Developing a Specialized Service Quality Model for Universities

Reza Fazli-Salehi, Mohammad Rahim Esfidani, Ivonne M. Torres & Miguel Angel Zúñiga

To cite this article: Reza Fazli-Salehi, Mohammad Rahim Esfidani, Ivonne M. Torres & Miguel Angel Zúñiga (2019): Developing a Specialized Service Quality Model for Universities, Services Marketing Quarterly, DOI: 10.1080/15332969.2019.1630175

To link to this article: https://doi.org/10.1080/15332969.2019.1630175

Published online: 18 Jul 2019.

Submit your article to this journal

View Crossmark data
Developing a Specialized Service Quality Model for Universities

Reza Fazli-Salehi\textsuperscript{a}, Mohammad Rahim Esfidani\textsuperscript{b}, Ivonne M. Torres\textsuperscript{c}, and Miguel Angel Zúñiga\textsuperscript{c}

\textsuperscript{a}Department of Marketing, College of Business, New Mexico State University, Las Cruces, NM, USA; \textsuperscript{b}Department of Business Management, University of Tehran (Faculty of Management), Tehran, Iran; \textsuperscript{c}Department of Business Administration, Earl G. Graves School of Business and Management, Morgan State University, Baltimore, MD, USA

ABSTRACT
Given the important role of universities in economic, social, cultural, and political dimensions, it is vital to ensure optimal quality of their performance in order to prevent loss of human and material capital and to maximize their competitiveness. This study develops a model for assessing perceived quality of universities and explains the outcomes of perceived quality among students. Results show that quality of lecturers, prestige, connection with outside world, extra-curriculum activities, research potential, responsiveness, facilities, design and ambiance, and diversity are considered components of perceived quality. Students with higher perceived university quality will make greater efforts to grow the brand.

KEYWORDS
Perceived quality; commitment; brand advocacy; active engagement

Introduction
Students will consider some institutions while ignoring others. Students will enroll at the institution if the investment seems attractive to them in terms of the economic return (Curtis, Abratt, & Minor, 2009). Given the important role of universities in various economic, social, cultural, and political dimensions, it is undeniably vital to ensure optimal quality of their performance in order to prevent loss of human and material capitals and to compete in a future world where quality is the most important component for survival of any organization. Currently, higher education has started to adapt to total quality management concepts and methodologies. This basic philosophy requires a customer-oriented approach to quality. In order to attract customers and retain them to achieve more profits, organizations are actively involved in understanding customer expectations and perceptions of service quality (Angelova & Zekiri, 2011). However, at a
university, service quality can only be a part of what is perceived as the overall quality, which needs a broader approach. The relationship between perceived quality and satisfaction has also been studied multiple times (Li, Huang, & Yang, 2011). Due to intense competition in the field of higher education, internationalization of higher education and classification of education as a marketable service, managers of public and private higher education institutions have to focus more on assessing student perceptions of service quality (Kwek, Lau, & Tan, 2010). Institutions with well-recognized brands, a positive reputation, and information that is comprehensive and easily accessible have better chances of recruiting students, faculty, and staff (Curtis et al., 2009).

In the 21st century, universities and higher education institutions are organizations in which their products and services are provided in the form of research achievements, innovations, and training services are more and more involved in development of countries. Thus, their quality is vitally important for socio-economic and cultural development of countries. Govender, Veerasamy, and Noel (2012) emphasized the importance of higher education in emerging economies and the need for constant investigation and research into service quality with a vision of improving the quality in education sector. In a related study, Sander, Otto, Becker, and Bollmann (2016) showed that students’ perception of service quality is prior to their satisfaction. The positive perception of service quality can lead to students’ satisfaction, which may lead to attracting new students through oral communication and re-attracting them for later periods. Retention of students and their academic performance are influenced by quality of services provided by higher education institutions. Students’ perception of quality can lead to their commitment, attachment and support for the university (Kahu, 2013). In other words, universities can improve students’ perception of service quality to make them commit to the university and prefer its brand to competitors’ brands (Dlačić, Arslanagić, Kadić-Maglajlić, Marković, & Raspor, 2014). This study tends to develop a model for evaluating perceived quality of higher education institutions and test the results regarding students’ behavior. Perceived quality of service-providing organizations is mainly measured by SERVQUAL model. Since this model is general, it is required for certain service-providing fields (such as education sector) to cover other factors that can hardly be addressed in a general model. On the other hand, marketing literature lacks studies on perceived quality and its outcomes in higher education sector. Moreover, research has mainly focused on measuring the quality of higher education institutions by focusing on indicators predetermined by organizations and limited research exists of perceived quality from the student’s perspective.
Theoretical framework

