Designing and Explaining Brand Equity Model in Higher Education

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Abstract

This study is designed and implemented to identify the dimensions of brand equity in higher education in Iran. Higher education provides an interesting and important concept for research because higher education institutions around the world have increasingly oriented to marketing and also students have become customers. Considering that any research with this content was not conducted in Iran in runtime and formulation of this report, the researcher has extracted various dimensions and components of higher education equity of country through the depth study of the research literature and earlier researches and has refined the indicators by consulting with teachers and academic experts. In addition to localization of structures and indicators influencing the brand equity of higher education, they designed a comprehensive model of the factors affecting the brand equity of higher education. The effective indicators with a quantitative study were reviewed and approved in terms of content by 23 teachers and experts from the University of Tehran, Shahid Beheshti, Allameh Tabatabai and Imam Sadegh. After confirming indicators, a quantitative questionnaire was used to assess the model and a sample of 564 individuals from students of four University of Tehran, Shahid Beheshti, Allameh Tabatabai and Imam Sadegh were studied and the conceptual model was examined through path analysis test. Ultimately, the final model of brand equity in higher education was presented and results were reported in the following.

Keywords: food quality, service quality, mental image, perceived value, behavioral intentions, loyalty, consumer satisfaction

Introduction

Organizations have identified their growing strength a combination of good customer service, high quality products, competitive pricing strategy and advertisements. Every organization expects its employees to provide excellent customer service. Ongoing work, new work, increased income, promotions and recognition of employees and so on are consequences that are derived from the quality of excellent service. If a customer has had a pleasant experience when doing things, probably he establishes a relationship with representative of customer service and because of their early encounters will always refer to them. In contrast, if the quality of service has had a negative impact, the customer who experiences poor service will never forget it. Because the first effects are more indelible, therefore, organizations should do their best and always make sure to choose the best and most courteous customer representatives at the front. Providing excellent customer value is essential to management. Agent service should do the best in value creation organization. Customer service refers to a wide range of activities that a company and its employees undertake to satisfy customers. Therefore, they continue to collaborate with company and use positive words to other potential customers. Providing more excellent customer service refers to learn issues that customers want and taking reasonable steps to ensure that they receive the desired services and products is essential. The importance of providing good customer service cannot be evaluated too important. Whatever a company to be valuable for its clients, more likely, customers will continue working with that company. Company should always seek ways to astonish its customers because today's

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customer is not only very complex and intelligent but also has an ocean of deadlines and places that can collaborate with them. By considering this point, it is important that organizations to recognize customers have opportunities and are seeking those organizations that respond to their most urgent needs. An organization by providing customers with services type and service quality that are expected can improve the chances of long-term business goals achieving (Farrington et al, 2009).

Considering the importance of brand topic and brand equity in higher education, this study attempts to examine the relationship between brand and equity from the perspective of higher education customers in Iran.

Statement of Problem

Today, consumers are shopping from stores where all goods ranging from furniture and computers to fast foods and water bottle are supplied in them. Encountering to a host of products with similar shape and quality, regardless of their characteristics will lead consumers' purchasing decisions to products' brand. In fact, brands are so important in consumer's buying decisions which have been referred as the company's main asset. A strong brand at least tells consumers what can expect from a product. It is important to know that brands are not just a specific noun and product packaging and do not develop solely from advertising or marketing strategies. Now this question is proposed why brands should be valued? Why a model should be designed for this topic? To answer these questions, the issue of brand equity should be investigated from three separate perspectives: from the perspective of company, customers and organizations and institutions that are active and interested in the area of brand valuation. Furthermore, brand equity can be assumed to have both internal and external dimensions. External dimension is the same value and status of brand and internal dimension is the indexes that brand is valued by them and its consequent is the brand's value.

Company perspective

Questions that are important for most owners of companies are that how can have the most powerful and influential brand? and how can specify the value of company's brand? When a brand is created, it is just the onset of way. We cannot create a brand and then abandon it because when we achieve to a new distinction, others are immediately seek to employ it. Therefore, the differences quickly will become the similarities. This is where the concept of brand management makes sense. So, we should do an operation that influence the minds of people that this impact is called brand equity. Brand equity management means the strict observance and promotion of the commitments that the company has accepted in front of clients and the community (Keller, 2008).

