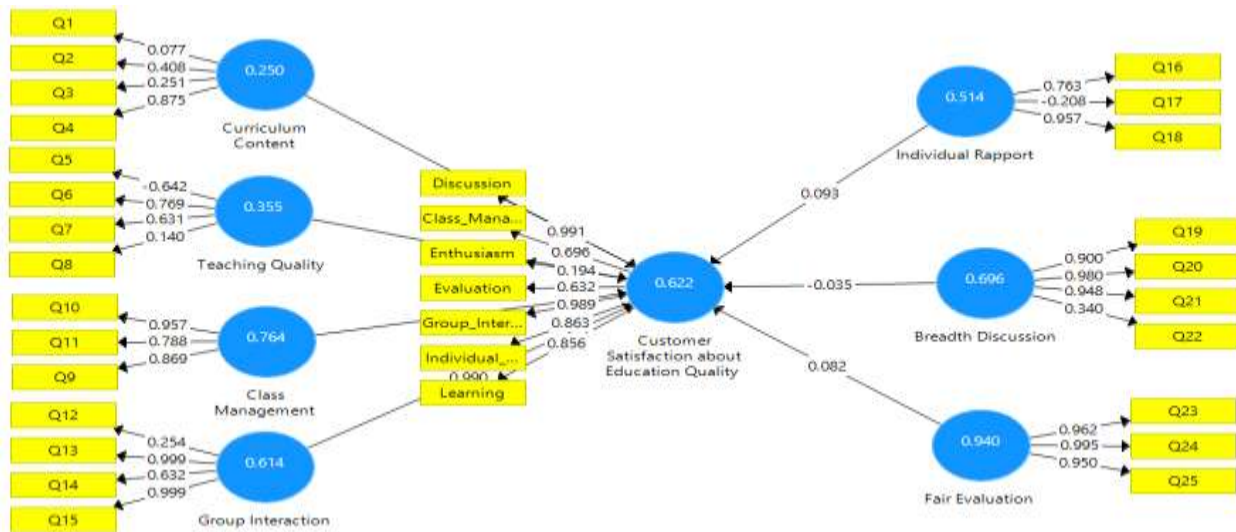


Figure 2: Path average variance extracted relationship between variable and its dimensions

This figure contains average variance path association between customer satisfaction regarding quality education and its sub-dimensions. Average variance extracted (AVE) is a measure of the amount of variance that is captured by a construct in relation to the amount of variance due to measurement error. The AVE values of factors are discussion .991, class management .696, fair evaluation .632, group interaction .989, individual rapport .863, and learning content .856. All dimensions of quality education are strongly related with customer satisfaction about education quality and interrelated positively. AVE is always computed to guarantee the validity of the structural model.

### Latent Variable

Latent Variable	Latent Variable Correlations	Latent Variable Covariances	Copy to Clipboard		Excel Format			
	Breadth Discussion	Class Management	Curriculum Content	Customer...	Fair Evaluation	Group Interaction	Individual Rapport	Teaching Quality
Breadth Discussion	1.000	0.652	0.311	0.916	0.570	0.890	0.851	0.419
Class Management	0.652	1.000	0.330	0.752	0.111	0.790	0.509	-0.020
Curriculum Content	0.311	0.330	1.000	0.360	0.054	0.409	0.204	0.078
Customer Satisfaction about Education Quality	0.916	0.752	0.360	1.000	0.594	0.965	0.889	0.390
Fair Evaluation	0.570	0.111	0.054	0.594	1.000	0.391	0.806	0.402
Group Interaction	0.890	0.790	0.409	0.965	0.391	1.000	0.761	0.369
Individual Rapport	0.851	0.509	0.204	0.889	0.806	0.761	1.000	0.382
Teaching Quality	0.419	-0.020	0.078	0.390	0.402	0.369	0.382	1.000

Figure 3: Latent variables

Latent variable indicates correlations in this figure. It is the part and output of structural equation modelling in path analysis. There was positive significant association between customer satisfaction about quality education and its sub-dimensions.

## R Square

Matrix	R Square	R Square Adjusted
	R Square	R Square Adjusted
Customer Satisfaction about Education Quality	0.996	0.995

Figure 4: R square

This diagram shows r square and r square adjusted. Researchers Ahmad, Batool, and Hussain (2019) described that r square value is acceptable at .3. The r square value is acceptable at 0.3. Therefore in this figure r square value of customer satisfaction about quality education  $r = .996$ , which is bigger than set standard.