Quality and perceived quality

Quality is conceptualized as “superiority or excellence,” while, perceived quality is “the consumer’s judgment about a product’s overall excellence or superiority” (Zeithaml, 1988). To measure perceived quality of universities, one must refer to service management literature. In brand literature and marketing, perceived quality of service-providing firms is usually measured by SERVQUAL. In some cases, however, scholars have studied service quality beyond the five dimensions of SERVQUAL model, which includes tangibles, reliability, responsiveness, assurance, and empathy. When dealing with the quality of a service provider, it would be difficult to be in control of the quality management. This is due to the fact that there can hardly be any preproduced elements to control before the service is delivered to the customers (Gronroos, 1988). Several scholars evaluated and confirmed the effect of service quality on behavioral outcomes (Li et al., 2011). Tsiotsou (2005) revealed a relationship between perceived quality and outcomes such as involvement, satisfaction and purchase intention. Also, Yee and San (2011) proposed this construct as an antecedent of brand equity, which enhances its level to a broader scale.

Understanding dimensions of quality

Efforts have been made to develop specific perceived quality models. These efforts are made by scholars such as Brady and Cronin (2001) who applied the extended SERVQUAL model to study service-providing businesses such as fast-food restaurants, photo shops, recreational centers, and dry cleaners. Their work summarized perceived quality of service-providing businesses in three general dimensions: (a) interaction quality, including attitude, behavior and expertise; (b) physical environment quality, including ambience, design and social factors; and (c) outcome quality, including waiting time, tangibles and valence.

Through a statistical sample study, Zethamel (1999) studied services provided in the public sector. In this study, all regular customers believed that quality of services should match customers’ expectations. Johnston (1997) considered speed, courtesy, comfort, cleanliness and friendly customer treatment as dimensions of service quality management in public sector. Govender et al. (2012) reported that gaps exist between international students’ expectations and perceptions with regard to the five dimensions of service quality. In their model developed for service quality, Lehtinen and Lehtinen (1991) considered three dimensions.
Physical quality

Physical quality involves the tangible aspects of the service (Kang & James, 2004). For example, Ha and Jang (2010) studied physical quality in the restaurant industry and concluded that service and food quality have positive and significant impact on customer satisfaction and their loyalty.

Interaction quality

Interaction quality refers to the interactive nature of services and involves the two-way flow that happens between the service provider (or a representative) and the customer (Kang & James, 2004). Lehtinen and Lehtinen (1991) categorized interaction quality in two dimensions of interactive persons and interaction equipment.

Corporate quality

Corporate quality is conceptualized as “the image attributed to a service provider by its current and potential customers, as well as other publics” (Kang & James, 2004). Corporate quality refers to how customers (as well as potential customers) perceive the corporate entity, organization or institution, its profile or image (Lehtinen & Lehtinen, 1991).

For better understanding of effective factors on student perceptions of university quality, Douglas, Douglas and Barnes (2006) measured effective factors on student satisfaction with Liverpool John Moores University. In their study, they ranked important factors of student satisfaction and measured the students’ satisfaction using all factors. The most important factors that led to student satisfaction with the university included teaching abilities, subject expertise, IT facilities, supplementary tutorial material, supplementary lecture material, consistency of teaching quality (regardless of the teachers), learning resources center, and online professor–student communication channels. Finally, according to the study conducted by Sultan and Yin Wong (2013), three aspects of perceived service quality for universities, includes academic, administrative, and facilities.