Brand equity includes indicators that cause a company with their management and promotion get a strong brand (internal dimension). All models of brand equity evaluation offer indicators for measuring the brand equity and claim that companies with management and promotion of these indicators will achieve to the strong brand and their brand position and value will be determined among other brands. A model with more appropriate and consistent indicators with consumers' market realities can help companies in strategic management. Brand equity is caused by the perceptions that consumers have toward that brand and these perceptions are changed by many factors. Brand equity cannot be understood and recognized without considering its resources namely the factors that are effective in creating and shaping the brand's value in mind of consumers (Aaker, 1991).

Customer perspective

With a superficial glance, we can also get what factors make important the existence of brand. Many goods and services with various brands are used from morning to night and each person has its own reasons to choose a brand among the available brands in the market. On the other

hand, the consumer societies especially third world countries move toward fashion and creating distinction through brands and now this topic as a new scientific argument is proposed in the disciplines of sociology, anthropology, psychology. Now, this question is raised what problem of customers is solved through designing a model for brand equity assessment?

In response to this question it should be said that the indicators that are used in brand power assessment model are formed based on consumer's perceptions and attitudes (internal dimension). In fact, companies and institutions having brand will pay special attention to their customers by emphasizing on these indicators. If these factors are properly formed and explained and companies also commit themselves to manage and promote those indexes, consumers will make faster and easier decision among available brands in the market. It is also necessary to note that a customer gives reward to that company which can satisfy his expectations, which is strict and unforgiving toward a company that do not observe these principles and easily removes the supplier from his shopping list (Aaker & Joachimsthaler, 2009).

The perspective of institutions and organizations that are involved or interested in the issue of valuation

In recent years, the discussion of brand and its relevant issues are considered by many companies and research institutes such as the public and private sectors and determining brand value as an argument is seriously considered. But what is the main problem from this perspective?

Government in line with Executive Law of policies of Article 44 of the constitution aims to transfer many governmental companies and institutes. This question which is always raised is that in assigning and determining the base price of companies with old and famous brand, should they be valued only based on their physical assets or the amount of profit or loss or the existence of a brand that consumers have good memories about it can be a determining factor or not. Banks and Finance and Credit Institutions seek physical assets as collateral to give greater financial resources. Can a brand be considered as a warranty? At first, regardless of its legal issues, a brand should be evaluated to determine its position correctly. In 2008, Top Brands Festival was held by introducing one hundred top brands in Iran and also in 2009 festivals entitled Top Brands were held that the methods of brands evaluation and selection were criticized by experts of brand area. Regardless of the position of brands in this ranking, the important thing is the lack of comprehensive indicators and lack of providing useful guidelines to companies for improving their brands' position. Due to the sensitivity of the experts of brand science as well as a group of consumers who follow these rankings, the existence of an Iranian model that properly and systematically determines the position and equity of aboriginal brands seems necessary.

In development prospects, human capital is the most significant capital of countries. Therefore, making humans astute and enable is such a mission. Meanwhile, since the higher education is responsible for producing science, promoting knowledge and educating human resources that are needed to different sectors of society, so has a special position in sustainable development of communities. On the other hand, the existing competitive environment in higher education of Iran has led to be successful in attracting the elites that provide the desired criteria of students. Furthermore, understanding the perceived position of university compared to competitors can help to better planning of university marketing. Hence, brand positioning and identifying its competitive position in this environment are considered necessary and unavoidable (Walker et al, 2004, 315-316). According to the latest educational census in 2007- 2008, totally 655,797 students were accepted in universities and higher education (except Azad University) and the highest number with 124,056 digits refers to Tehran and in this academic year, the total number of students at different educational levels in universities and higher education centers was 2089283 people that among them 94,102 people enrolled in M.A. level that has 220% growth rate towards five years ago

(www.amar.sci.org.ir). On the other hand, the total number of students who are studying in the M.A. level has risen to 290,679 students in academic year 2010- 2011 (a 300% growth). These figures show a marked and rapid growth of higher education market particularly in M.A. level in Iran. Universities are trying to attract elite students and in this regard, universities of Tehran like Tehran University and Sanati Sharif University in order to attract students offer special privileges such as financial support, the possibility of continuing their education at home and abroad. So, in this market, with increasing competition to attract the top ranking of public big exam, universities should know what indicators are important for students in selection of university. Therefore, the main question of this research is what is the appropriate model for assessing brand equity in higher education in Iran.

