

PAKSERV – measuring higher education service quality in a collectivist cultural context

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Studies which acknowledge culturally sensitive service quality scales are scarce. This study aims to examine a PAKSERV measure of satisfaction and loyalty in a Pakistani higher education context. Consequently, the model fitness of the PAKSERV scale is tested through the conduct of this study. The data for this study have been collected from three major universities in Pakistan. The sample population for this study was higher education students, enrolled on a full-time status in these universities. To strengthen the methodology, first-year students were excluded from investigation as having very little university experience. A survey-based approach was used to collect data from 236 higher education students in Pakistan who were personally approached by the researchers. The hypotheses pertaining to the traditional service quality items of *Tangibility* and *Assurance* have been rejected. A strong significance has been found for all the PAKSERV items which include: *Sincerity*, *Formality* and *Personalisation*. The PAKSERV scale has been employed for the first time to investigate the service quality-loyalty path in a collectivist cultural context. Furthermore, the application of PAKSERV in a higher education setting has been enumerated. The study is useful for marketing decision makers who strive hard to enhance the students' overall experience during the span of degree programmes.

Keywords: PAKSERV; satisfaction; loyalty; higher education; CFA; Pakistan

Introduction

Over the last two decades, there has been a significant shift in marketing thinking; from a goods-dominant perspective to a co-creation paradigm (Vargo & Lusch, 2004). This paradigm shift has changed the way a service is delivered and perceived in a social setting including higher education. Recently, there has been academic debate on the exact roles of students, customers and products. Since students themselves are paying their university fee, it makes sense that their expectations must be met as customers (Angell, Heffernan, & Megicks, 2008).

There is a clear linkage between meeting customer expectations and its role and impact on their satisfaction and loyalty in higher education setting (Angell et al., 2008). The universities in Asia are striving hard to achieve student satisfaction and loyalty, but the quest for quality continues (Yeo & Li, 2013). It is believed that student expectations of quality must be met to counter challenges such as student retention and engagement in a higher-education context (Shah, Nair, & Wilson, 2011).

In spite of extensive research in the domain of service quality in higher education, researchers envision certain gaps which must be acknowledged in the pursuit of study. First, there have been various tools championed to measure service quality. Among

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these tools, the SERVQUAL scale has been widely used to present a current state of service quality across the industries (Ladhari, 2009). However, though useful and widely adopted by service marketing researchers, the SERVQUAL scale has been criticised mainly on two grounds. First, researchers argue that the SERVQUAL scale is not comprehensive and that there is a need to add a few more dimensions to the model in order to measure service quality comprehensively (Ladhari, 2009). The researchers in higher education have also criticised the SERVQUAL for its comprehensiveness and have employed different dimensions to measure the extent of service quality (Clewes, 2003). Second, the SERVQUAL scale has limited validity across cultures (Ladhari, 2008). Service marketing researchers strongly recommend the need to imply culturally sensitive service quality measurement scales. For instance, there is a significant difference between high-context and low-context cultures that affects how customers interpret service quality dimensions (Laroche, Ueltschy, Abe, Cleveland, & Yannopoulos, 2004). There are also differences in time orientation among people living in different parts of the world. For instance, people living in western societies emphasise more ‘timeliness and professionalism’, while human relations are emphasised in eastern societies (Hall, 1983). By acknowledging these criticisms, Raajpoot (2004) developed a scale to measure service quality that is best suited for use in an Asian, and particularly, Pakistani cultural context. The PAKSERV scale comprises six dimensions: reliability, responsiveness, assurance, personalisation, formality and sincerity (Raajpoot, 2004). The high scores on collectivism, power, distance and uncertainty avoidance signify the importance of these new dimensions. Contemporary higher education marketing researchers have incorporated traditional tools such as SERVQUAL to explicate service quality in higher education (Brown & Mazzarol, 2009). By acknowledging the criticism of SERVQUAL, and the absence of culturally sensitive scales to measure the service quality of higher education, the researchers employ the culturally sensitive PAKSERV scale in a higher education context.