Evaluating outcomes of quality

Chen, Chen, and Lee (2013) examined the relationship between quality of physical environment, quality of personal interaction, customer satisfaction and customer loyalty through a causal framework. The results showed that quality of physical environment had a significant and positive effect on customer satisfaction, but no significant effect on customer loyalty. Quality of personal interaction had a significant and positive effect on customer
satisfaction and loyalty. Customer satisfaction had a significant and positive effect on customer loyalty.

Walsh and Bartikowski (2013) evaluated the effect of service quality on customer satisfaction and customer loyalty on 437 retail customers. Their results showed that service quality had a significant direct effect on customer satisfaction and thereby customer loyalty. Joon Choi and Sik Kim (2013) evaluated the effect of output quality, interaction quality and peer-to-peer quality on customer satisfaction and loyalty. Their results showed that output quality, interaction quality and bilateral quality had a significant positive effect on customer satisfaction and thereby customer loyalty. Studying main predictors of customer satisfaction, Jamal and Naser (2002) found that quality of customer–employee interaction had a direct effect on customer satisfaction.

Different studies have been conducted on outcomes of perceived quality of universities.

The volume and quality of accessible information about the institution impacts potential students’ decisions. Students compare university brands and features and attributes of other institutions as alternatives, by assigning a degree of importance to each brand they can choose as an alternative (Curtis et al., 2009). Sultan and Yin Wong (2013), concluded that service quality has a direct positive effect on student satisfaction and student trust. The authors also reported an indirect effect on brand performance and behavioral intention.

**Method**

The studied population included students of public universities in Tehran. Public universities were selected for this study because these universities often have measureable qualitative indicators and their students have higher involvement with the subject (in Iran, public universities are usually more popular and a large number of top students are admitted to these universities). Moreover, sampling was clearer among public universities and prevented dispersion of samples. Researchers who wish to conduct broader studies need to determine which type of other universities they would like to add to the sample.

**Qualitative phase**

This study was conducted in two parts: qualitative and quantitative phase. In the qualitative phase a two-step method was used in the qualitative phase. Initially, three focus groups were formed among students of Tehran University to extract the overall mindset and general opinions of the students. By determining primary concepts and categories, exploratory
Interviews were conducted to collect qualitative data; the steps of these interviews included informal dialog interview, following the question guide and standard open interview. Initially, informal dialog interview was used to extract concepts and categories. Then, a question guide was used to follow concepts and categories in the interview. Once outline of interviews was formed by the concepts and categories, open questions were designed and continued until theoretical saturation was achieved. Next, standard open interview was used. Interviews were performed by two interviewers simultaneously with students of 10 public universities in Tehran. In this step, totally 46 exploratory interviews were done. Two major open questions were asked in interviews:

1. What are the factors that remind you of a high quality university?
2. What are you willing to do more at a high quality university?

For this purpose, results of two exploratory interviews were compared, and then the results were analyzed by two evaluators. Theme analysis was used to encode data. Member check was used to examine validity and reliability of data. Then, triangulation method was used to ensure results. Nine factors were noted as the dimensions of perceived quality. Three constructs were detected as the potential outcomes of perceived quality. Several hypotheses were considered to explain the relationship between the constructs. Then based on the results drawn from the theme analysis, a questionnaire was developed, using the collected data for quantitative phase.

**Quantitative phase**

In the quantitative phase, in order to evaluate dimensions and outcomes of quality, questionnaires were distributed among students of 10 public universities in Tehran. The missing data were removed; totally, 390 filled questionnaires were analyzed. All questions were directly adopted from data extracted in qualitative part. Questionnaires were distributed among the students of 10 public universities in Tehran. The studied universities included University of Tehran, Sharif University of Technology, Amir Kabir University, Shahed University, Tarbiat Modarres University, Allameh Tabatabaei University, Al-Zahra University, Kharazmi University, University of Science and Technology, and Khajeh Nasir Toosi University of Technology.

