

## USING STRUCTURE EQUATION MODELING TO CONSTRUCT STUDENT SATISFACTION MODELS FOR PRIVATE UNIVERSITIES OF PAKISTAN

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### ABSTARCT

*Globalization and privatization of higher education across the globe have an immense influence over the delivery of service called 'higher education'. Private universities are in search of Business Excellence Models (BEMS) in competitive global world. They are struggling to build their image and reputation so that they can attract customers and public funding. University image has much to do with establishing the brand in market to attract quality students and faculty and it can be best assured through service quality and student satisfaction. Brown and Mazzarol (2009) have suggested that the university reputation or the institutional image has strong relationship with the perceived loyalty and belongingness with the institution. According to them the student satisfaction had weak and indeterminate link with the service quality of both types "human ware" (people and processes) and "hardware" (tangibles and facilities). A quantitative study was conducted in seven private Pakistani universities to assess students' perceptions of service quality and the process of reputation-building. The study examines the interaction of students' perception about the image and satisfaction with service delivery to procure customer satisfaction models predicting future sustainability of the market for the universities. Results suggest that leadership marks the difference; it is the planning and delivering of the most obligatory service – higher education – which is making the desired outcomes reachable to customers and earning outreach to the future market.*

**Keywords:** Higher Education. Private Universities. Service Quality. Customer Satisfaction. Leadership. University Image & Reputation

## 1) INTRODUCTION

Plato taught that freedom lies in choice, and people learn to exercise choices that free them from ignorance through higher education, granting eternal bliss—the hallmark of Aristotelian ethics. In contemporary knowledge societies, making the right decisions is even more critical since people do not enjoy the liberties of repeated mistakes. Choice of career or profession, and possibly entry into it, depend on choice of higher-education institution. The choice is critical because contemporary higher education affects people's lifestyles dramatically (Williams 2004), providing means of economic and social change. Following the globalization and privatization of higher education, students have relatively easy access to the higher education market, therefore, there exists a strong competition among universities for customers, and quality intake of students has become a challenge (Stensaker 2014; Metaxas and Koulouriotis 2014).

Higher education is experiencing change worldwide, and new mental models are emerging regarding service delivery and customer satisfaction (Heinonen et al. 2010; Collins & Park 2016); the same is true for private Pakistani universities. Universities must start learning from quality-based customer experiences to build an excellent business model for a university (Kanji, Malek and Tambi 1999; Dahlgaard-Park and Dahlgaard 2007). Does such a model exist for the newly established private universities of Pakistan, and if it exists, how does it work to provide satisfaction to its customers, and builds the image and reputation for the university simultaneously? Halai (2013) argues that the private higher-education sector in Pakistan is agile and offers broader access to young people; however, the quality of education in these institutions requires serious improvement, with only a few exceptions. This study aims to validate the claim made by Halai.

The government is responsible for regulating the quality of higher education, especially in private HEIs, because both stakeholders' money and effort is at stake and Higher Education Commission Pakistan is one such authority in Pakistan. Although the quality assurance and ranking is done by different independent agencies in the West, but in Pakistan HEC is responsible for both. Ranking, accountability measures, and quality assurance, all are considered eligible measures of quality of higher education institutions around the globe. Ranking is aimed at comparing the quality of one institution with another, whereas, quality assurance

focuses on the efforts of an institution to ensure quality improvement. Accountability is the obligation of government agencies to make sure that people are rightly served in the universities (Shin and Toutkoushian 2011).

Collins & Park (2016) assert that the technologies for measuring and ranking academic performance have created new vision for educational institutions to pursue for reputation and worldwide universities have started to reshape institutional behaviors seeking high standards of performance and quality. This study is in search of models which can present true relationship between the above mentioned critical factors, reputation, image and service quality and how this relationship might quote sustainable market for private universities in Punjab. Pakistan.

### **1.1) University Image and Reputation**

Research literature uses reputation, corporate identity, and image interchangeably (Abratt 1989; Sung & Yang 2008). Davies, Chun, da Silva, & Roper differentiate reputation and image by defining reputation as “something that is dependent upon actual experience of the organization” (2004:126), and image is an opinion independent of experience. Reputation is an indicator of a university’s general success in achieving important targets such as quality intake of students, research grants, and high ranking (Dill and Soo 2005). Though not given as much weightage in League Tables as it is given to faculty research productivity and student intake; it appears to be the strongest intangible motivation for pulling students towards the particular institution. Old and established institutions have already classified public repute and academic prestige, but newly established private universities, lacking in reputation have to use effective marketing strategies to brand their image.

### **1.2) HE Market and Customer Choice**

Research demonstrates that the image and reputation of a university influence customers’ choice (Brown and Mazarol 2009; Alves and Rapuso 2010; Durkin, McKenna, and Cummins 2012), defining a purposeful value for them. Durkin et al. (2012) argue that investment in higher-education marketing has become imperative if institutions want to attract desirable students. Keeping business trends in view, no university can afford to ignore students’ experiences as customers since young generation of students are well aware of their rights as customers; therefore, attracting

the upcoming, interactive generation as customers is challenging (Baldwin and James 2000; Sigala and Baum 2003; Mark 2013; Asif and Gouthier 2014). Students make academic choices cautiously and judiciously, influenced by a variety of options (Zafiropoulous and Varna 2008; Shin and Toutkoushian 2011), while seeking comparative information on universities (Usher and Savino 2006). Rankings not only serve as sources of reliable information to inform choices (Dill and Soo 2005; Williams and Dyke 2005), they are also means of marketing products offered by universities. Thus, rankings intertwine with public choices; they are the DNA of higher education that reproduces to give new life to higher education institutions and the people associated with them (Clarke 2007; Federkeil 2008).

### **1.3) Rankings as University Image**

Rankings are effective marketing tools as they inform customers about the image and service quality; moreover, they motivate institutions to improve their quality (Gormley and Weimer 1999; Williams and Dyke 2005; Sadlak and Liu 2007). Globally, media agencies rank universities commercially, but in Pakistan, a government institution—the Higher Education Commission (HEC)—is responsible for ranking universities across the country. Both public and private universities in Pakistan use HEC rankings to promote their external image in the market and sustain prestige in competition with other institutions. HEC ranking is not commercial; it collects data from university managers rather than from customers' experiences of service quality. HEC ranking is taken as the university's image because students seek this information before entering the university, independently of their experiences.

Many global rankings rely either on the reputational measures and/or quantifiable measures of institutional performance. Although reputational measures are not indicative of the most valuable indicators of quality, teaching and research (Van Raan 2005), but Shin and Toutkoushian (2011) argue that reputational measures are better than quantification techniques of productivity, since reputation is gathered over time, therefore it is more stable and reliable information about quality.