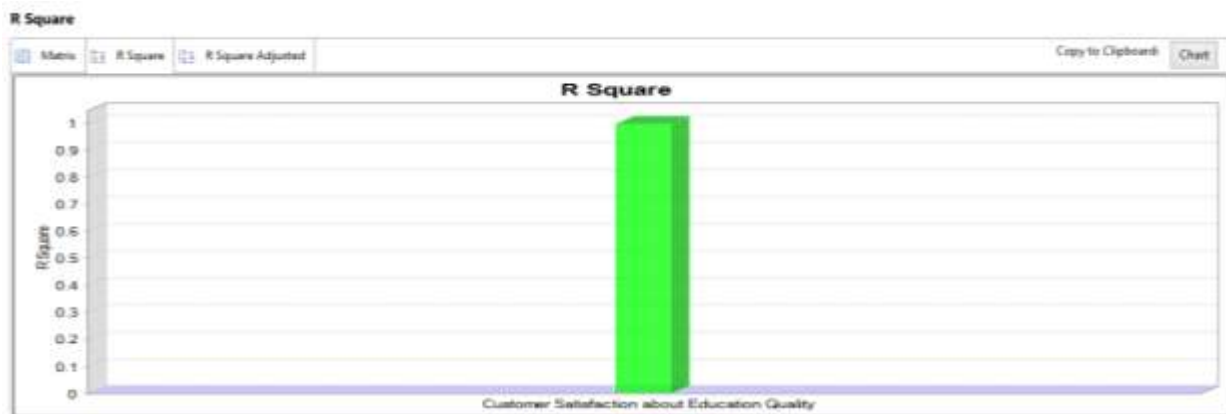


Figure 5: R square

This figure indicates the height of r square in graphical form. The r square of quality education in green line is touching 1, which shows the significance of data.

## Construct Reliability and Validity

Matrix	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Breadth Discussion	0.823	0.961	0.892	0.696
Class Management	0.860	1.145	0.906	0.764
Curriculum Content	0.022	0.024	0.521	0.345
Customer Satisfaction about Education Quality	0.872	0.939	0.912	0.622
Fair Evaluation	0.968	0.976	0.979	0.940
Group Interaction	0.889	0.969	0.931	0.822
Individual Rapport	0.716	1.071	0.860	0.756
Teaching Quality	-0.008	0.437	0.266	0.468

Figure 6: Construct reliability and validity of factors

Questionnaire or scale is only considered accurate and valid when its validity and reliability are confirmed. In path analysis, structural equation modelling measured construct reliability and validity in above figure. Reliability and validity were calculated by four different tests Cronbach's Alpha, rho\_A, Composite reliability, and average variance extracted. Reliability values in green colour are showing the strong validity and highly significant consistent and reliable scale dimensions of customer satisfaction about quality education. But values in red colour are below from threshold. These values in red colour are not competing the threshold



and standardized cut in this figure. The cut point or acceptable value is vary in four tests. These values are below than margin due to which these numbers are in red colour. However, the quality education construct and its different factors are statistically significant valid and reliable except curriculum content and teaching quality.

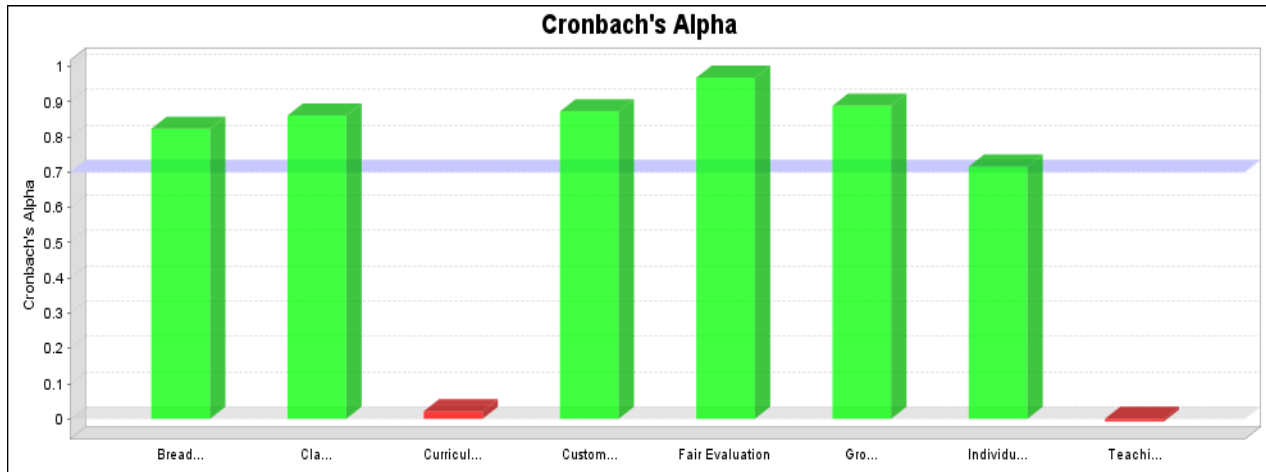


Figure 7: Cronbach's alpha

Above figure is related to Cronbach's alpha that is used to check internal consistency among items of constructs. The acceptable values of items are at 0.7 in this reliability. There are all dimensions of quality education except curriculum content and teaching quality in form of green pillars and both are crossing the blue standard marginal line and touching .9 value. It means dimensions of instrument are statistically reliable.