Sampling was done in multiple stages. In the first stage, stratified sampling was used in which students were recruited from different universities and degrees based on national statistical proportions. In the second stage, convenient sampling was used within the degree groups.
For sampling, the interviewer attended the universities and distributed questionnaires among students regardless of their age or gender. The number of questionnaires distributed at each university (sample size for each university) was determined based on the number of students in the country and percentage of students at each university. Considering national statistics and ratio of respondents from different degrees, the number of students at different universities and degrees was proportional to national percentages. Descriptive statistics methods were used for data analysis to measure demographic variables of respondents. Then, exploratory factor analysis was applied to summarize data and designate factors. Using SMART-PLS, the suggested model was tested by structural equation modeling (SEM).

**Results**

**Qualitative phase**

Theme analysis detected nine dimensions for perceived quality of university; these dimensions included: quality of lecturers, prestige, connection with outside world, extra-curriculum activities, research potential, responsiveness, facilities, diversity, design, and ambiance. Based on data obtained from exploratory interviews, three behaviors were considered as outcomes of perceived quality of universities; these behaviors included brand advocacy, commitment and active engagement. Moreover, students considered social experience as an effective factor on brand advocacy. Therefore, several hypotheses were developed for the next phase (quantitative research):

**The effect of perceived quality on brand advocacy**

Brand advocacy has been a predictable outcome which also revealed itself in the responses the students delivered: “When the quality of the university is high, I will try to promote my university in a positive way”; “I will recommend the university to my friends and acquaintances”; “If the quality of the university is high, I will spread good words about the university.” Therefore, based on the students’ responses, we propose the following hypothesis:

H1: Perceived quality of university has a positive effect on brand advocacy.

**The effect of perceived quality on active engagement**

Active engagement can basically be manifested in many singular items the students mention they would do, if the quality is high. “If the quality is high,
I would definitely have more motivation to participate in the seminars and conventions held by university”; “I would volunteer to join the clubs. I would love to spend more time on campus, if I believe the quality is high.” Therefore, based on the students’ responses, we propose the following hypothesis:

H2: Perceived quality of university has a positive effect on active engagement.

The effect of perceived quality on commitment
Commitment can show itself in the responses by referring to the willingness to help the university and having a strong emotional attachment to it. Some of the students mentioned the following responses: “I will try to strengthen the brand of my university by participating more in the research activities”; “If I become a manager in an industry, I would try to recruit my staff from the graduates of this university”; “When the university that I study at delivers good quality, I feel a sense of belonging to it which makes me quite committed to it”; “I would rather stay at the university for the next degree level, instead of applying for foreign universities.” Therefore, based on the students’ responses, we propose the following hypothesis:

H3: Perceived quality of university has a positive effect on brand commitment.

The effect of social experience on brand advocacy
The students mentioned the social experience they have at the university as an effective factor that positively affects their brand advocacy. “When I have friends from my social class, I can talk about the university as a positive experience.” Therefore, based on the students’ responses, we propose the following hypothesis:

H4: Social experience at universities has a positive effect on brand advocacy.

The effect of perceived quality on satisfaction
The students mentioned perceived quality of the university as a driver of their satisfaction. “When I feel I study at a high quality university, it gives me an overall better feeling about my choice.” Therefore, based on the students’ responses, we propose the following hypothesis:

H5: Perceived Quality of the university has a positive effect on students’ satisfaction.

The effect of social experience on satisfaction
The students stated that when they have the benefits of social experience at the university, they would generally feel more satisfied with it. “When an
intimate atmosphere exists among students, I can feel quite happy about my university”; “When university plays a role in enhancing my social interaction capability, I would feel more satisfied with my general studentship experience.”

Therefore, based on the students’ responses, we propose the following hypothesis:

H6: Social experience at universities has a positive effect on students’ satisfaction.