However, Dill and Soo (2005) are quite skeptical of reputational measures of quality and performance; they regard it "controversial" in a sense that it does not directly tell us about two major attributes of higher education, the quality of teaching and the quality of learning. Dill and Soo (2005) seem

more in agreement with learning theorists, such as Astin (1985; 1996), Kuh (2003) and Pascarella and Terenzini (1998; 2005) who believe that transformative learning should be the top priority agenda of any higher education institution, and its outcomes the criterion for ranking. Educationists widely support Harvey's style of assessing customer satisfaction (Yildiz and Kara 2009; Dill and Soo 2005; Dill and Beerkens 2013), which recommends performance judgment, value addition, and/or expected outcome of service education (Harvey 2005; Harvey and Williams 2010), which accords with consumer values in marketing (Ledden et al. 2011; Kalafatis and Ledden 2013).

#### **1.4) University Reputation and Service Quality**

A university's reputation is earned by the service quality it offers to students, securing customer satisfaction and loyalty. By offering this, the university enters a positive cycle of improvement, building its image and grasping greater market share (Shapiro 1982; Pampaloni 2010). New universities try to set their image by following marketing approaches to attract customers. Public image and branding of a university are important aspects of quality because favorable images leave a positive impact on current and prospective students, nurture loyalty among customers (Andreassen and Lindestad 1998; de Ruyter and Wetzels 2000), enhance consumer attachment (Bhattacharya and Sen 2003), and attract public grants and funding for the institution (Gutman and Miaoulis 2003).

Research contends that higher education institutions must plan their services carefully and deliver them conscientiously to knowledgeable higher-education customers (Baldwin & James 2000; Mark 2013) to create customer logic (Heinonen et al. 2010). Researchers and marketers agree that a university's name evokes special feelings and emotions from an observer, which might be attributed to the characteristics of the institution, making it more desirable to customers (i.e., a brand image) (Brown and Mazzarol 2009; Alves and Raposo 2010). Casidy (2014) concludes that student perceptions of a university's image moderate relationships between service quality, loyalty, positive word-of-mouth, and intentions of subsequent purchases. Alves and Raposo (2010) also emphasize service delivery and the value it creates – deemed as satisfaction by individual students – which is critical to developing institutional image and long-term relationships with customers.

The current research concerns the exploration of the dynamics of the 'customers' choice' that pronounces students' satisfaction as customers and affects their decision to continue buying the service from the same higher education institution or produce a positive word of mouth, the conditions which imply loyalty.

### **1.5) Mapping Customer Satisfaction**

The students are customers of private university, because they pay directly to obtain the service higher education and are most affected by its quality. Moreover, they are not consumers who consume service once only, but they are expected to take readmission in other courses, degree programs or trainings. Customer satisfaction models focus on 'individuals' perceived levels of satisfaction' (Parasuraman, Zeithmal, & Berry 1985; 1988; Bitner 1990; Zeithaml, Parasuraman and Berry 1990), suggesting customers seek service quality regularly, and when expectations are met, they become satisfied and/or happy, and are greatly satisfied when service quality is above expectations. Contrarily, customers perceive dissatisfaction when the service does not meet their expectations. As the gap widens, customers do not hesitate to spread negative word-of-mouth about an organization and its services (Petruzzellis et al. 2006; Voss, Gruber and Szmigin 2007). Brady, Cronin & Brand (2002) and Brown and Mazarol (2009) have suggested that both "human-ware" (i.e., quality of interpersonal contact during service delivery) and hardware (i.e., infrastructure aspects of the service such as technology, classrooms, buildings, and leisure are important factors for pronouncing satisfaction, and therefore essential components of excellence and quality.

Customer focus is one of the core principles of TQM (total quality management) and Shaney, Banwet and Karunes (2004) have further argued that students demand a "quality experience" and their consequent behaviors are exhibited in terms of an attitude towards the institution, which will help in constructing brand image of the university. Such a consumerist behavior of university students has led researchers and analysts to regard "quality" as the single most important factor for long-term success and survival in HE market. The drive for quality or quality movement in HE, thus, aims at nothing less than "maximizing student satisfaction" and "minimizing dissatisfaction" with their university life and experiences provided by the university; not only such efforts help in gaining student retention, they become good performance indicators for

the university to build university image by moving up in the local and international rankings (Blackmore, Douglas and Barnes (2006).

### **1.6) Loyalty - Index of Student Satisfaction**

Loyalty is the most desirable outcome of satisfaction, regarded as “the marketplace currency of the 21st century” (Gee, Coates and Nicholson 2008:359). Pfeifer reports, “It costs five times more to acquire a new customer than to retain an existing one” (2005:181); thus, retaining customers remains more beneficial for organizations than seeking new ones (Singh and Sirdeshmukh 2000; Anderson and Narus 2004). Oliver (1997) defines loyalty as “a deeply held commitment to re-buy or re-patronize a preferred product or service consistently in the future, despite situational influence and marketing efforts having the potential to cause switching behavior”, commitment to which is challenging. Uncles, Dowling, and Hammond (2003) point out that consumers exhibit polygamous behavior; they remain loyal to a “portfolio of brands within a product category” (Gee et al. 2008:360). Similar behavior is expected from higher-education customers in Pakistan, and it remains a poignant question whether or not they continue their education at the same institution.

Gustafsson, Johnson, and Roos (2005) outline three prerequisites of loyalty: calculative commitment, affective commitment, and overall customer satisfaction. Calculative commitment depends on one’s decisions related to brand price and utility (Anderson and Weitz 1992). People hesitate to switch because they might have to pay a huge price to do so, and sometimes the price of another brand is too high, making it unaffordable. In the case of universities, choice of college/university is a one-time decision for life, because switching institutions incurs additional admission fees (Gee et al. 2008).

Affective commitment relates to feelings of affiliation and attachment; one feels bonded to a university because of unmatched values it adds to oneself. Yang et al. (2008) argue that reputation serves as a relational opportunity since students make lifetime decisions when they choose an institution in which to spend 3 to 7 important years of their lives. What they acquire during those years—friends, future life partners, employment, business partners, and other social networking prospects—sets directions and limits on their future wellbeing, both socially and economically. The relational

aspect of reputation must be translated into affective commitment and a strong sense of trust that transforms consumers of higher education into loyal customers. This study explores how successful private Pakistani universities are being in gaining loyal customers by shaping their choice.

Student loyalty to a university is influenced by perceived service quality (Perin, Sampaio, Simões and Pólvora 2012). Intangible aspects of service such as customer satisfaction, trust, affective commitment, and calculative commitment interact to determine loyalty (Bowden 2011). Service quality is an antecedent of value, which in turn is a driver of satisfaction; consumer value reflects consumers' perceptions of the outcomes of consumption experiences (Ledden, Kalafatis and Mathioudakis 2011). Researchers allude to the temporal nature of value regarding education outcomes, which can be reformulated, modified, and adjusted for changing service-quality experiences (Kalafatis and Ledden 2013). Therefore, increased attention has been given to traditional marketing and business models in higher education contexts, especially concerning private universities.