The conceptual model of research
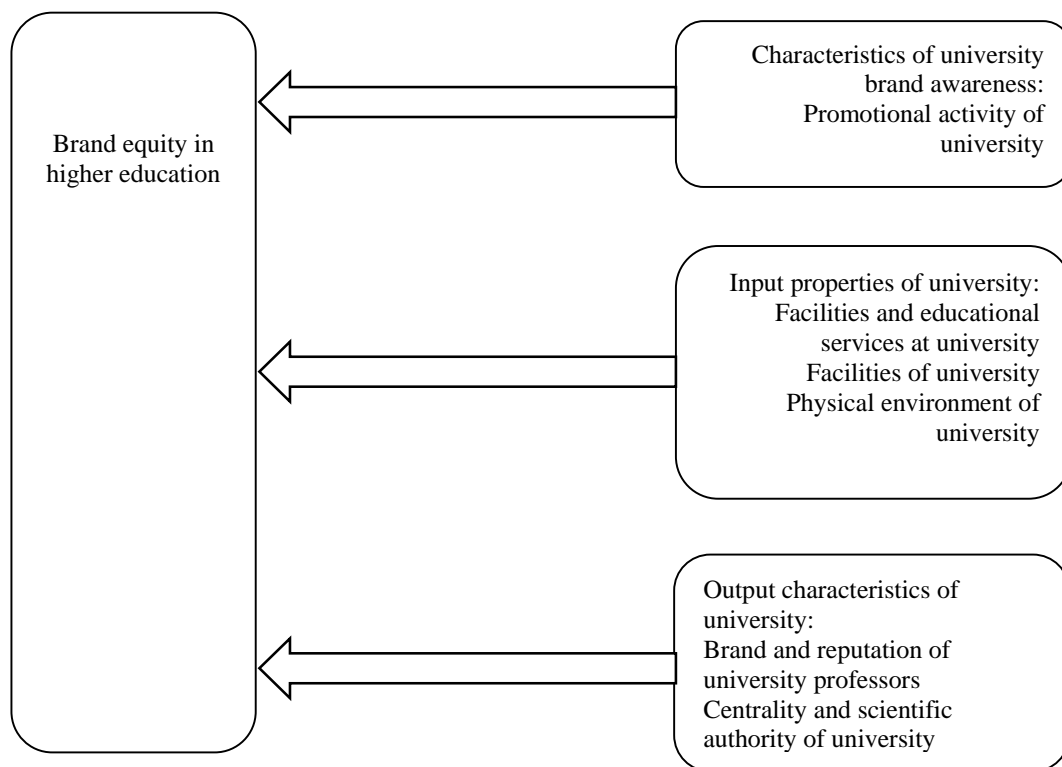Brand equity model in higher education is presented in the following graph:

Figure 1. Conceptual model of research

Research hypotheses:
H 1: The promotional activity of university has a positive impact on the HEBE.
H 2: The educational facilities and services of university have a positive effect on the HEBE.
H 3: The amenities of university have a positive effect on the HEBE.
H 4: The physical environment of university has a positive effect on the HEBE.
H 5: The brand and academic reputation of professors of university have a positive effect on the

HEBE.

H 6: The scientific centrality and authority of university have a positive effect on the HEBE.

Methodology

The present study in terms of aim is in the category of applied research. This study is an applied-research which is done to expand the frontiers of human's public knowledge. Therefore, each of the subjects that can help to spread these sciences in the experimental and humanities field and attempts to describe and explain them and clarify their unfamiliar aspects is placed in the field of applied research. This type of research is a systematic work that by using knowledge gained from research or academic experience is done to produce materials, products or new devices and to innovate or deploy processes, systems or new services. The findings of this research can be used to expand the boundaries of branding, marketing and higher education services area and more specifically in marketing and branding of universities and higher education centers or in other words, after conducting the statistical tests and discussion and conclusion, factors affecting brand equity in higher education can be determined. Briefly, after reviewing the background of study, the effective indicators on the formation of brand equity in higher education are specified, then they are evaluated and prioritized from the perspective of students of four famous university of Tehran including, Tehran, Shahid beheshti, Allame Tabatabi and Sanati Sharif and the conceptual model of study has been tested. Finally, since the present study tries to develop brand equity model of higher education, so it is considered as an applied research.

The statistical population and sampling methods

The statistical sample size with an error level of 4% is estimated about 600 people among the population with 828,000 students in Iran and in order to have access to this sample size, 700 students were selected by simple cluster sampling from four University of Tehran, Shahid beheshti, Allame Tabatabi and Sanati Sharif. Finally, 564 questionnaires were returned that all of them were used in the statistical analysis.