**Discriminant Validity**

	Breadth Discussion	Class Management	Curriculum...	Customer ...	Fair Evaluation	Group Interaction	Individual Rapport	Teaching Quality
Breadth Discussion	0.834							
Class Management	0.652	0.756						
Curriculum Content	0.311	0.330	0.500					
Customer Satisfaction about Education Quality	0.916	0.752	0.360	0.789				
Fair Evaluation	0.570	0.111	0.054	0.594	0.969			
Group Interaction	0.890	0.790	0.409	0.965	0.391	0.906		
Individual Rapport	0.851	0.509	0.204	0.889	0.806	0.761	0.717	
Teaching Quality	0.419	-0.020	0.078	0.390	0.402	0.369	0.382	0.596

Figure 8: Discriminant validity

Discriminant validity ensures the discrimination between variables. Above figure is related to discriminant validity that is used to check validness of constructs. Ahmad, Hussain, and Batool (2019) defined that each construct had maximum value and less value with other variable. Therefore, dimensions of this instrument are showing discrimination with each other which confirm the tool validity.

## Discriminant Validity

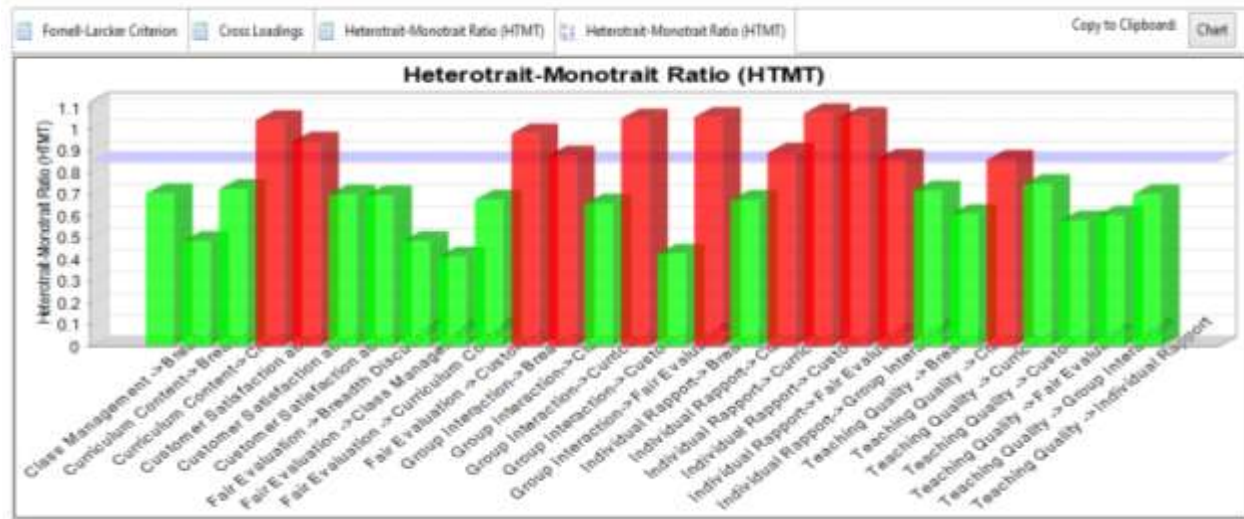


Figure 9: Discriminant validity

Above figure is related to discriminant validity in graphical form. The cut point is .9 and red lines are crossing standard point. It means the constructs in red lines have discrimination with other dimensions. But factors in green lines are unable to show discrimination.

## IV. DISCUSSION

The study was about to conduct path analysis of customer satisfaction about quality education in universities. Quality of education is vital and crucial, particularly with regards to higher education. Students' achievements and efficiency depend upon quality of institution and its education. It is proved by the research that quality education is need and it affects the customer satisfaction as well as their achievements. Paulo, Mario, and Helena (2011) identified how the customers' satisfaction is changed with the passage of time. They discussed university student's demand more quality in spite of others. Because they know the market demands and changes. They gave fruitful ideas for customer's gratification improvement through curriculum, syllabus, content delivering techniques, and how education procedure is managed. The results of the present study are aligned with this past study. It was observed that curriculum content and teaching quality are important factors of customer satisfaction to gain quality education.