### **1.7) The Challenge of Market**

Maringe and Mourad (2012) comment that discourses related to higher education marketing are customer-centered and rich in choice, competition, consumerism, value, customer satisfaction, and loyalty, but there is a disconnect between marketing education and practice (Harrigan and Hulbert 2011). The market has its own shortcomings and marketing ideas must be applied carefully (Hemsley-Brown 2011). Harvey and Williams (2010) warn that higher-education marketing is difficult; although universities have their own marketing departments that are busy promoting their university's image, their ubiquitous efforts do not appear to work well since they run contrary to the academic values and perspectives held by educators. Selling what already exists is the incorrect way to pursue market demand; marketers of higher education must think beyond fads.

The commodification and marketization of higher education permits private institutions to operate freely in the market, ignoring the possible negative impact on higher education and its quality (Hemsley-Brown 2011; Stensaker 2014). The market itself is not mature enough to determine whether its effects on its customers are good or bad; instead, government agencies use quality assurance (QA) as the measure to make higher



education institutions accountable to the public (Dill and Beerrens 2013). How much these QA strategies will prove to influence the higher education market in Pakistan is yet to be known. Research demonstrates evidence that QA initiatives promote customer satisfaction (Arif and Ilyas 2011; 2013; Arif, Ilyas and Hameed 2013). Is it possible to assume that QA initiatives translated into service quality will also affect the reputation and sustainable future market of the private universities as well?

## **2) CONCEPTUAL FRAMEWORK OF THE STUDY**

An interactionist approach was used to construct the research framework, derived by expanding Brown and Mazzarol's (2009) view regarding perceived value of a university's image. HEC rankings for universities are used as the image, because these serve as the information students seek before selecting a university, and are independent of experience. Reputation is constructed by overall satisfaction with service delivery.

It was assumed that reputation builds loyalty, which is visible in the tangible behavior patterns of positive word-of-mouth, intentions to repurchase, and affective commitment (Davies et al. 2004; Bowden 2011; Casidy 2014), thus reflecting customers' satisfaction behaviors and their true choices (Harvey and Williams 2010; Ledden et al. 2011; Kalafatis and Ledden 2013).

However, the study does not study the impact of "human ware" and "hardware" on student satisfaction and loyalty as proposed by Parasuraman et al. (1988), but it has adopted educationists view point following Dill and Soo (2005); Harvey and Williams (2010), Kuh (2003) and Pascarella and Terenzini (1998; 2005). Following the Malcolm Baldrige National Quality Award and EFQM (the European Excellence Award), and focusing upon leadership and learning, Dhalgaard-Park and Dhalgaard (2007) and Dhalgaard-Park (2008) have enhanced the customer satisfaction model suggested by Kanji et al. (1999) by adding another component— leadership (Asif and Gouthier 2014). Thus, the study has added two unique variables; they are: leadership and perceived outcomes of education, and their interactive effect on student satisfaction and loyalty.

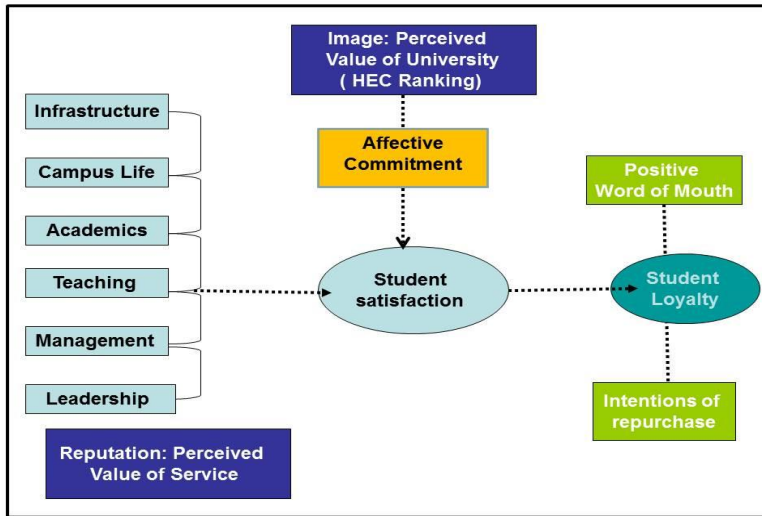


Figure 1: Conceptual Framework of the Study

The study deals with following research questions:

- 1) Which factors shape student satisfaction with service quality, building the reputation of a university?
- 2) Whether or not the student experiences of the consumption of services reinforce existing perceptions of a university's image?
- 3) How does a university's reputation boost students' expression of loyalty?

### 3) METHOD

A quantitative survey was held in seven private universities with 1400 students using cluster sampling technique. There are 56 private universities in Pakistan, 19 of which are situated in the Punjab and 3 in the Federal Capital, Islamabad. Cluster sampling technique was used to draw the sample from three departments of each private university selected purposively. In this technique intact group and not individuals are selected (Mills and Gay 2015). This technique has been especially useful in gathering data across seven universities in 4 cities of Pakistan, because it would have been difficult to approach individual students who may qualify for the sample (Mangal 2002). The selection was made in stages. At the 1<sup>st</sup> stage 7 private universities were selected which fulfilled the following criteria, i.e., (i) the university should be an HEC recognized W4 category medium sized private university with a student enrolment

between six to eight thousand; (ii) the university must have three departments (a) Business Studies (b) Information technology and (c) Social Sciences. (iii) The university must have the similar fee structure, and share a similar cohort of students. In the 2<sup>nd</sup> stage 200 students were approached from the three departments of each university following disproportionate sampling.

Seven private Pakistani universities across three major cities in the Punjab - Lahore, Gujranwala and Faisalabad - and one in the Federal area finally met the criteria and were selected for data collection. University ranking represents its image, signifying its perceived value for its customers, and "W4" is the ranking category assigned by the Higher Education Commission in Pakistan to its best accredited universities scoring between 85%-100% on the performance metrics. The "W4" ranking by the HEC ensures that these universities enjoy the best reputation by virtue of providing quality services to their customers in Pakistan. Satisfaction with the university image (W category) is measured as a one-dimensional factor comprising either favorableness or un-favorableness.

A questionnaire that included a 5-point Likert scale comprising 42 items was constructed to measure students' perceptions of satisfaction with the service quality provided by the private universities (reputation), and 9 items scale was used to measure student perceptions about the perceived value of the university (image), and student loyalty. The items were drawn from extensive literature review suiting the purpose of theoretical framework. The questionnaire consisted of four parts; the first part was aimed at collecting demographic information, the second part consisted of six factors, each comprising seven items. Five factors measured the five dimensions of SERVQUAL as suggested by Parasuraman et al. (1985; 1998; 1994), and the sixth measured satisfaction with the leadership function as discussed above in the conceptual framework of the study.