The instrument of the study

Hypotheses are proposed as assumption, guesses and possible conscious solutions and responses about the research problem. Researchers should gather the necessary data from the statistical population (samples) by tools and test the hypotheses by analyzing, processing and converting them into information. A variety of tools are needed to collect data. The type of these tools depends on a variety of factors including the nature and methods of research (Khaki, 2005, 129).

The secondary sources including books, magazines, articles, and digital and physical resources were used to collect the background of study which through them we can obtain appropriate information about the research topic and literature and also the note taking tool is used in data collection method by library.

In order to collect statistical data, the field data collection method through the questionnaire tool is used. In questionnaire the respondents are asked to express their response or evaluation towards an idea, behavior, belief, etc. based on the objective or subjective criteria in response domain between agreement or disagreement, so, the Likert scale was used. The standardized questionnaire was used in this study.

Data analysis method

In this study, the descriptive and inferential statistics methods were used to analyze the data obtained from sample. The data collected from questionnaire was organized in the form of statistical tables and then centers-oriented indexes and their distributions were calculated. After describing the sample characteristics, classification, coding and the summarizing were done and sample statistics

were calculated and the SPSS and LISREL software were used for statistical analysis of the obtained data. It is worth mentioning that to examine the significant effect of a variable in the study, the independent t-test and ANOVA was used for more than two groups.

Structural model (path analysis)

The structural equation model tests all the structural equation by using t-statistics. According to this model, the relationships between implicit and explicit variables are significant at the reliability level of 95%, if the t-statistic value to be out of +1.96 to - 1.96 ranges. Therefore, the alignment of questionnaire's questions to measure concepts can be shown valid at this stage. Actually, the results of above table show what researcher intended to measure them by questionnaire's questions are achieved by these tools. So, the relationships between structures or hidden variables are attributable. In order to show to what extents these obtained values are consistent with the existing facts in the model, the fit indicators should be studied.

Table 1. Research hypothesis testing

Test result	t-Value	Standardized coefficients	Research hypotheses
Rejected	-2/36	-0/1	H1: Promotional activities of university have a significant and positive effect on HEBE.
Confirmed	2/34	0/17	H2: The brand and academic reputation of professors of university have a significant and positive effect on the HEBE.
Confirmed	5/73	0/35	H 3: The scientific centrality and authority of university have a positive and significant effect on the HEBE.
Confirmed	67/2	0/15	H4: The educational facilities and services of university have a positive and significant effect on the HEBE.
Confirmed	1/9	0/1	H 5: The amenities of university have a positive and significant effect on the HEBE.
Confirmed	2/74	0/1	H 6: The physical environment of university has a positive and significant effect on the HEBE.

The results of the hypothesis testing

The research hypotheses are examined in this section. As it was mentioned the path coefficient was used to test the research hypotheses and the results of the hypotheses analyzing are presented in the following.

First hypothesis: Promotional activities have a significant and positive effect on Higher Education's Brand Equity.

Considering that the significant number between two variables of university's promotional activities and higher education's brand equity is -2.29, therefore, from the perspective of participants of present study the promotional activities of university have a significant and negative impact on higher education's brand equity. The path coefficient of -0.1 for this hypothesis indicates that by enhancement of promotional activity 0.1 of brand equity is reduced.

As is evident in this study, promotional activities restudied as characteristics of the brand awareness and the results of the negative impact of these activities on the higher education's brand

equity have approved. An interesting extracted point from this result is that although the promotional activities in branding of goods and services lead to the improvement and enhancement of brand equity, due to the nature of the research and educational activities, has negative effects on texture of such services; because students often consider special credibility and prestige to universities and educational centers with high brand equity and especially it is true about Iran in which students are trying to be attracted by the prestigious universities. Now if these universities want to attract students with promotional tools, they will reduce their own value from students' view a little. On the other hand, the negative aspects of the promotional activities from Iranian students' view somewhat refers to this point that recently universities and higher education institutions advertise and promote to introduce their free educational services and paid tuition. And, by launching the tuition campuses and free supported centers begin to promote by SMS and online and also printed advertising to attract students. In general, they have strengthened this view in students that universities by getting money in front of their services have reduced their main quality and values. Finally, this negative view caused any promotional activity of university for its introduction under the aura of perceptual error to be considered negative and it would have a negative impact on brand equity.