Second, the PAKSERV scale has not been empirically tested in an Asian setting to improve the scale’s context-specific psychometric properties. Higher education marketers have also stressed the need to employ country-specific scales to help in addressing the higher education issues pertaining to quality (de Jager & Gbadamosi, 2010). To date, the PAKSERV scale has been tested only once in the African banking sector where all of its dimensions were found reliable (Saunders, 2008). The current study is the first of its kind to test the validity of PAKSERV scale in the higher-education sector.

Finally, the path from customer satisfaction to loyalty has never been developed through the PAKSERV measure of service quality in higher education settings. The Pakistani higher education system has been undergoing a transformation, where the universities are finding it difficult to retain and engage students. This has been mainly due to the absence of a ‘customer-centric’ approach resulting in high student dropout and failure rates (Kashif, Ayyaz, Raza, & Hamid, 2013). Recently, higher educational marketing researchers have recommended imparting issues such as service quality and student satisfaction through a quantitative paradigm (Kashif & Ting, 2014). The current study will help Pakistani higher education marketers in their quest to achieve student (customer) satisfaction and loyalty. Under these assumptions, the following research questions have been envisioned:

- What are the significant PAKSERV dimensions that should be emphasised by Pakistani universities in order to achieve service quality?
- What is the validity of PAKSERV in the higher education context of Pakistan?

- Does the service quality based on PAKSERV dimensions lead to student satisfaction and loyalty?

The remainder of this paper is organised as follows: literature review on service quality, methods employed to collect and analyse data, findings and discussions generated from the data, limitations of the research and the conclusion section.

Literature review

Service quality

The concept of service quality was championed in the early 1980s by quality management researchers (Parasuraman, Zeithaml, & Berry, 1988). The researchers suggested identifying customer expectations and meeting these expectations in a desirable way to ensure quality. Two divergent views emerged in the field of service quality: the Nordic School and the American School. The Nordic School was endorsed by Grönroos (1984), while the American School was developed by researchers such as Parasuraman et al. (1988). Both the schools emerged as part of a quality campaign in the early 1980s, which took into consideration customer expectations and perceptions (Dabholkar, Shepherd, & Thorpe, 2000). The concept of quality has been applied to various service sectors, benefiting firms by helping them stay competitive and grow. However, it must be noted that employees are the core source for gaining competitive advantage in services (Bartlett & Ghoshal, 2002). Higher education has also been considered a service where two primary stakeholders are taken into consideration: students and industry. Universities also compete for student share because public funding has been decreased to the minimum (Brown & Mazzarol, 2009). Since students are regarded as primary stakeholders, their expectations must be met, and once they are satisfied with the higher education service, this leads to loyalty (Fernandes, Ross, & Meraj, 2013). Service marketing researchers argue that higher education is identical in many aspects to other service businesses. For example, many service sectors are facing intense competition, and higher education is no exception (Seth, Deshmukh, & Vrat, 2005). Like other services, the faculty and students produce and simultaneously consume education service in the class room, which indicates that process quality is also an integral part of higher education quality (Sureshchandar, Rajendran, & Kamalanabhan, 2001). The interaction quality, outcome quality and overall process quality are significant determinants of service quality in higher education (Srikanthan & Dalrymple, 2005). It also signals the important roles of administration, faculty and the overall university environment in satisfying students. The higher education marketing researchers believe that some innovative dimensions must be explored to investigate service quality in higher education (Van Kemenade, Pupius, & Hardjono, 2008).

Various tools have emerged over the years to investigate service quality, including the extensive use of the SERVQUAL model developed by Parasuraman et al. (1988). The scale takes into account customer expectations and also measures the extent to which these expectations have been met by the service provider. The scale consists of dimensions such as:

- (1) reliability;
- (2) assurance;
- (3) tangibles;
- (4) empathy;
- (5) responsiveness.