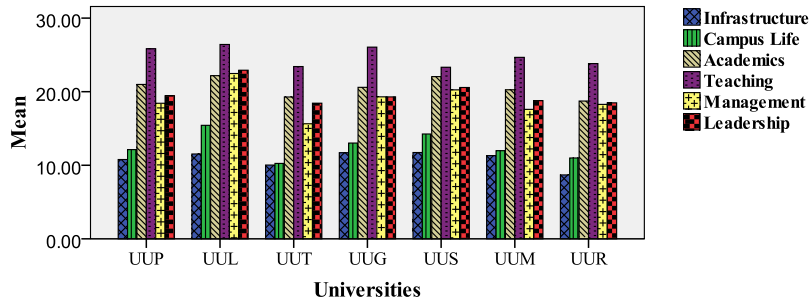
Student satisfaction with service quality was measured across six broad constructs: 1) infrastructure, assessing satisfaction with tangible facilities, 2) campus life, assessing social aspects of university life, 3) teaching, assessing general satisfaction with the people (teacher) and the process (teaching), 4) academics, assessing academic planning, program of study, and possible outcomes (e.g., employability), 5) management, assessing service delivery quality related to various processes (e.g., admission, fees, job placement, and complaint handling), and 6) leadership, including vision

and mission, and broader planning regarding service delivery and organizational improvement. Perceived value of the university's image denotes the affective dimension of loyalty, assessing reflection on the experience as it creates a meaningful association of oneself with the university (Heinoinn et al. 2010). Student satisfaction represents global dimensions of satisfaction, a snapshot of total student experiences with a university through fulfilled expectations (Petruzzellis et al. 2006). Word-of-mouth and intentions of repurchase represent the evaluative dimension (Brown and Mazzarol 2009).

The third part of the questionnaire consisted of scales for loyalty and perceptions about university image. The fourth section consisted of open-ended items asking for suggestions for improvement, but unfortunately that part was not uniformly filled out by the participants, and one or another item was left blank by students; therefore, the feedback from this part was not included in the final results. The questionnaire was reviewed by peers as well as experts for content validity and pilot tested with 250 students before administering the final data collection. The reliability coefficient was 0.84 during the pilot and 0.86 for the main study. The questionnaire was administered personally and with the help of expert services to 1800 students. Sixty-three percent were returned (i.e., 1140 of 1800), but only 1002 were complete and processed for final analysis. The response rate is relatively high because a professional agency was involved in the data collection.

#### **4) RESULTS**

Descriptive statistics provided a preliminary assessment of student satisfaction with the universities. Figure 2 shows that satisfaction with teaching quality was high for UUS, UUP, UUL and UUG, but low for UUT and UUR. Satisfaction ratings for quality of infrastructure and campus life were lowest, being below average in nearly all universities. Satisfaction with quality of management and leadership varied across all universities, with UUL and UUS leading and others following narrowly; the same was true for academics. Collectively, UUL led in all aspects of service, and UUS, UUP, UUT, and UUM were inconsistent in offering better services. UUT and UUR lagged behind in nearly all cases. Appendix A gives more details regarding means and standard deviations related to individual service quality indicators,



*Figure 2: Satisfaction with Service Quality compared across seven Universities*

The results of exploratory factor analysis identified connections between various items (Anderson, 2003) (See Appendix B for details). Discriminant analysis further reduced the data. Three factors—infrastructure (i.e., tangibility), campus life (i.e., social factors), and management—were excluded from further analysis since their contributions were uniformly non-significant or weak (i.e., loadings < 0.3) in promoting student satisfaction (See Appendix C).

#### 4.1) SEM Analysis

Significant factors obtained through discriminant analysis were further grouped into 'Education' and 'Leadership'. Education factors are related to how the service has actually been delivered. Education 1 (teachers and teaching) is related to people and process, corresponding to the reliability of the service as outlined by Parasuraman's SERVQUAL, whereas Education 2 is related to how students are actually approached and dealt with during their stay at university, corresponding more to the responsiveness and empathy theme as outlined by Parasuraman's SERVQUAL. The leadership factor indicates how the service has been planned and exercised, including items on university-industry linkage and social responsibility, etc. To analyze the results, the model shown in Figure 3 was used, which explains multiple relationships between the variables.

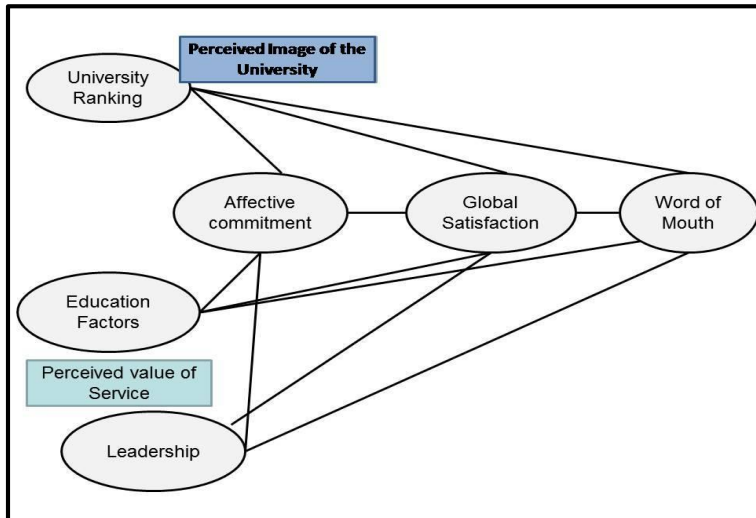


Figure 3: Conceptual Model for SEM Analysis

The model was assessed using structural equation modeling (SEM). Values for chi-square, comparative fit index (CFI), normed fit index (NFI), and root mean square error of approximation (RMSEA) were used to evaluate the model. The results of all fit indices (chi-square p-value, CFI, and NFI) supported two models. Values for relative fit, calculated by comparing the proposed model with a null model, were satisfactory (0.95) (Hu and Bentler 1999; Byrne 2010). RMSEA for models 1 and 2 indicated moderate fit (Loehlin 2004) for values closer to zero. The significant standardized path co-efficient was analyzed further to explore the impact of factors on each other (Figures 4 and 5). The path was deemed strong when the coefficient value was significant ( $>0.3$ ) (Meyers, Gamst and Guarino 2006) and indeterminate when any factor was unrelated to all proposed elements of other factors.

#### 4.2) Student Satisfaction Models

**Model-1:** The model suggests leadership function is the key determinant of student satisfaction, thus better reputation of universities, witnessed as a positive impact on affective commitment and overall satisfaction with service quality in private universities in Pakistan; hereby, the perceived value of the university's image is also strongly linked with affective commitment.