Among the indicators that were identified for the promotional activity of university in this study can be pointed to the advertisements of university to introduce to the community, promotions of university in various media to attract the top rankings of entrance exam, awards, offered amenities and facilities for continuing education in higher levels to attract the top rankings, the presence of university as a scientific sponsor of the prestigious national and regional and global conferences.

Second hypothesis: The brand and academic reputation of professors of university have a significant and positive effect on the HEBE.

The investigation of assumptions' results showed that the significant coefficient of the relationship between brand and reputation of academic professors and higher education brand equity is 3.34, which show that this relationship is meaningful. Therefore, the brand and reputation of academic professors have a significant and positive effect on higher education brand equity. The path coefficient is equal to 0.17 and positive for this structural relation. This study indicated the importance of brand and reputation of academic professors in the formation of brand equity in students' minds. As we know, the existence of elite professors in university is one of the effective factors in branding of university and attracting students. The reputation of academic professors in specialized fields is one of factors affecting the university's brand equity. Due to the scientific nature of university activities, it is obvious that famous academic professors in specialized terms have important impact on university and will bring high value for it. On the other hand, if the academic professors can achieve the Top Scientific Research ranks, can also help to promote the brand equity of university. Titles such as Top Professor or Researcher in this respect are important. Other factors like the number of lectures at various forums, books, articles and prominent scientific researches of academic professors are important from the perspective of professors and the faculty of university which contributes to strengthening the brand equity of university. Other effective factor on brand equity refers to the executive role of professor in the country. This study indicated that the history of professors in acquiring various administrative positions in the country has an effect on brand equity and joining of faculty in internal and external scientific community strengthen brand equity of university.

Third hypothesis: The scientific centrality and authority of university have a positive and significant effect on the Higher Education's Brand Equity.

Evaluating the assumptions' results showed that the significant coefficient of the relationship between scientific centrality and authority of university and higher education brand equity is 5.73, which indicate this relation is meaningful. So, the scientific centrality and authority of university have significant and positive effect on higher education brand equity. This structural relation has the positive path coefficient equal to 0.17. University, due to the educational and research nature, is considered as the main educational centers of country and according to the results of this study a university with stronger academic and scientific centrality will have the higher brand equity. For example, the concentration of more specialized experts in various disciplines causes students especially those who are looking for the scientific validity of university consider more valuable that university. This issue is also true about the number of scientific and research poles of university. In fact, these two parameters can be deduced from each other in some way. Another important indicator in enhancing brand equity, especially among researcher students refers to specialized academic or research publications of university which illustrate the scientific power of university. Sometimes university continually holds the national and international scientific conferences that according to the research results can contribute to the promotion of brand equity of university. Having superior professors in the world and Iran and high rank of university among the top universities of the country or region are other factors affecting brand equity of university. The existence of students with high scientific level and high rank of entrance exam can also increase the brand equity of university; according to the results of this study the stronger students at university enhance the brand equity from the perspective of other students. Another indicator of the university's academic centrality refers to the existence of several specialized discipline and trends that will improve its brand equity.

Fourth Hypothesis: The educational facilities and services of university have a positive and significant effect on the HEBE.

According to the results of hypothesis testing, the significant coefficient of the relationship between educational facilities and services of university and higher education brand equity is equal to 2.67 which indicate this relationship is meaningful and the educational facilities and services of university have significant and positive effect on higher education brand equity. This structural relation has positive path coefficient of 0.15. Universities and higher education institutions get meaning through education. Therefore, the quality of educational services and facilities as specified in the current study has important role in its brand equity. This factor is determined by several indexes such as having updated academic resources is important for students of university. Connection to databases and access to scientific data of university can be detected in this indicator. Having strong IT contexts is new ways of providing services in various sectors that certainly higher education is not exempt from this issue. The existence of technology infrastructure either in terms of virtual learning services or in terms of automation services will help to enhance the brand value. Due to the facilitated teaching and research at university the existence of training facilities and laboratory equipment for some fields are generally considered as the indicators of the quality of services and educational facilities that is effective in branding and brand equity enhancement. The ratio of students' number to educational spaces and facilities of university is among other indicators that are related to the quality of scientific services. Also, the existence of higher levels at university is effective in strengthening brand equity.

Fifth hypothesis: The amenities of university have a positive and significant effect on the Higher Education's Brand Equity.

Although, amenities have no positive relation with scientific and educational nature of university, they are considered as the facilitator of educational services and are effective in mental

image of students toward university and its selection by students. This relation does not have so intensity and is about 0.1.