**Quantitative phase**

As the results showed, 43.5% of students were female and 55.7% were male. Moreover, 63.9% of respondents were undergraduate students, 26.2% were undergraduate students and 9.7% were PhD students. The results showed that 84.7% of respondents were full-time students, 4.6% were part-time students, and 0.5% were international students. Exploratory factor analysis was used to identify underlying indicators of variables. Principal component analysis was used to extract factors. Kaiser criterion (as the best method for principal component analysis) was used to select the correct number of factors. Equamax orthogonal rotation was used to rotate factors. Outputs of this test were iterated six times to reach the best condition (all items with factor loadings lower than 0.5 were removed in each step). Bartlett’s test and Kaiser–Meyer–Olkin (KMO) test were done on data to confirm suitability of data for factor analysis. A KMO score of 0.921 indicated that the data was suited for factor analysis. Moreover, Bartlett’s test showed that new structure of data was possible. Results of rotated component matrix were used to classify items based on their factor loading. Items were classified based on the largest factor loading of each item by considering the size of their correlation.

In the next step, factors were designated by considering items of each factor. Quality of lecturers explains 6.627% of total variance in items (eigenvalue = 17.307). Brand advocacy explains 6.608% of total variance in items (eigenvalue = 6.859). It also involves the items that were presumably considered to represent Satisfaction. Therefore, the construct “satisfaction” and the related hypotheses (H5 and H6) were omitted from the study. Prestige explains 6.575% of total variance in items (eigenvalue = 2.710). Connection with outside world explains 6.436% of total variance in items (eigenvalue = 2.681). Commitment explains 6.077% of total variance in items (eigenvalue = 2.195). Extra-curriculum activity explains 5.723% of total variance in items (eigenvalue = 1.631). Research potential explains 5.379% of total variance in items (eigenvalue = 1.519). Staff responsiveness explains 5.367% of total variance in items (eigenvalue = 1.325). Facilities explain 5.061% of total variance in items (eigenvalue = 1.277). Active
engagement explains 5.004% of total variance in items (eigenvalue = 1.199). Design and ambiance explains 4.950% of total variance in items (eigenvalue = 1.077). Diversity explains 4.528% of total variance in items (eigenvalue = 1.029). Social experience explains 4.471% of total variance in items (eigenvalue = 1.001). Conceptual model was developed by identifying variables; the model is shown in Figure 1. Notice that as mentioned earlier, satisfaction is omitted as its items were found to be covered by brand advocacy.

**Hypotheses and model testing**

To examine validity of variables according to average variance extracted (AVE), AVE > 0.5 indicate internal consistency of the reflective measurement model. AVE obtained from Smart-PLS indicates convergent validity of these variables. Moreover, a model will be homogenous if absolute value of factor loading of each observed variable corresponding to latent variable of that model is at least equal to 0.5 and its best range is 0.7. All factor loadings of the measurement models were higher than 0.5 and significant at 95% confidence interval.

Path coefficients or coefficients of regression (Figure 2) show effect size of independent variables on dependent variable. Significance of path coefficients is a major complement and direction of β-value of the model. A relationship is confirmed if the obtained value is higher than minimum
statistic at the considered confidence. At 95% confidence, path coefficients and significance of the model show the confirmed relationships.

Results show that perceived quality has a significant effect on active engagement ($\beta = 0.444; t$-value $= 9.355$), commitment ($\beta = 0.543; t$-value $= 14.185$) and brand advocacy ($\beta = 0.609; t$-value $= 14.441$) at 95% confidence interval ($Z > 1.96$). Moreover, social experience has a positive and significant effect on brand advocacy ($\beta = 0.210; t$-value $= 4.544$) at 95% confidence interval (Figure 3).
Goodness of fit (GOF) index was suggested by Tenenhaus et al. (2005). GOF considers both measurement and structural models and it is used as a criterion for measuring total performance of the model. GOF ranges from zero to one. Wetzels, Oderkerken-Schröder, and van Oppen (2009) considered GOF = 0.01 as weak, GOF = 0.25 as moderate and GOF = 0.36 as strong. GOF is square root of product of communality and $R^2$ average. For this model, GOF = 0.474 indicates goodness of the model.