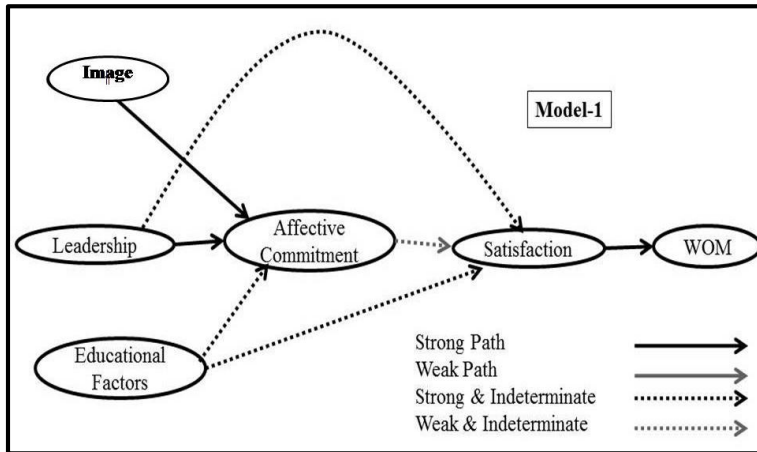


Figure 4a: Path Analysis of Satisfaction Model-1

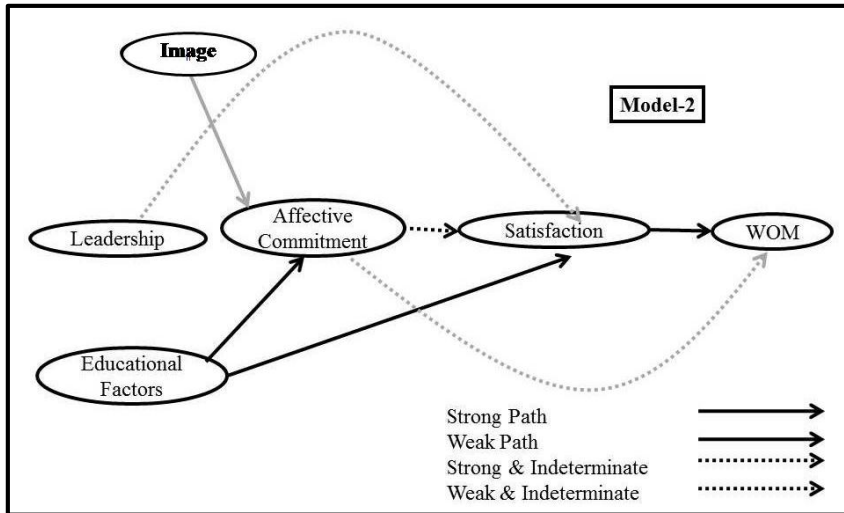
Note: See Appendix D for values

This model was supported for two universities-UUL and UUS-suggesting a strong link between university image and affective commitment, and indicating that many expectations related to W-category universities have been fulfilled by the services offered in the university. Both leadership and people/processes (i.e., teacher and teaching) had strong, indeterminate links with overall satisfaction with service quality, helping the university to enjoy a good image and reputation in the market. Leadership makes the difference, creating a strong bond between students and the university, and leaving long lasting impressions of loyalty and belongingness upon their customers.

Interpersonal relationships between students and teachers ensured a sense of belonging to the university, and healthy expectations of meeting desired educational outcomes (such as employability and desired salary) have enhanced empathy. Satisfaction with service quality is translated into loyalty, indicating that students are ready to spread positive word-of-mouth for the university, and they will take part in promotions. However, intentions to repurchase were absent, suggesting students are aware of other choices in the market, and they would not hesitate to switch over if they were to find an opportunity.

**Model-2:** The model demonstrates that educational factors play a leading role in student satisfaction and thus securing universities a good reputation in the market, since they are seen to positively influence the affective

commitment and overall satisfaction with service quality. The satisfaction to loyalty path is also strong and positive.



*Figure 5a: Path Analysis of Satisfaction Model-2*

*Note: See Appendix D for values.*

This model was supported for three universities - UUP, UUG, and UUM - suggesting a strong link between educational factors and satisfaction, and indicating that all expectations relating to W4-category universities were fulfilled by teachers and their teaching. Teachers' involvement enables the students to reach their desired educational outcomes. They have little trust in leadership planning and decision-making. A weak link between university image and affective commitment was also observed, while leadership showed no link with affective commitment at all. Satisfaction had a strong but indeterminate link with affective commitment. Satisfaction translates into loyalty, suggesting students are ready to spread positive word-of-mouth for the university, and they will take part in promotions. Again, signs of repurchasing were missing. Overall, perceptions of perceived value of the university's image were weak and evaluative commitment was missing, suggesting students are aware of other choices in the market, and will not hesitate to switch over at an available opportunity.



## 5) DISCUSSION

The global satisfaction with service quality appears uniform across all universities, and does not have any discriminant effect on student satisfaction or loyalty. This general satisfaction creates a safety net or hygiene conditions for universities. However, the two core functions of higher education—leadership and teaching/learning—appear to create drastic disparities.

Keeping weak and indeterminate links in the models in mind, it is obvious that service quality in these universities is not ‘exceptional’ or ‘transformational’ (Harvey 2005; Harvey and Williams 2010; Halai 2013). Model 1 reflects that student satisfaction creates ‘value for money’, and Model 2 justifies ‘fitness of use’. Both models represent strong links between affective commitment and education factors, the core service of higher education. When expectations of this service are met, this helps universities get positive word-of-mouth from its customers, but intentions to repurchase are absent from both models, suggesting students will not hesitate to switch should opportunities in the market be discovered.

Satisfaction with educational factors is strong but indeterminate in Model 1; it is reflective of strong consumerism on the part of students; the name of the university is enough on their transcripts. The indeterminate link with education factors does not lessen the affective commitment, supporting the fact that university choice is hardly a rational decision (Durkin and McKenna 2011); it is an emotional choice (Watson and Watson 2015). Such trends suggest that university leadership in Model 1 is managerial rather than academic (Yeilder and Codling 2004). The leaders (in Model 1) are successful in creating a business model by satisfying two categories of loyalty (i.e., affective commitment and global satisfaction). This commitment helps universities engage in long-term relationships with customers, especially students. However, the study has collected the opinions of existing students; whether or not these expectations will remain the same on entering the job market is not known.

Model 2 provides no link between affective commitment and leadership or perceived value of the university’s image. The positive aspect of this model is strong trust in people, processes, and outcomes regarding education, which are the core functions of higher education, but a weaker link between the affective commitment and global student satisfaction indicates

that this connection might be limited to interpersonal relationships of individual students with a few teachers. Failing to create impressions necessary for strong image building the leadership of the universities (in Model 2) appears to struggle for a reputation of excellence. Unless these universities revisit their leadership practices and establish strong organizational bonds between students and universities, the welfare of all stakeholders will be at risk. It will be increasingly difficult for these universities to sustain a quality intake of students, which might pose a serious threat to the very sustainability of these universities.

## **6) CONCLUSIONS**

It is concluded that perceptions of service quality play a leading role in building reputation and image of the university, and they are predictable regarding future trends of the higher education market as well. Research results confirm that a high level of satisfaction with service quality results in tangible and quantifiable benefits in terms of “profit, cost savings, and market share” (Parasuraman et al. 1991: 335) through earning student’s loyalty. The tenet developed in the 1980s and 1990s that service quality is directly related to customer satisfaction and loyalty (Petruzzellis et al. 2006; Ledden et al. 2011, Perin et al. 2012) seems to be applicable in 2012 and beyond, and it can be further associated with organizational reputation and image (Brown and Mazarol 2009; Alves and Rapuso 2010; Durkin et al. 2012).