Another scale is the SERVPERF scale which considers customer perceived quality (Cronin & Taylor, 1992). These researchers criticised the SERVQUAL scale due to its limited validity across the industries and also in different cultures. However, the major limitation of SERVPERF has also remained in the scale's limited scope in the measurement of service quality, noting only customer perceptions. However, contemporary researchers comparatively preferred SERVQUAL over SERVPERF due to its ability to replicate more effectively other cultural contexts (Carrillat, Jaramillo, & Mulki, 2007). However, this does not mean that SERVQUAL has been an ideal scale to investigate service quality in different cultural contexts. Service marketing researchers have criticised it and suggested new scales to investigate service quality (Raajpoot, 2004).

Service quality in higher education

Despite several efforts made by service marketing researchers to establish a few good scales, the context-specification of a scale remains a big challenge. The maintenance of service quality in higher education is a challenging job due to considering the scope of education as a service which encompasses several processes at the same time (Brown & Mazzarol, 2009). The faculty, administration and students have to play their roles in order to create a memorable service experience. This has been true with other services and researchers who believe in a holistic paradigm to create value for stakeholders (Vargo & Lusch, 2004). The criticism of almost all the measures is a context-specific service quality measurement tool which is highly recommended by contemporary researchers (Frimpong & Wilson, 2013). The recent studies have employed SERVQUAL to investigate the service quality of higher educational institutes, which has not proved sufficient to cover all aspects of quality in higher education (Calvo-Porrá, Lévy-Mangin, & Novo-Corti, 2013).

Service quality dimensions have been playing a significant role in delineating service quality. The various service quality models have been adapted to investigate the service quality of education services (Petruzzellis, D'Ugento, & Romanazzi, 2006). There are some conflicting views on the ability of the SERVQUAL scale to measure quality in higher education. Stodnick and Rogers (2008) reported SERVQUAL as a highly reliable scale to measure service quality in a class room setting. In contrast, there are studies where the SERVQUAL scale has not been proved as a valid measure of service quality (Sahney, Banwet, & Karunes, 2004). The HEDPERF measure is another scale to investigate service quality (Abdullah, 2005). This scale was proposed to measure the service quality of higher education services, which did not become very popular due to its similarities with the SERVPERF scale (Abdullah, 2005).

Contemporary researchers, however, have been employing SERVQUAL in recent studies to explore student satisfaction with higher education services (Calvo-Porrá et al., 2013). In a study conducted by Shekarchizadeh, Rasli, and Hon-Tat (2011), all the new dimensions of a modified SERVQUAL scale were found to contribute significantly to the measurement of higher education service quality. However, the traditional items such as responsiveness and empathy were not found in the final model. The study of Abili, Thani, and Afarinandehbin (2012) explored the service quality of universities in an Iranian higher education context. The items such as tangibility, empathy and assurance were not found to contribute strongly while measuring the service quality of a university. In a recent study conducted in an African higher education context, Cheruiyot and Maru (2013) found reliability to be the dominant dimension which contributes to student perceived quality. All these researchers have employed traditional items or used

a modified SERVQUAL scale. However, the cultural context has been ignored which, if well served, can offer a valid insight for higher education decision makers (Narang, 2012; Raajpoot, 2004). Based on some previously established knowledge mechanisms, we hypothesise the following;

H1: Favourable student perceptions towards Tangibility positively influence their satisfaction.

H2: Favourable student perceptions towards Reliability positively influence their satisfaction.

H3: Favourable student perceptions towards Assurance positively influence their satisfaction.

Measurement of service quality

While keeping in mind the criticism of SERVQUAL concerning its limited ability to represent different cultural context, the PAKSERV scale was developed (Raajpoot, 2004). The researcher focused on the Asian context of Pakistan and its culture. The researcher hypothesised national culture and personal values of people while establishing a scale which consisted of these three additional dimensions:

Sincerity: The true spirit of service providers to deliver expected service, considering customer interest a priority.

Personalisation: The ability of service providers to customise the service offerings based on customer expectations. Overall, it is about paying individual attention.

Formality: Consideration of the social class customers belong to and treating them in a way they are used to in a culture.