The allocation of dormitory with appropriate quality, the existence of appropriate self-service, sports and leisure facilities and the existence of appropriate vehicles for transportation facilities are some of facilities that have been identified in this study as amenities.

It is common that a university has appropriate academic knowledge but due to the inappropriate situation of its amenities, including dormitory and feeding college students prefer to choose a university with slightly different academic knowledge which provides suitable facilities. As it is clear, the rank of university is not specified only through its scientific scope and all amenities and environmental factors also contribute to the promotion of the university's ranking and as it is specified in this study, all these factors are effective on the university brand equity.

Sixth hypothesis: The physical environment of university has a positive and significant effect on the Higher Education Brand Equity.

The hypotheses testing results indicated that the significant coefficient of the relation between university and higher education brand equity is 2.74 which show the meaningful relationship. Therefore, the physical environment of university has a positive and significant effect on the higher education brand equity. This structural relation has positive path coefficient equal to 0.1.

In this study, it was found that the physical environment of university plays a role in promoting its brand equity. The geographical location of university, gender separation in university, landscaping and beautiful campus, and the concentration of colleges and infrastructure of university are among the factors that contribute to mental image of students from the physical dimension and students consider these factors as one of the criteria in selection of university. The summary of the hypotheses testing results and research model are given in Table 5-2.

Recommendations arising from the results of research hypotheses

- In this study, it was found that promotional activities have a negative impact on brand equity. In this regard, it is recommended that universities and higher education centers have a special sensitivity to this issue; according to the research results, it should be suggested that universities and higher education institutions refrain to do promotional activities but with a little smart looking at this issue it should be suggested to pay attention to the tool, aim and how to perform the promotional activities until the audiences of conducted promotional activities do not think that these activities are done to profit-making by university. Because it is perceived that the sensitivity of students mostly refers to the profit-making activities of university in recent years in the country. If not, introducing university to different communities cannot have negative feedback because the effect of brand awareness on brand equity of goods and services is evident in previous valid studies.

- It is recommended that universities can create and strengthen brand equity when they pay attention to their nature and the existence cause because according to the results of this study, in this way, they can provide the causes of creating their equity and in fact, brand is the onset point of equity creation. The task of university is education, research and scientific development of the country. Therefore, if the universities like to create their brand equity in mind of students and society, at first, they need to think about research-scientific strengthening and consider indicators associated with this dimension.

- According to the results of study, students consider high equity for universities with well-known professors. In this regard, it is recommended to universities to attract famous professors to

contribute their own brand; this suggestion is effective to universities with little reputation and lower scientific level, so, through this strategy can attract the opinion of some students.

- The scientific centrality and authority of the university were recognized as one of the central dimensions of higher education brand equity. So, it is suggested to universities to strengthen their brand equity through at least one or more identified indicators.

The creation of research and scientific poles, obtaining permission and publishing the specialized scientific or research publications are some of the important factors that with proper investment and careful planning will lead to the scientific strengthening and the university brand promotion; The attempt of universities to hold the scientific national and international conferences and meetings is important in this context; Another issue that with detailed educational planning of university and obtaining funding and establishment of infrastructure and with scientific and economic justification can be effective refers to the creation of several specialized disciplines and tendencies at university that certainly brings high equity.

- It is proposed that university has the educational nature. So, the perceived services quality of university by students is evaluated by its educational services and facilities. Due to the effect of this factor on brand equity, it is recommended to universities to emphasize on indicators of the educational facilities and services. The creation of accessibility of the online sources of information to universities, the establishment of appropriate and adequate educational and laboratory equipment and creating the appropriate information technology contexts are some important indicators that contribute to the reinforcement of university's servicing. However, these factors are strengthened with adequate and appropriate educational space.

- The amenities and physical environment of university can also be considered as facilitator of educational services. According to the results of study, they have slightly positive impact on higher education brand equity. Universities should try to improve their dormitory environment and provide appropriate accommodation and housing for their students. The appropriate and regular transportation vehicle is dormitory's complementary services. On the other hand, offering healthy and suitable feeding services are very important. It is worth noting that students' nutrition should be considered from two perspectives either in the form of subsidized or free sales and establishment of buffet and restaurants. Sports and recreational facilities are other requirements of this dimension. It is worth noting that according to the results of study, higher level students pay attention to amenities and facilities much more than the undergraduate students and it should be paid more attention to this factor in higher levels.

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