The research results confirm the claims of Halai (2013); it is concluded that private Pakistani universities have yet to build reputation of excellence in the market. Student satisfaction scores for all services are nearer to means or above average, which suggest no-dissatisfaction rather than pure satisfaction for five of seven universities. Out of seven universities under study, the students of only two universities have exhibited a strong link between university image and affective commitment. Therefore, these two universities may claim to produce a successful business procuring loyal customers and building strong reputation. But that model is consumerist and service oriented educationists will always view it skeptically (Dill and Soo 2005; Harvey and Williams 2010; Dill and Beerkens 2013).

The models derived from the research not only reflect students’ expectations and needs, they also explain how variable reputation becomes when a university management’s prerogatives remain inflexible towards

student care; this care has been missing on the management part of university, such as providing infrastructural facilities, and responsiveness related to handling of complaints and issues. It is observed, hence, in Model 2, that affective commitment is lost as students lose their trust in leadership's problem solving ability. It is safely deduced that a university can stay in the market if it fulfills its core function, that is, teaching, but it will lead the market when the leadership function is best exercised through better planning and organizing the service as a whole not neglecting the ancillary components like responsiveness and timeliness of service. Ensuring the desired educational outcomes are vital, but affective dealing with issues and problems that arise during service delivery.

## **7) IMPLICATIONS**

### **7.1) Implications for Quality of Service Delivery**

Graduates are not seeking a piece of paper, but rather a job and the lifestyle they can enjoy with the salary and status offered by the job (Arif and Ilyas 2012). Therefore, all services from higher-education institutions are designed intentionally and delivered to create value (Perin et al. 2012; Arif, et al. 2013). Service delivery is not a single experience carried out linearly in a short period. Customers' experiences of a service are spread over a lifetime, and involve multiple facets of life, generating hosts of thoughts, feelings, and actions that confirm quality perceptions. Time for obtaining customers' perceptions should not be limited to post-consumption of a service; it should be practiced continually (Parasuraman et al. 1991; Verhoef et al.2009). Private Pakistani universities might have to adopt sustainable business frameworks to offer quality and value to customers (Arif and Ilyas 2011, 2012; AsifandGouthier2014; Metaxas and Koulouriotis 2014).

Higher-education customers co-create the service—teaching and learning—which is 'transformational' for both students and teachers. The higher education leaders must design for the active participation of students in teaching and learning process in and beyond the classroom, especially with the intangible factors of the service (Bowden 2011; Arif and Ilyas 2012; Casidy 2014; Watson and Watson 2015). Such an active involvement may lead to successful service encounters initiating customer-organization socialization (Zeithaml and Bitner 1996), helping students

gain necessary information and skills to work in partnership with organizational management to achieve their mutually agreed goals.

Positive service encounters with existing and passing out graduates are critical (Telford and Mason 2005), and must be maintained at 'zero defects' level. Suggests the universities to employ lean management techniques to secure customer satisfaction with the service, because a single bad experience may spoil the history of good ones (Watson and Watson 2015). The absence of evaluative commitment is not as threatening as the absence of affective commitment, since affective commitment seems to ensure life commitment, a sincere bonding forever. Such an enduring relationship will secure universities the support of alumni in form of industry-academia linkage or placement of other graduates. This is the image and reputation that every university wants to enjoy.

## **7.2) Suggestions for the Improvement of Service**

Marketing of higher education is experiencing change throughout the world, and new mental models are emerging regarding service delivery and customer satisfaction (Heinonen et al. 2010; Kano 2015) for building reputation and image (Perin et al. 2012; Alves and Rapuso 2010); the same is true for private Pakistani universities. The results reflect that affective commitment has a crucial role in creating positive university image. The desired levels of affective commitment can only be earned through right leadership action, i.e., demonstrating empathy and care about students' future needs, making it part of policy and planning, and emphasizing these values during service delivery (Durkin and McKenna 2011; Watson and Watson 2015).

One of the major reasons for joining a university or HEI is its image, such as a "W4" ranking which bears the hallmark of a university's existing reputation in the market. Satisfaction with this attribute calls for the planning and delivery of the service to achieve the level described in advertisements or marketing campaigns. Only then will the students exhibit the same degree of belongingness and comfort with the services provided by the university as they had expected at the time of admission. Therefore, the leadership should focus more on internal than external marketing. The students have expressed only medium level satisfaction with the service quality, therefore the high ranking of these universities by the HEC also become questionable. Should HEC revise its ranking criteria

of private universities including customer satisfaction as an essential element?

Marketing is more than planning for selling services. Kotler and Keller (2006) argue that consumer needs are met if marketing plans have substance. The challenge becomes tougher in the case of higher education if the stakeholder's relative definition of quality is strictly followed (Harvey and Williams 2010). Multiple higher-education stakeholders desire equal rights for customers; pleasing stakeholders, students, parents, teachers, communities, and government agencies responsible for accreditation and control becomes ever more enigmatic. To fulfill obligations of multiple stakeholders, private Pakistani universities must redefine their scope of customers', especially internal customers' – faculty. Leaders must focus on faculty empowerment (Arif and Ilyas 2013) and involve them constructively in marketing. This strategy might help them climb out of the typical consumerist ruts and stop selling what already exists. In this way they will construct and reconstruct students' experiences of their own choices (Ledden et al. 2011; Perin et al. 2012; Kalafatis and Ledden 2013).

Leadership is the most critical factor that affects customer loyalty, and consequently the image and reputation of a university. A university may sustain its brand name and existing reputation in the market through exceeding customer expectations rather than only barely meeting them. Hereby, we may consider all those weak factors as dissatisfactory which were excluded from the study, i.e. infrastructure, campus life and management. Should internal marketing in the university start by improving these services?

Rankings serve as critical criterion for quality for students all over the globe, especially for Asian students seeking admissions elsewhere in the world. University management and leaders actively look forward to building their reputation. Seeking customer satisfaction is one important measure in this aspect and academic culture is shifting in universities; students now claim more attention than the faculty (Shin 2013; 2014). It is important to use quality frameworks instead of independent factors to measure quality for quality assurance. These dimensions of quality must be well integrated into each other rather than acting as independent competitors. We must also keep in mind the advice of Collin and Park (2016) that scholars of higher education should seriously review the impact of ranking on quality seeking HEIs, especially taking care of the positive

and negative effects of rankings on the future sustainability of the universities.

## **8) LIMITATIONS OF RESEARCH**

The study was limited to W4-category universities in the Punjab Province and the Federal area. Sample size was small in comparison to the number of students enrolled in the universities. The questionnaire was designed to collect data based on self-reports, which has its own limitations. An important part of the customer satisfaction model, customer complaints, is missing. Complaints, missing services, and suggestions for improvement comprised the qualitative portion of the questionnaire left blank by majority of students. Therefore, we limited discussions to the results of the quantitative analyses. Supporting data from other stakeholders, such as faculty, management, alumni and HEC officials, is also missing. Data were collected from students enrolled in the universities at the time, so results might present linear perspectives regarding service quality and customer satisfaction, but research findings confirm previous research, indicating its generalizability.