The national culture of any country has been found to impact service quality perceptions (Imrie, Cadogan, & McNaughton, 2002). Customers' service quality perceptions are a product of one's social system, which shape consumer thinking and in turn change the way service quality is perceived (Hofstede, 1997). The service quality measurement must be culturally sensitive in order to establish correct inferences about perceived quality (Furrer, Liu, & Sudharshan, 2000). These researchers falsified the employment of SERVQUAL in different cultural contexts and recommended establishing culturally sensitive measurement scales.

The PAKSERV scale acknowledged three SERVQUAL items of Tangibility, Reliability, and Assurance, but negated the contribution of Empathy and Responsiveness dimensions. These two dimensions were substituted with three additional, new dimensions: Sincerity, Personalisation and Formality. Pakistani culture is a high uncertainty avoidance social system where people avoid risk (Hofstede, 1980). In a service setting, this high score on uncertainty avoidance can be translated into a dimension such as 'sincerity' where people need advice which will lessen the associated risk involved with the buying and consumption of a service. Considering collectivism as a character of Pakistani culture, where people like to live as part of a group, the dimension of 'Sincerity' is understandable. However, it is also evident that Pakistanis score high on 'Power distance', which means that the individual differences and status are highly acknowledged and shared among the members of society (Hofstede, 1980). In a service setting, this can be attributed to the development of two dimensions of service quality: Formality and Personalisation. However, to some extent, we believe the relationship between cultural dimensions and service quality seems contradictory. For example, a high score on collectivism may not lead to the feeling of 'being personal' and 'highly formal' during service encounters. On the other hand, Pakistani society is regarded as 'polycentric' in terms of time orientation (Hall, 1983), which may lead to entirely different perceptions towards dimensions such as 'Reliability'. People having a polycentric view of time

prefer human relations over other formalities. This is contrary to the ‘monocentric’ view where time and other formalities are strictly followed as is mostly done in western countries. A recent study conducted to explore higher education service quality in a western setting found that dimensions such as Responsiveness and Assurance do not contribute much to service quality (Calvo-Porrall et al., 2013). These discussions and empirical support necessitate further studies to align and refute some measurement scales. Societies also change with the passage of time, which means that these measures are time bound. Contemporary researchers in service quality have also highlighted the importance of individual attention and customer-based service quality paradigms (Dabholkar et al., 2000). However, in higher-education settings, paying individual attention to students is a challenging task. This is mainly because an instructor’s role is to serve the collective needs of all the students as teaching also involves student assessment and evaluation of their learning (Kashif, Rehman, Mustafa, & Basharat, 2014). At the university level, group work is a major component of various degree programmes. Thus focusing on a few students by the instructor is considered as discriminative and negatively contributes to student satisfaction. Based on these assumptions, we hypothesise the following in an effort to extend further the PAKSERV scale;

H4: Favourable student perceptions of Sincerity positively influence their satisfaction.

H5: Favourable student perceptions towards Formality positively influence their satisfaction.

H6: Favourable student perceptions towards Personalisation positively influence their satisfaction.

It has been empirically demonstrated that student satisfaction leads to student loyalty in higher education (Fernandes et al., 2013). However, we believe that the nature of loyalty can vary across service settings. For example, a high student retention rate, students’ interest in education delivery and spreading of positive word-of-mouth are few forms of student loyalty which contribute to the development of a university as a highly reputable brand (Teo & Soutar, 2012). Student loyalty is a competitive tool and helps universities to build brand image positively among the stakeholder groups (Helgesen & Nesset, 2007). Furthermore, student satisfaction and loyalty have been attributed to meeting their expectations of service quality by key players in higher education (Dlačić, Arslanagić, Kadić-Maglajlić, Marković, & Raspor, 2014). Keeping in view these relationships, we hypothesise the following;

H7: Student satisfaction will positively influence their loyalty.