The status and reputation of any institution depends upon its academic and administrative quality and capacity to compete the academic world. Both qualities are helpful in customers' satisfaction regarding academics. Ivy (2001) also agreed that to select the university, most students consider the institution's reputation. It may difficult for the teachers to adopt and change the teaching methods according to nature of the topic and subject. Students are comfortable and give prefer to change the teaching technique conferring the subject demand (Douglas, McClelland, & Davies 2008). The important elements to provide quality knowledge are the competent teachers, delivering methods and academic facilities that are helpful during teaching (Petruzzellis & Romanazzi, 2010; Saleem, Hussain, & Ahmad, 2017). Letcher and Neves (2015) suggested that there are mainly seven factors which are used as standardized instruments for the student satisfaction. They are satisfied with the curriculum instruction and classes, satisfaction with the quality of teaching, satisfaction with the extra curricula activities and career opportunities, satisfaction with the student advising, satisfaction with the quality of teaching feedback, satisfaction with the computing facility and satisfaction with student interaction. The findings of current study are also supporting these factors which discussed Letcher and Neves. Consequently, the past studies which were examined in different countries of the world are supporting the findings of present study related to customer satisfaction about quality education. It means the results of study are valid and generalizable in local context.

## V. CONCLUSIONS

Nations become strong when the resources are used for the improvement of academic condition of the educational institutions and this kind of investment has positive effect on the economy of country (Coleman, 2005). Education demand is increasing with the passage of time and people are showing more interest to get it. And customers demand high service quality education and they have also high expectations that institutional administration may provide them standardized services. The clients need exclusive academic and management services from institution. Students are studying in higher education institutions as treated primary customers. The word customer is used frequently for students in the educational institutions now a days. Students' satisfaction assumes a fundamental part in promoting, as well as a basic factor in inducing students to learn effectively. This primary purpose of this study was to conduct path analysis of customer satisfaction about quality education in universities with the help of structural equation modelling. The quantitative study was correlation and survey type in nature. Self-developed questionnaire regarding customer satisfaction about quality education on five point likert scale was used to collect data from participants. Validity was ensured by field experts before using scale. Internal consistency was checked among items by applying Cronbach alpha, rho-a, composite reliability, and average variance for reliability confirmation of scale. All four techniques verified that instrument is valid and reliable. There were significant positive association between quality education and its sub-dimensions. Items loading confirmed that all dimensions are important to check the customer satisfaction about education quality in higher educational institutions. Average variance extracted (AVE) is a measure of the amount of variance that is captured by a construct in relation to the amount of variance due to measurement error. All dimensions of quality education are strongly related with customer satisfaction about education quality and interrelated positively. AVE is always computed to guarantee the validity of the structural model. Results showed that students are satisfied from classroom management of teachers. They are provided opportunities to interact with each other and discuss things with in groups as well as with teacher for better and effective learning. They are also satisfied because their performance is assessed by fair evaluation. Universities administration may focus on teaching quality and revise curriculum with the passage of time for more customer satisfaction and compete the academic world. As students go to higher classes then they demand the high satisfaction level regarding the quality and facilities in the institution. This thing enhances students' proficiency and adequacy. The customer satisfaction approach is necessary to achieve the goals and promote the institutional product in internal and external market. Their satisfaction develops quality culture that is favorable for the progress of quality education. Quality is most important factor to enhance the institution demands among customers.

## VI. RECOMMENDATIONS

Quality maintenance is a difficult task but not impossible. In competitive world, everyone is busy to achieve excellence to gain more fame. Higher education institutions are a backbone of any education system of a society. Organizations cannot survive without customer satisfaction in any field. For the sake of this, multi-national organizations pay more attention on customer pleasure and gratification in all over the world. Students are considered and treated as customers in universities. Thus, to keep in mind students priorities and demands are very important to run academic institutions successfully. If they are not satisfied from academic or administrative services of the institutions, then they may move to another organization where there basic needs are fulfilled. The institutions may focus to enhance quality education for the sake of customer satisfaction. At present quality is a major issue in the market. Everyone is focusing on quantity rather than quality. A very few institutions are quality conscious in this matter. There is need in institutions to take some positive initiatives to provide better quality education to customers. Train teachers with the passage of time to cope the changing environment. It is the primary duty of a teacher to manage class and provide healthy environment to students, where they feel comfortable and discuss things openly with teachers as well as class fellows. In this way, they can interact and share their ideas with others freely. Universities need to perceive the demands of current time and market and introduce new curriculum and content, which is acceptable globally. Fair evaluation is a core factor of quality education and customers are only satisfied when they are treated without any biasness. Universities may eliminate this and bound faculty members to focus on impartial assessment with launching and following strict evaluation policies. All these necessary actions may provide a road map which leads towards customer satisfaction regarding quality education.