**Conclusion and discussion**

This study used both qualitative and quantitative approaches. In qualitative phase, interviews were used to collect data. Primary concepts and categories were identified; then, a question guide was used to develop the concepts and categories in the interviews. A two-step method was used to select participants of the qualitative part. Initially, three focus group sessions were held among the students of University of Tehran; in the next step, using a question guide that was designed based on the results of focus groups, 46 exploratory interviews were conducted with students of 10 public universities in Tehran. The extracted categories were used in the quantitative phase. Proper items were developed for categories. Data were collected for exploratory factor analysis. The identified factors included quality of lecturers, brand advocacy, prestige, connection with outside world, commitment, extra-curriculum activities, research potential, staff responsiveness, facilities, active engagement, design and ambiance, diversity and social experience. In the next step, the conceptual model was developed. According to the model, quality of lecturers, prestige, connection with outside world, extra-curriculum activities, research potential, staff responsiveness, facilities, design and ambiance, and diversity were considered as components of perceived quality. Moreover, the model suggested that perceived quality had a direct effect on brand advocacy, commitment and active engagement.

In this study, we examined connection of the university with outside world regarding two dimensions: (a) connection with universities abroad and exchange of professor and student; (b) connection with industry sector. Quality of universities that emphasize their connection with different institutions and plan for it is perceived higher among students. Quality of lecturers was assessed from different aspects including teaching capability, proper curriculum, academic level, bilateral interaction with students, practical materials, and ethics. Prestige is a factor that is well reflected in students’ choices. Recognition among potential clients, high ranking among competitors and effect of university brand on recruitment system of industries are dimensions of prestige. Staff responsiveness includes availability of
employees, their respectful manners, and accountability when handling problems. Facilities are addressed from two dimensions: educational facilities and welfare facilities. Educational facilities involve quality of classrooms, libraries, laboratories and workshops, website, and Internet speed. Welfare facilities involve dining hall, dormitories, buffet, and sports facilities. Extracurricular activities include sports, cultural, and entertainment programs that are provided along with curriculum. Research potential includes significance of research activities at the university, availability of updated scientific resources, and research works conducted at the university. Design and ambiance are important factors in quality of universities and include delightful architecture, adequate green space, and good physical condition of classrooms. Diversity includes two dimensions: diversity of students and diversity of majors. Social experience involves intimate atmosphere and friends who are at the same level, which can have a positive effect on brand advocacy. Outcomes of perceived quality involve three constructs: brand advocacy, commitment and active engagement.

**Brand advocacy**

Brand advocacy refers to selecting a single brand among numerous choices, paying as much as possible, passing positive feelings about the brand to others and expressing its values to others (Lowenstein, 2011, p. 112, Machado, Cant, & Seaborne, 2014). Advocacy can be both physical and social (Stokburger-Sauer, Ratneshwar, & Sen, 2012). Through an organizational research, Mael and Ashforth (1992) found a strong positive relationship between identification of graduates with their institution and social and physical advertisement (Stokburger-Sauer et al. 2012). According to our qualitative study and factor analysis, brand advocacy involves items from satisfaction and word of mouth. Findings related to model analysis showed that perceived quality has a positive effect on brand advocacy. This is consistent with the findings of the study conducted by Sultan and Yin Wong (2013).

**Active engagement**

Active engagement is defined as customer’s tendency to invest time, energy, money, or other resources in a brand beyond those expended for purchase or consumption of other brand (Keller, 2009). For instance, following a brand’s web page or buying branded merchandise are manifestations of active engagement. Also Bergkvist and Bech-Larsen (2010) found this construct to be the outcome of brand loyalty and brand love. Active engagement is considered as a dimension of brand relationship (Keller, 2001).
Examples of active engagement for a university may include spending time on campus, visiting the university website, listening to professors’ podcasts, attending seminars and conferences, attending ceremonies, etc. In this study, active engagement includes energy and time spent by students for various activities on the campus apart from those on regular educational tasks. These activities may include participating in arts and cultural programs, membership in graduates club, doing leisure activities on campus and spending more time at the university. Findings revealed that perceived quality has a positive effect on active engagement. Students with higher perceived quality spend more time, energy and money for their universities, resembling a higher attachment and a deeper relationship with the university.