Methodology

The PAKSERV instrument has been envisioned to operate in a higher education setting of Pakistan. The population for this study was internal and external stakeholders. However, the research team limited the sampling frame to students enrolled in several universities in Pakistan. The sample was drawn from three universities located in the province of Punjab, Pakistan. These three universities were selected as they were located close to each other and were easily accessible for the authors in terms of timely and relevant data collection. For the purpose of data collection, final-year students were chosen as units of analysis. This was done by considering their experience of studying in a particular university, which can work as a basis on which to comment on the perceived quality of higher education institutions. Once their needs are met by the universities, this can easily lead to the establishment of loyalty. This approach to respondent selection in higher education has already been employed by service marketing researchers (Gallifa & Batalle, 2010). The

respondents were approached randomly by the students involved in data collection in the three universities. The study was descriptive and cross-sectional in nature. The data were collected in the months of January and February 2014.

The instrument was composed of two parts: PAKSERV dimensions including measures of satisfaction and loyalty (Raajpoot, 2004); and the demographics. The six PAKSERV dimensions were adapted from the work of Raajpoot (2004) while the satisfaction and loyalty measures were adapted from the work of Laroche et al. (2004) and Nam (2008). All these dimensions consisted of 31 items in total. The questionnaire was developed in the English language and no need was felt to translate it into the local language: Urdu. This was done keeping in mind that the medium of instruction was English in the selected universities.

There were 700 students enrolled in the three universities who were in their fourth year of education. In total, 300 questionnaires were distributed. The realised sample consisted of 236 questionnaires. With a response rate of 78%, this was considered a relatively good number to justify reliance on the analysis. The sample size and response rates were guided by contemporary studies in higher education (Ntim, 2014). Even smaller sample sizes have been used by higher education researchers. The 31 scale items were measured on a Likert scale of 1 = strongly disagree to 5 = strongly agree. The scale items of PAKSERV were customised accordingly to suit the higher education context.

The sample consisted of 64% males and 36% females. In terms of age, 43.2% of respondents were aged between 18 and 24 years, 29.2% between 25 and 35 years and 27.5% between 36 and 45 years. Table 1 presents respondent demographics:

Explanation of structural equation modelling

The collected data were analysed using SPSS and AMOS. Following the procedure suggested by Anderson and Gerbing (1988), a measurement model was estimated before the structural model. A confirmatory factor analysis (CFA) was used to assess the measurement model and to test data quality, including reliability and construct validity checks. Structural equation modelling (SEM) was conducted to assess the overall fit of the proposed model and test hypotheses.

Measurement model

To refine all measures for the structural model, a measurement model was estimated using the maximum likelihood estimation method. The initial 31 items developed for

Table 1. Demographics.

	Frequency	Percentage
<i>Gender</i>		
Male	151	64.0
Female	85	36.0
Total	236	100.0
<i>Age</i>		
18–24	102	43.2
25–35	69	29.2
36–45	65	27.5
Total	236	100.0

measurement were subjected to a CFA. Based on the results of the CFA, six items were deleted because of low factor loadings including T4, P4, LU29, F23, F24 and F25. It is noteworthy that F23, F24 and F25 were all dimensions of one variable named 'Formality'. Therefore, this dimension was dropped. The results of CFA on the remaining 25 items showed a good fit to the data ($\chi^2 = 460.771$, $df = 253$, $p < .001$, $\chi^2/df = 1.821$, root-mean-square error of approximation [RMSEA] = 0.059 and Comparative Fit Index [CFI] = 0.917). Consequently, this measurement model was used for all further analyses.

Table 2. Standardised confirmatory factor loadings.