#### REFERENCES

1. Ahmad, S., Batool, A., & Hussain, A. (2019). Path relationship of time management and academic achievement of students in distance learning institutions. *Pakistan Journal of Distance and Online Learning*, 5(2), 191-208.
2. Ahmad, S., Hussain, A., & Batool, A. (2019). Measuring professional life quality of university teachers: Scale construction and validation. *Journal of Research and Reflections in Education*, 13(2), 273-281.
3. Alexandris, K., & James, J. (2002). Measurement of internal service quality: Application of SERVQUAL battery to internal service quality. *Managing Service Quality*, 12(5), 278-291.
4. Alves, H., & Raposo, M. (2007). Conceptual model of student satisfaction in higher education. *Total Quality Management, University of Beira Interior, Covilha, Portugal*, 18(5), 571-588.
5. Alves, H., & Raposo, M. (2009). The measurement of the construct satisfaction in higher education. *The Service Industries Journal*, 29(2), 203-218.
6. Anderson, G. (2006). Carving out time and space in the managerial university. *Journal of Organizational Change Management*, 19(5), 578-592.
7. Arambewela, R., Hall, J., & Zuhair, S. (2006). Postgraduate international students from Asia: Factors influencing satisfaction. *Journal of Marketing for Higher Education*, 15(2), 105-127.
8. Arif, S., & Ilias, M. (2011). Leadership, empowerment and customer satisfaction in teaching institutions. *The TQM Journal*, 23(4), 388-402.
9. Astin, A. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, 40(5), 518-529.
10. Athanassopoulos, A., Gounaris, S., & Stathakopoulos, V. (2001). Behavioral responses to customer satisfaction: An empirical study. *European Journal of Marketing*, 35(5-6), 687-707.
11. Atheyaman, A. (1997). Linking student satisfaction and service quality perceptions: The case of university education. *European Journal of Marketing*, 31(7), 528-540.
12. Barnes, B. R. (2007). Analysing service quality: The case of post-graduate Chinese students. *Total Quality Management & Business Excellence*, 18(3), 313-331.
13. Brink, C. (2010). Quality and standards: Clarity, comparability and responsibility. *Quality in Higher Education*, 16(2), 139-152.
14. Brown, R., & Mazzarol, T. (2009). *The importance of institutional image to student satisfaction and loyalty within higher education*. High Education Springer, University of Western Australia, Crawley, WA, Australia, 58:81(95).
15. Brunat, E. (2006). *The importance of higher education to attract investment and contribute to sustain economic growth and competitiveness in Kaliningrad*. Baltic Rim Economic, Bimonthly Review.
16. Carey, K., Cambiano, R. L., & De Vore, J. B. (2002). Student to faculty satisfaction at a Midwestern university in the United States. *HERDSA*, 93-97. Retrieved April 09 from [www.ecu.edu.au/conferences/herdsa/main/papers/ref/pdf/Carey.pdf](http://www.ecu.edu.au/conferences/herdsa/main/papers/ref/pdf/Carey.pdf).
17. Chandar, S. G. S., Rajendran, C., & Anantharaman, R. N. (2002). The relationship between service quality and customer satisfaction-a factor specific approach. *Journal of Services Marketing*, 16(4), 363-379.
18. Chea. (2002). *The fundamentals of accreditation. What do you need to know?* Washington DC: Council for Higher Education Accreditation.
19. Cheng, M. (2011). Transforming the learner' versus passing the exam? Understanding the gap between academic and student definitions of teaching quality. *Quality in Higher Education*, 17(1), 3-17.
20. Cheng, M. (2014). Quality as transformation: educational metamorphosis. *Quality in Higher Education*, 20(3), 272-289.
21. Cledes, M. D., Gan, C., Kao, T., & Choong, M. (2008). An empirical analysis of customer satisfaction in international air travel. *Innovative Marketing*, 4(2), 49-62.
22. Coleman, S. (2005). The impact of human capital measures on firm performance: A comparison by gender, race, and ethnicity. *The Journal of Entrepreneurial Finance and Business Ventur*, 10(5), 38-56.
23. Crawford, F. (1991). Total quality management, committee of vice-chancellors and principals occasional paper, London, december, cited in Hill, F. M. (1995) Managing service quality in higher education, the role of the student as primary consumer. *Quality Assurance in Education*, 3(3), 10-21.
24. Cronin, J. J. Jr., & Taylor, S. A. (1992). Measuring service quality: A re-examination and extension. *Journal of Marketing*, 56(3), 55-68.