## **9) FUTURE DIRECTIONS OF RESEARCH**

Current results are indicative of high, moderate, and low satisfaction, but not dissatisfaction. Dissatisfaction should be measured as a separate, independent construct. A comprehensive, mixed-methods study, including opinions from faculty, managers, and alumni, would provide a holistic picture of service quality and customer satisfaction concerning university image and reputation.

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## Appendices

### Appendix A.

#### Mean Scores and Standard Deviations of Measures of Student Service Quality Indicators

University	Infrastructure		Campus Life		Academics	
	M	SD	M	SD	M	SD
UUL	11.53	2.11	15.43	2.61	22.18	3.42
	(a, a, -, -, -, b)		(a, b, a, a, a, a)		(a, -, b, a, a, -, -)	
UUS	11.73	2.48	14.25	3.16	22.05	4.38
	(a, a, a, -, b, -, -)		(b, a, a, a, a, a)		(a, b, -, a, a, -, -)	
UUG	11.70	2.25	13.01	2.90	20.59	4.33
	(a, a, a, b, -, -, -)		(a, a, a, b, -, -, a)		(a, -, -, -, -, b, -)	
UUP	10.78	2.44	12.13	3.68	20.98	4.94
	(a, -, b, a, a, -, -)		(a, a, a, -, b, -, -)		(a, -, -, -, -, -, b)	
UUT	10.03	3.29	10.25	4.16	19.28	5.32
	(a, b, -, a, a, a, -)		(a, a, b, a, a, a, -)		(-, a, a, -, b, -, -)	
UUM	11.31	3.14	11.98	3.51	20.26	5.41
	(a, a, -, -, -, b, -)		(a, a, a, -, -, b, -)		(-, a, a, b, -, -, -)	
UUR	8.69	2.27	10.99	4.04	18.73	4.18
	(b, a, a, a, a, a, a)		(a, a, -, a, -, -, b)		(b, a, a, -, -, a, a)	
UUL	26.42	3.67	22.47	3.79	22.92	3.36
	(-, b, a, -, a, -, a)		(b, a, a, a, a, a, a)		(b, a, a, a, a, a, a)	
UUS	23.32	7.60	20.25	5.71	20.57	5.39
	(a, a, -, a, -, -, b, a)		(a, a, b, a, -, a, -)		(a, a, b, -, -, -, -)	
UUG	26.05	5.11	19.30	4.47	19.29	4.95
	(-, -, a, b, a, -, -)		(a, a, -, -, b, -, -)		(a, -, -, -, -, b, -)	
UUP	25.83	5.43	18.43	5.52	19.44	5.16
	(b, -, a, -, a, -, a)		(a, a, a, b, -, -, -)		(a, -, -, -, -, -, b)	
UUT	3.42	6.00	15.64	5.47	18.44	5.29
	(a, a, b, a, -, -, -)		(a, b, a, a, a, -, a)		(a, b, a, -, -, -, -)	
UUM	24.67	6.07	17.60	5.66	18.78	5.45
	(-, -, -, -, -, -, b)		(a, -, a, -, -, b, -)		(a, -, -, -, b, -, -)	

University	Infrastructure		Campus Life		Academics	
	M	SD	M	SD	M	SD
UUR	23.82	4.85	18.27	5.11	18.48	5.87
	(a, a, -, a, b, -, -)		(a, a, -, -, -, b)		(a, -, -, b, -, -, -)	

**Note:** Means comparisons are represented at seven levels (separated by commas), one for each university. At each level, means with the same group of letters differed significantly at 0.05 level from mean of different letter by Tamhane post hoc test. Blanks indicate insignificant differences.

**Appendix B**  
**Exploratory factor analysis and reliability analyses**

No.	Factors	Items	Factor loadings	Cronbach's alpha
1	Quality of Infrastructure	Classrooms with proper light, air, space & furniture. Library, Mosque, book store, stationary, etc. Technology like labs, internet, multimedia or other AV- Aids.	.783 .631 .524	0.768
2	Quality of Campus Life	Playgrounds, gymnasium. Security and emergency first aid. The recreational activities carried on at campus. The games & sports activities on campus.	.625 .615 .559 .596	0.770
3	Quality of Academic Services	Academic activities are well planned in ahead. There is a variety of available courses and programs. All education is learning centered. Education is corresponding to needs of existing job markets. Education has potential to create new job markets. Education will promote social responsibility and citizenship among students.	.529 .538 .624 .567 .605 .518	0.839

No.	Factors	Items	Factor loadings	Cronbach's alpha
4	Quality of Teaching	<p>Teachers are easily available.</p> <p>Teachers have knowledge and expertise in the relative discipline.</p> <p>Teachers have charismatic and influencing personality.</p> <p>Teachers are well equipped with modern teaching skills.</p> <p>Teachers are fair in assessment and grading.</p> <p>Teachers provide necessary guidance and counseling.</p> <p>Teachers maintain web portal for teaching material and communication.</p>	<p>.560</p> <p>.678</p> <p>.762</p> <p>.712</p> <p>.649</p> <p>.616</p> <p>.569</p>	0.874
5	Quality of Management	<p>Management cooperates in procuring scholarship and/or any other economic benefit.</p> <p>Management is always listening to complaints.</p> <p>All problems related to teaching and learning are strategically handled.</p> <p>The staff uses best competencies and skills to serve students.</p> <p>Management plans for students' internship &amp; job placement</p> <p>Management provides adequate alumni services.</p>	<p>.615</p> <p>.633</p> <p>.717</p> <p>.669</p> <p>.640</p> <p>.601</p>	0.877
6	Quality of Leadership	<p>Senior leadership is visible in setting values and directions for everyone.</p> <p>Senior leaders strive to create a sustainable, high-performing organization with a focus on student learning.</p> <p>Senior leaders reinforce and reward contributions of students.</p> <p>Leadership regularly introduces new technologies, program or service innovations.</p> <p>Leadership explores opportunities to consider and</p>	<p>.612</p> <p>.667</p> <p>.696</p> <p>.690</p> <p>.639</p>	0.888



No.	Factors	Items	Factor loadings	Cronbach's alpha
		promote the well-being of local environmental, social, and economic systems. There is a strong partnership between industry and your university to support workforce development.	.629	

**Appendix C**

**The Standardized Co-efficients and Correlations of Predictor Variables of the Discriminant Function with <sup>a</sup> perceived value of service**