Variable		Factor loadings	AVE	CR
<i>Tangibility</i>				
T1	The equipment used in this university is modern	0.702	0.505	0.769
T2	The facilities offered by this university are attractive	0.635		
T3	Employees of this university wear neat and clean dresses	0.692		
T5	The buildings of this university are well furnished	0.666		
<i>Reliability</i>				
R1	Employees of this university fulfil their promises	0.796	0.529	0.817
R2	The communicated service standards are followed by this university	0.713		
R3	The services provided by this university are error-free	0.728		
R4	All the promised service offers are available all the time in this university	0.667		
<i>Assurance</i>				
A1	The employees of this university treat everyone equally	0.688	0.552	0.860
A2	The employees of this university are competent to perform professionally	0.793		
A3	This university offers financially safe investment	0.703		
A4	The employees of this university are courteous	0.718		
A5	Employees of this university have appropriate knowledge	0.806		
<i>Sincerity</i>				
S1	In this university, students' interest is taken from heart	0.650	0.511	0.800
S2	Employees of this university offer proactive advices	0.689		
S3	Employees of this university are well-mannered	0.719		
S4	Employees of this university are not overfriendly	0.767		
<i>Personalisation</i>				
P1	Individuals are given personal attention in this university	0.717	0.503	0.703
P21	In this university students are individually known	0.697		
P3	In this university immediate action is taken about any matter	0.673		
<i>Satisfaction with university</i>				
Sat1	Assuming the entire experience with this university, I am satisfied	0.712	0.506	0.708
Sat2	In general, my satisfaction level related to the current university is high	0.640		
Sat3	This university has exceeded my expectations in offering quality education	0.625		
<i>University loyalty</i>				
Loy1	I recommend my family, friends and relatives to take advantage of the services offered by this university	0.632	0.501	0.702
Loy2	I spread positive word of mouth about this university and its high quality services	0.780		

Note: The term 'employees of this university' in the questionnaire refers to faculty and support staff both.

Table 3. Correlation.

	1	2	3	4	5	6	7
1. Tangibles (T)	0.710						
2. Reliability (R)	0.754	0.727					
3. Assurance (A)	0.707	0.721	0.742				
4. Sincerity (S)	0.691	0.714	0.722	0.714			
5. Personalisation (P)	0.657	0.685	0.708	0.635	0.709		
6. Satisfaction (Sat)	0.589	0.852	0.537	0.406	0.531	0.711	
7. Loyalty (Loy)	0.566	0.622	0.766	0.528	0.540	0.655	0.707

A reliability test was conducted to assess the internal consistency of multiple indicators for each construct. As shown in Table 1, because all values of composite reliability were between .702 and .860, multiple measures in this study are reliable for assessing each construct (Hair, Sarstedt, Ringle, & Mena, 2012). A construct validity test was conducted using the factor loadings within the constructs and shown in Table 1; all standardised factor loadings emerged fairly high. This showed that the measurement had convergent validity (Anderson & Gerbing, 1988).

Discriminant validity of the constructs was also checked. The values in Table 2 represent average variance extracted (AVE) values for each construct as well as the squared correlation coefficients between constructs. The results in Table 3 show that the AVE values were greater than the squared correlation coefficients between each pairs of constructs. Overall, these results revealed strong evidence for the discriminant validity of the measures (Hair et al., 2012).

Structural model

SEM to assess the proposed conceptual model was conducted using the maximum likelihood estimation method. The Chi-square value of the model and other model fits ($\chi^2 = 486.897$, $df = 258$, $p < .001$, $\chi^2/df = 1.887$, $RMSEA = 0.0761$ and $CFI = 0.908$) revealed that the model fits the data reasonably well. The structural results of the proposed model are depicted in Figure 1.

The relationship between tangibility and customer satisfaction was -0.263 ($p > .01$) indicating that tangibility does not significantly influence customer satisfaction, and thus $H1$ was not supported. The hypothesised relationship between reliability and customer satisfaction was supported by the corresponding estimate of 0.869 ($p < .05$) and therefore $H2$ is supported. The relationship between assurance and customer satisfaction was 0.191 ($p > .05$) indicating that assurance does not significantly influence customer satisfaction and thus $H3$ was not supported.