25. Cuthbert, P. F. (1996). Managing service quality in higher education: Is SERVQUAL the answer? Part2. *Managing Service Quality*, 6(3), 31-35.
26. Danish, R., Malik, M., & Usman, A. (2010). The impact of service quality on students' satisfaction in higher education institutes of Punjab. *Journal of Management Research*, 2(2), 1.
27. Danjuma, I., & Rasli, A. (2012). Service quality, satisfaction and attachment in higher education institutions: A theory of planned behaviour perspective. *International Journal of Academic Research*, 4(2), 96-103.
28. Douglas, J., McClelland, R., & Davies, J. (2008). The development of a conceptual model of student satisfaction with their experience in higher education. *Quality Assurance in Education*, 16(1), 19-35.
29. Elliot, K. M., & Healy, M. A. (2001). Key factors influencing student satisfaction related to recruitment and retention. *Journal of Marketing for Higher Education*, 10(4), 1-11.
30. Fredrickson, J. E. (2012). Linking student effort to satisfaction: The importance of faculty support in creating a gain-loss frame. *Academy of Educational Leadership Journal*, 16, Special Issue, 111-125.
31. Gatfield, T. (2000). A scale for measuring student perception of quality: An Australian Asian perspective. *Journal of Marketing for Higher Education*, 10(1), 27-41.
32. Gibbs, P. (2011). Finding quality in being good enough conversations. *Quality in Higher Education*, 17(2), 139-150.
33. Gibson, A. (2010). Measuring business student satisfaction: A review and summary of the major predictors. *Journal of Higher Education Policy and Managements, Seton Hall University, South Orange, USA*, 32(3), 251-259.
34. Government of Pakistan. (1947). *Proceedings of the Pakistan educational conference*. Karachi: Ministry of Interior, Education Division.
35. Government of Pakistan. (2007). *Pakistan in the 21st century: Vision 2030*. Islamabad: Planning Commission.
36. Gulla, M. (1999). Assessing the teaching quality to student satisfaction relationship: Applied customer satisfaction research in the classroom. *Journal of Marketing Theory and Practice*, 7(3), 87-97. Retrieved from <http://www.jstor.org/pss/40469971>.
37. Hill, M., & Epps, K. (2010). The impact of physical classroom environment on student satisfaction and student evaluation of teaching in the university environment. *Academy of Educational Leadership Journal, Kennesaw State University*, 14(4), 65-79.
38. Hom, W. (2000). *An overview of customer satisfaction models*. Paper presented at the annual meeting of the research and planning group for California community colleges (38th, Pacific Grove, CA, April 26-28).
39. Hom, W. (2002). Applying customer satisfaction theory to community college planning of student services. *Journal*. Retrieved from [http://www.ijournal.us/issue\\_02/ij\\_issue02WillardHom\\_01.htm](http://www.ijournal.us/issue_02/ij_issue02WillardHom_01.htm)
40. Hoque, K. E., Razak, A. Z. A., Othman, A. J., Mishra, P. K., & Samad, R. S. A. (2013). Quality services as perceived by students of international and public schools. *Life Science Journal*, 10(2), 74-78.
41. Ilias, A., Rahman, R. A., & Razak, M. Z. A. (2008). Service quality and student satisfaction: A case study at private higher education institutions. *International Business Research*, 1(3), 163-175.
42. Ivy, J. (2001). Higher education institution image: A correspondence analysis approach. *The International Journal of Educational Management*, 15(6), 276-282.
43. Kamal, A., & Ramzi, N. (2002). Assuring quality service in higher education: Registration and advising attitudes in a private university in Lebanon. *Quality Assurance in Education*, 10(4), 198-206.
44. Kotler, P., & Clarke, R. N. (1987). *Marketing for health care organizations*. Englewood Cliffs, NJ: Prentice-Hall.
45. Kuh, G. D., & Hu, S. (2001). The effects of student-faculty interaction in the 1990s. *The Review of Higher Education*, 24(3), 309-332.
46. Kwek, C., Lau, T., & Tan, H. (2010). Education quality process model and its influence on students' perceived service quality. *International Journal of Business and Management*, 5(8), 154.
47. Lassar, W. M., Manolis, C., & Winsor, R. D. (2000). Service quality perspectives and satisfaction in private banking. *Journal of Service Marketing*, 14(3), 244-271.
48. LeBlanc, G., & Nguyen, N. (1997). Searching for excellence in business education: an exploratory study of customer impressions of service quality. *International Journal of Educational Management*, 11(2), 72-79.
49. Leece, J. (2010). Paying the piper and calling the tune: Power and the direct payment relationship.