University	Dependent variable	Predictors	Discriminant Loadings	Standardized coefficients
UUT	Perceived Value	Leadership	.775	.633
	Perceived Value	Teaching	.651	.633
	Perceived Value	Academics	.650	.244
	Perceived Value	Management	.252	.119
	Perceived Value	Campus Life	.224	-.106
	Perceived Value	Infrastructure	.177	-.186
UUM	Perceived Value	Academics	.785	.689
	Perceived Value	Leadership	.633	.171
	Perceived Value	Teaching	.632	.411
	Perceived Value	Infrastructure	.289	-.240
	Perceived Value	Management	.222	-.697
	Perceived Value	Campus Life	.015	.358
UUG	Perceived Value	Teaching	.903	.703
	Perceived Value	Leadership	.651	.334
	Perceived Value	Academics	.650	.304
	Perceived Value	Management	.235	-.306
	Perceived Value	Campus Life	.171	-0.50
	Perceived Value	Infrastructure	.057	-.177
UUS	Perceived Value	Teaching	.854	.616
	Perceived Value	Leadership	.733	.402
	Perceived Value	Academics	.602	.203
	Perceived Value	Campus Life	.271	.378
	Perceived Value	Infrastructure	.251	-.164
	Perceived Value	Management	.163	-.256

University	Dependent variable	Predictors	Discriminant Loadings	Standardized coefficients
UUL	Perceived Value	Academics	.706	.781
	Perceived Value	Leadership	.684	.656
	Perceived Value	Teaching	.600	-.042
	Perceived Value	Management	.291	.120
	Perceived Value	Campus Life	.211	.265
	Perceived Value	Infrastructure	.112	-.791

<sup>a</sup>Perceived value: I feel that I'm a valued part\ member of this university (yes, no)

<sup>b</sup>Wilk's lambda was found to be significant for all universities whereas for UUR, the six quality indicators were insignificantly predicting students' perceived value (hence the results are not displayed).

### Appendix D

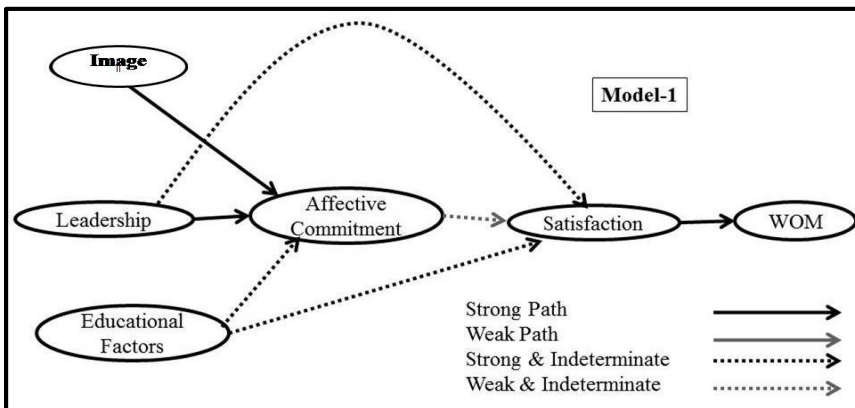


Figure 4a: Path Analysis of Satisfaction Model 1

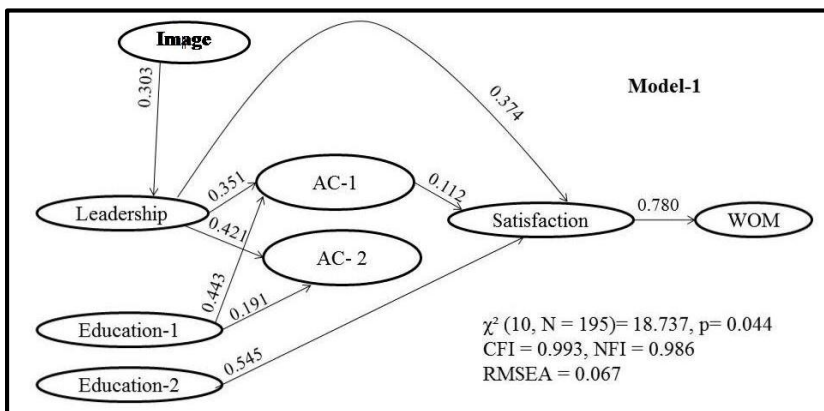


Figure 4b: Structural Equation Model-1 for Student Satisfaction

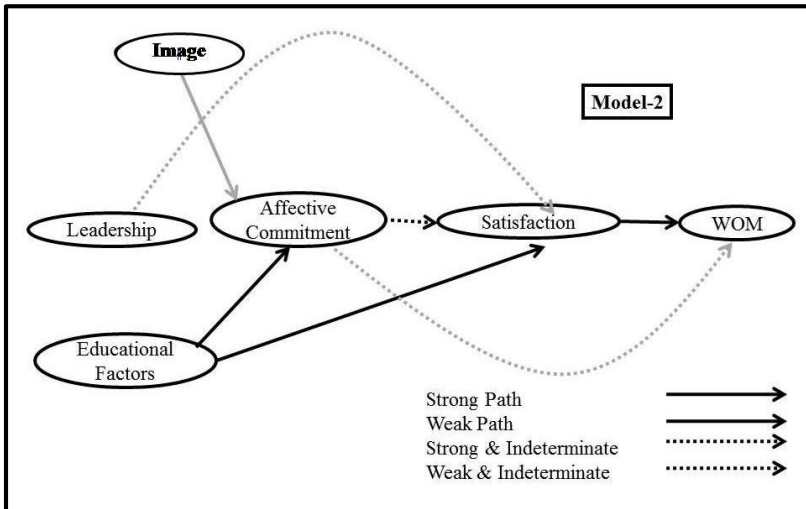


Figure 5a: Path Analysis of Satisfaction Model 2

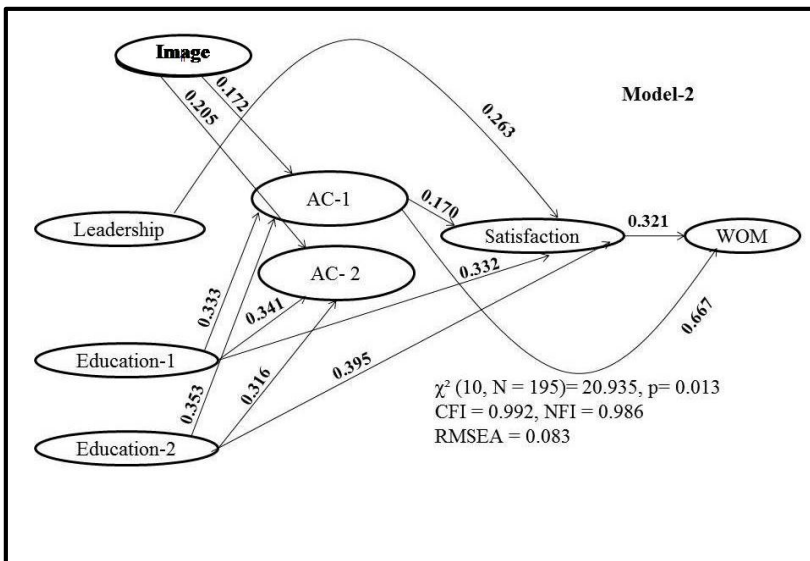


Figure 5b: Structural Equation Model-2 for Student Satisfaction