The relationship between sincerity and customer satisfaction was 0.367 ($p < .05$) indicating that sincerity significantly influences customer satisfaction and thus $H4$ was supported. The relationship between personalisation and customer satisfaction was 0.245 ($p > .05$) indicating that personalisation is not a significant predictor of customer satisfaction and thus $H5$ was not supported. The R^2 value was 0.68 indicating 68% of the variance in satisfaction can be explained by all the five predictors. Lastly, the path coefficient of the relationship between customer satisfaction and customer loyalty was 0.805 ($p < .01$), indicating that customer satisfaction influences customer loyalty significantly and thus $H6$ was supported. The R^2 was 0.648 , indicating that satisfaction can explain 64.8% of the variance in loyalty. The summary of the results is presented in Table 4.

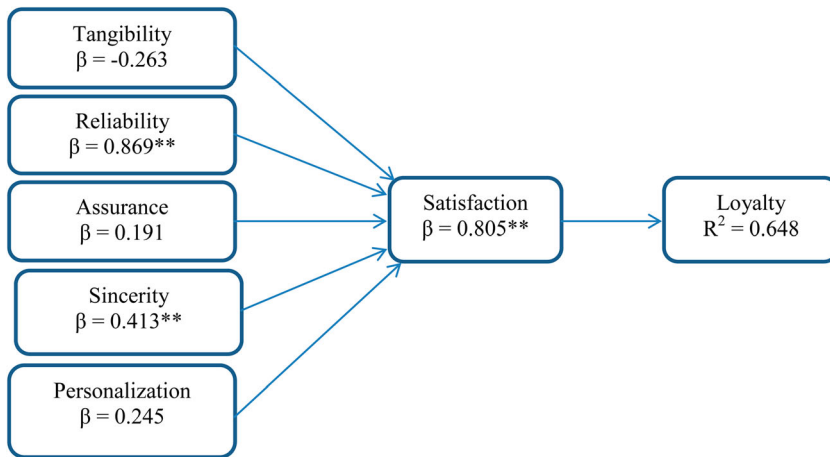
Figure 1. Structural model. Note: * $p < .05$, ** $p < .01$.

Table 4. Results of the structural model.

				Std. Beta	<i>t</i>	Decision
H1	SAT	←	T	-.263	-1.487	Not supported
H2	SAT	←	R	.869	4.136**	Supported
H3	SAT	←	A	.191	1.111	Not supported
H4	SAT	←	S	.413	2.158*	Supported
H5	SAT	←	P	.245	1.533	Not supported
H6	CL	←	SAT	.805	5.804**	Supported

Note: * $p < .05$, ** $p < .01$.

Discussion

The study makes several contributions. First, as per now, the PAKSERV scale has been tested for the first time in a collective setting of Pakistan. Second, it is the first attempt where this scale has been validated in a higher education setting. Third, the path from student satisfaction to loyalty has been explored for the first time through validation of a PAKSERV scale. The results reveal an excellent model fit for the PAKSERV scale which can be based upon the factor loadings. For instance, the factor scores for all the PAKSERV dimensions are greater than 0.700, which depicts a higher level of reliability. The PAKSERV scale exhibited strong validity in a higher education context. This also adds value to PAKSERV as a scale, ensuring its application to a different type of service – higher education.

The results further suggest that only the ‘Reliability’ and ‘sincerity’ dimensions of PAKSERV scale have been valued by the respondents. Dimensions such as Tangibility, Assurance, and Formality have not been found to influence the marketing outcomes of student satisfaction and loyalty. This has been due to a few cultural and contextual differences. On account of its culture, Pakistan scores high on uncertainty avoidance. This also means that customers, in a service setting, are not sufficiently prepared to adopt new design features and may resist surprises during service encounters (Raajpoot, 2004). Since Pakistan is a high collectivist culture people like to be part of groups and their

identity is based primarily on the in-group affiliations (Hofstede, 1980). This may cause a lesser impact of the perceived importance of formality and personalisation in a higher education context. It can be attributed to another reason – time-orientation (Hall, 1983). Since in Pakistani culture people tend to follow the polycentric view of time, and formalities are generally ignored, giving Formality less importance in a collectivist cultural service setting is understandable.