- British Journal of Social Work*, 40(1), 188-206.
50. Letcher, D. W., & Neves, J. S. (2015) Determinants of undergraduate business student satisfaction. *Research in Higher Education Journal*, 6, 1-26.
  51. Lodge, J. M., & Bonsanquet, A. (2014). Evaluating quality learning in higher education: Re-examining the evidence. *Quality in Higher Education*, 20(1), 3-23.
  52. Mahiah, S., Suhaimi, S., & Ibrahim, A. (2006). Measuring the level of customer satisfaction among employees of human Resource Division. *Advances in Global Business Research*, 3(1), 40-43.
  53. Malik, M. E., & Danish, R. Q. (2010). Impact of service quality of institution on students' satisfaction. *Journal of Management Research*, 2(2), 1-10.
  54. Marcus, B. H., Lewis, B. A., Williams, D. M., Dunsiger, S., Jackicic, J. M., Whiteley, J. A., & Parisi, A. F. (2009). A comparison of internet and print-based physical activity interventions. *Archives of Internal Medicine*, 167(9), 944-949.
  55. Marilyn, R. (2005). Marketing education. *International Journal of Contemporary Hospitality Management*, 17(1), 65-77.
  56. Martin, A. J. (2003). *How to motivate your child for school and beyond*. Sydney: Bantam.
  57. Mertova, P. (2008). *Quality in higher education: Stories of English and Czech academics and higher education leaders* (Unpublished doctoral dissertation). Monash University, Melbourne.
  58. Morley, L. (2003). Reconstructing students as consumers: Power and assimilation in Slowey, M. and Watson, D. *Higher Education and the Life course*, London: SRHE and Open University Press.
  59. Nadiri, H., Kandampully, J., & Hussain, K. (2009). Students' perceptions of service quality in higher education. *Total Quality Management & Business Excellence*, 20(5), 523-535.
  60. Nettet, E., & Helgesen, O. (2009). Modelling and managing student loyalty: A study of a Norwegian university college. *Scandinavian Journal of Educational Research*, 53(4), 327-345.
  61. Newton, J. (2000). Feeding the beast or improving quality academics' perceptions of quality assurance and quality monitoring. *Quality in Higher Education*, 6(2), 153-163.
  62. Newton, R. R. (2002). For profit and traditional institutions: A comparison. *International Higher Education*, 1, 17-19.
  63. Odeh, A. Y. (2012). Use of information resources by undergraduate students and it relationship with academic achievement. *International Journal of Libraries & Information Services*, 62(3), 222-232.
  64. Oldfield, B. M., & Baron, S. (2000). Students' perception of service quality in a UK university business and management faculty. *Quality Assurance in Education*, 8(2), 85-95.
  65. Oliver, R. L. (1999). *Satisfaction: A behavioral perspective on consumer*. New York, Prentice Hall.
  66. O'Neill, M. A., & Palmer, A. (2004). Importance-performance analysis: A useful tool for directing continuous quality improvement in higher education. *Quality Assurance in Education*, 12(1), 39-52.
  67. Ong, W. M., & Nankervis, A. (2012). Service quality in higher education: Students' perceptions in Australia and Malaysia. *Review of Integrative Business & Economics Research*, 1(1), 277-290.
  68. Owino, E. O. (2013). *The influence of service quality and corporate image on customer satisfaction among university students in Kenya* (Unpublished PhD dissertation). University of Nairobi, Kenya.
  69. Padma, K. (2006). *Measuring multidimensional performance attributes: Method and application to measurement of service quality of local telephone companies* (UMI dissertation). Publishing in the Ohio State University.
  70. Palacio, A. B., Meneses, G. D., & Perez, P. J. P. (2002). The configuration of the university image and its relationship with the satisfaction of students. *Journal of Educational Administration*, 40(5), 486-505.
  71. Parasuraman, A. (1990). *An empirical examination of relationships in an extended service quality model*. Marketing Science Institute, Cambridge, MA.
  72. Parasuraman, A., Zeithaml, A., & Berry, L. (1988). SERVQUAL: Multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
  73. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41-50.
  74. Parasuraman, A., Zeithaml, V., Berry, L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
  75. Pariseau, S. E., & McDaniel, J. R. (1997). Assessing service quality in schools of business. *The International Journal of Quality & Reliability Management*, 14(3), 204-235.
  76. Paulo, O. D., Mário, B. R., & Helena, B. A. (2011). Using a satisfaction index to compare students' satisfaction during and after higher education service consumption. *Tertiary Education and*