**Brand commitment**

Brand commitment refers to the psychological, emotional and economic attachments that consumers have towards the brand, as well as consumers’ willingness to make efforts to continue their relationship with the brand (Barnes 2003; Papista & Dimitriadis, 2012). Brand commitment reflects the extent to which a brand is firmly established as the only acceptable option in a product category (Warrington & Shim, 2000). Brand commitment is related to brand loyalty but distinct. Brand loyalty refers to a behavioral aspect and it is usually reflected in repurchase of a certain brand as well as consumers’ need to reduce efforts in the process of decision-making. However, brand commitment is related to an attitudinal aspect (Tuškej, Golob, & Podnar, 2011).

In this study, results showed that perceived quality has a positive effect on commitment. Positive perception of service quality leads to emotional attachment and commitment to a brand.

Furthermore, according to our study, social experience performs as an independent variable that has a direct effect on brand advocacy. Communicating with friends and people at the same level in a friendly atmosphere promotes advocacy among students.

**Limitations and future research**

There are some limitations to this study. Some categories of quality vary among students from different degrees and majors. For example, medical students might believe that a major part of university quality depends on clinical and hospital environment in which they are studying. Moreover, this study was conducted at a macro-level. Thus, it is suggested to evaluate mental criteria of different groups by separating different segments of
students. On the other hand, the studied population included students of public universities. There are private universities and other higher education institutions in Iran that have different policies and facilities, not to mention different tuition fees. The students’ expectations from these distinct types of universities are also different from each other. Therefore, results of this study are not generalizable.

This study was conducted in only one city (Tehran). Due to their various social, economic, and cultural characteristics, different geographical regions have different perceptions and expectations, which would make changes in the model. Thus, it is suggested to conduct broader studies in order to develop a comprehensive perceived quality model for educational system. Moreover, it is essential to develop proper models for cities that have certain ethical, geographical and cultural characteristics.

Managerial implications

Managers of higher education institutions can make benefits of the results of this study. In management literature, there are always discussions on quality of service providing firms. However, elements of the quality are unknown for managers of many industries and sectors. This study tended to develop a model of perceived quality specifically for universities in order to reveal details and various aspects of such a complex structure and also focus on its functional dimensions. An attractive aspect of this study for managers of universities is to know the items with which subjects are involved. For example, connection with the outside world is a criterion of perceived quality of universities from the respondents’ perspectives. The fact that connection with foreign universities and interaction with industry are dimensions of perceived quality can be a useful guideline for managers. This is also true for design and ambiance.

Interestingly, subjects considered quality and ambiance of the campus as dimensions of quality. Despite relatively good infrastructure of Iranian universities, most of these universities have lost their optimal physical conditions over time. It is also noteworthy that subjects addressed diversity. This is quite important because one might assume that specificity and focusing on a narrow spectrum of customers and products indicate higher quality, while results of this study showed that students perceive quality of universities to be higher when they cover more diverse majors and admit more diverse students. Another interesting finding as a dimension of quality was research potential. Higher education institutions that are founded based on the practical needs of industry and yet ignore research area need to consider this category and provide updated studies to promote this important dimension.
When evaluating results, one can consider high or low perception of different dimensions of quality. Among the dimensions assessed on a Likert scale from 1 (the lowest) to 5 (the highest), prestige ($M = 2.2495$) and research potential ($M = 2.4790$) are recognized as major weaknesses in perceived quality of public universities in Tehran. Moreover, connection with outside world ($M = 3.0741$) is recognized as the strength of perceived quality of public universities in Tehran. Public universities are recommended to promote their prestige and research potential and focus on their weaknesses and strengths to attract students. The mean of perceived quality was $2.6066$ (on a Likert scale of 1 to 5), which is slightly lower than average.

A practical result of this study is to realize the outcome of higher perceived quality of universities among the subjects. When students perceive the quality of university to be higher, spend more time at the university, recommend the university to their friends and make efforts for growth of the brand. At universities with higher quality, students are more likely to join graduates clubs. This is considerably important for universities that tend to maintain their relationships with graduates and retain talents.

References