The ‘Reliability’ and ‘Sincerity’ dimensions have been found to contribute significantly to service quality perceptions. This is in line with the findings of classic and contemporary researchers in the field of service quality (Parasuraman et al., 1988; Raajpoot, 2004). It has also a few cultural nuances. Pakistanis score high on uncertainty avoidance, which means they need sincere advice on high-involvement buying decisions such as higher education. Hence, the focus on these two dimensions is understandable. In a higher education setting, the researchers have already highlighted the dominant role of ‘Reliability’ in contributing towards service quality (Cheruiyot & Maru, 2013). In addition, it has been observed that student satisfaction leads to student loyalty. This also validates the findings of previous research where student satisfaction leads to loyalty, and provides universities with advantages such as positive word of mouth and graduate employment opportunities (Fernandes et al., 2013).

Also, notably, students valued the ‘Reliability’ and ‘Sincerity’ dimensions, which are significant components of process and interactive quality. Previous researchers have established the notion that interaction and process quality contribute significantly to overall service quality (Srikanthan & Dalrymple, 2005). In a student-centric environment where higher education is considered a service, the role of faculty has been pivotal (Kashif & Ting, 2014). The focus of students on quality dimensions related to faculty signifies the role of instructors in contributing towards perceived service quality.

The findings also suggest that ‘employee-centred’ dimensions of PAKSERV service quality have been highly valued by respondents, leading to their satisfaction and loyalty. For example, a higher score in terms of impact of Sincerity and Personalisation on student satisfaction and loyalty can be attributed to service delivery by the faculty. The role of employees in creating a sustainable competitive advantage has already been highlighted in contemporary studies (Bartlett & Ghoshal, 2002). A strong link between PAKSERV-based student satisfaction and loyalty has also been found, which is also consistent with recently conducted studies in higher education (Fernandes et al., 2013). In an era where higher education policy makers are struggling to achieve student satisfaction and loyalty, this study can be an important addition to research providing a reliable solution (Yeo & LI, 2013). Further to this, the PAKSERV scale has been found to be a valid measure while investigating the service quality of higher educational institutes.

Limitations and future research

The current study makes several contributions. In spite of these contributions, the results must be implemented within a few limitations. First, the design is cross-sectional in nature. In order to reach a meaningful conclusion with regard to service quality – loyalty path, longitudinal studies are highly recommended. Although the cross-sectional design has been employed by a large number of marketing researchers, since the service quality research has reached its maturity, we highly recommend a few longitudinal studies in future. Second, the data have been collected through employing a survey-based approach. For a more in-depth understanding of the local culture to discover the customer service expectations, a qualitative approach is recommended. Another limitation is the study

setting. The data have been collected from three closely located universities, which may affect the results. Despite the fact that these three are major universities in Pakistan, future researchers must take a more representative sample of the population. Higher education delivery depends on two internal players: faculty and support services. Hence, future researchers are recommended to investigate these two groups separately to delineate better the service quality offered by a university.

Managerial implications

The study is an original work in the sense that it highlights a collectivist cultural perspective through a scale which has been established to be employed in the Asian settings of Pakistan. The results have some useful implications for higher education marketers. First, it was observed that process quality and interaction quality are important in ensuring customer satisfaction and loyalty in higher education settings. For this to happen smoothly, higher education marketers need to think holistically and facilitate the faculty as much as they can to create wonderful customer service experiences (Vargo & Lusch, 2004). The role of faculty in delivering customer service experience needs to be acknowledged. Second, the students valued the sincerity of instructors and other support staff during service encounters in a higher education setting. The university faculty and staff must demonstrate sincerity to achieve marketing outcomes of satisfaction and loyalty. It can be achieved through providing counselling proactively to help and solve student problems with workable solutions. Third, the PAKSERV dimensions, validated in this study, can be used to build a brand image of the institution, since in a service system employees are the core that creates a competitive advantage (Bartlett & Ghoshal, 2002). In higher education, this signifies the important roles of students, faculty and administration.

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