- Management*, 18(1), 17-40.
77. Pereda, M. (2006). *An examination of the impact of service quality dimensions on students' satisfaction in higher education in the UK* (Unpublished doctoral dissertation). University of Surrey.
  78. Perry, R. P. (1991). Perceived control in college students: Implications for instruction in higher education. *Higher Education: Handbook of Theory and Research*, 7, 1-56.
  79. Petruzzellis, L., & Romanazzi, S. (2010). Educational value: How students choose university. *International Journal of Educational Management. University of Bari Bari, Italy*, 24(2), 139-158.
  80. Pollack, B. L. (2008). The nature of the service quality and satisfaction relationship Empirical evidence for the existence of satisfiers and dissatisfiers. *Managing Service Quality*, 18(6), 537-558.
  81. Quinn, A., Lemay, G., Larsen, P., & Johnson, D. M. (2009). Service quality in higher education. *Total Quality Management & Business Excellence*, 20(2), 139-152.
  82. Ramírez, G.B. (2013). Studying quality beyond technical rationality: political and symbolic perspectives. *Quality in Higher Education*, 19(2), 126-141.
  83. Ranaweera, C., & Prabhu, J. (2003). On the relative importance of customer satisfaction and trust as determinants of customer retention and positive word of mouth. *Journal of Targeting, Measurement and Analysis for Marketing*, 12(1), 82-90.
  84. Richardson, J. T. E. (2005). Instruments for obtaining student feedback: A review of the literature. *Assessment and Evaluation in Higher Education*, 30(4), 387-415.
  85. Rowley, J. (2003). Designing student feedback questionnaires. *Quality Assurance in Education*, 11(3), 142-149.
  86. Rowley, J. E. (1996). Customer compatibility management: An alternative perspective on student-to-student support in higher education. *International Journal of Educational Management*, 10(4), 15-20.
  87. Ruby, C. A. (1998). Assessing satisfaction with selected student services using servqual a market driven model of service quality. *NASPA Journal*, 35(4), 331-341.
  88. Russell, M. (2005). Marketing education: A review of service quality perceptions among international students. *International Journal of Contemporary Hospitality Management*, 17(1), 65-77.
  89. Saaditul, I., Shamsinar, M. S., & Wong, C. M. (2000). *Customer satisfaction towards service quality of higher education in Malaysia*. Seminar FEP 2000 Pulau Pinang, 20-23. Retrieved November 9th, 2004, from <http://www.econ.upm.edu.my/repport/mgm11b.html>.
  90. Saarinen, T. (2010). What I talk about when I talk about quality. *Quality in Higher Education*, 16(1), 55-57.
  91. Saleem, M., Hussain, A., & Ahmad, S. (2017). Identification of gaps in service quality in higher education. *Bulletin of Education and Research*, 39(2), 171-182.
  92. Shanahan, P., & Gelber, R. (2004). Quality in university student administration: Stakeholder conceptions. *Quality Assurance in Education*, 12(4), 166-174.
  93. Sheih, C. (2006). The relationship between service quality and customer satisfaction: The example of CJKU library. *Journal of Information and Optimization Sciences*, 27(1), 193-201.
  94. Smith, G., Smith, A., & Clarke, A. (2007). Evaluating service quality in universities: A service department perspective. *Quality Assurance in Education*, 15(3), 334-351.
  95. Smith, R., & Ennew, C. (2001). *Service quality and its impact on word-of-mouth communication in higher education*. University of Nottingham in Malaysia, Division of Business and Management.
  96. Sohail, M., & Shaikh, N. (2004). Quest for excellence in business education: A study of student impressions of service quality. *International Journal of Educational Management*, 18(1), 58-65.
  97. Soutar, G., & McNeil, M. (1996). Measuring service quality in a tertiary institution. *Journal of Educational Administration*, 34(1), 72-82.
  98. Spreng, R. A., & Mackoy, R. D. (1996). An empirical examination of a model of perceived service quality and satisfaction. *Journal of Retailing*, 72(2), 52-64.
  99. Talmacean, I., & Domnica, M. D. (2013). Viewpoints concerning educational quality management at a superior level. Management and economics. *Nicolae Balcescu Land Forces Academy*, 2(70), 198-204.
  100. Umbach, P. D., & Porter, S. R. (2002). How do academic departments' impact student satisfaction? Understanding the contextual effects of departments. *Research in Higher Education*, 43(2), 209-234.
  101. Wiers-Jenssen, J., Stensaker, B., & Groggaard, J. B. (2002). Student satisfaction: Towards an empirical deconstruction of the concept. *Quality in Higher Education*, 8(2), 183-195.
  102. Wilkinson, A., Redman, T., Snape, E., & Marchington, M. (1998). *Managing with total quality management: Theory and practice*, London: Macmillan Press Ltd.

103. Wilkinson, R. G. (2000). *Mind the gap: Hierarchies, health, and human evolution*. London: Weidenfeld and Nicolson.
104. William, J. (2002). *The student satisfaction approach: Student feedback and its potential role in quality assessment and enhancement*. 24<sup>th</sup> EAIR Forum, Prague, 8-11.
105. Zeithaml, V. (1987). *Defining and relating prices, perceived quality, and perceived report No. 87-101*, Cambridge, MA: Marketing Science Institute.
106. Zeithaml, V., Bitner, M., & Gremler, D. (2009). *Service marketing: Integrating customer focus across the firm* (5th ed.). McGraw Hill International, New York.