



Positioning of campuses in terms of satisfaction: A research on Marmara University

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Abstract

The aim of the study is to determine university students' satisfaction levels on the infrastructure and education level of the university and also to identify how they position different campuses of the university regarding satisfaction their satisfaction levels. According to this aim, Marmara University was chosen as the sampling frame and data were collected from students studying in different campuses. As for the sampling method, convenience sampling was used and a total of 898 usable surveys were collected. A 83-item satisfaction scale was used. As a result of factor analysis 12 factors were achieved. Multidimensional scaling was used to position the campuses regarding the satisfaction levels of students. The results show that the different campuses of Marmara University have different positions on the perceptual map. Results obtained from the study are interpreted and suggestions are presented.

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1. Introduction

Fierce competition conditions in the world have an important effect in the research and education fields just as in other areas. The changes and advances in technology makes the world more global each passing day, which in turn cause many changes in the structure of firms and corporations, as well as universities.

In order to be successful in a highly competitive environment, the universities of the 21th century try to spread information and knowledge that they create not only to their own students but to wide populations, in a fast and "customized" manner (Uydaci et. al., 2008). It can easily be seen that the rising competition in today's world causes universities to benefit from the various strategies and processes of marketing. As the marketing concept indicates, it is especially important for the managers of universities to understand the desires and needs of students (existing and potential) who make up their target market and also to identify how these students perceive universities. Identification of how students perceive universities is a crucial step in the formation and implementation of positioning strategies of universities. Positioning may be defined as the specific place a brand occupies in the minds

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of the consumers as compared to competing brands (Ries and Trout, 1982). In other words, it is the process by which a brand creates an image or an identity in the consumers' mind.

For university managers it is necessary to identify how their universities are perceived by students and other interest groups as this process aid in understanding their needs and expectations from higher education. It should be remembered that institutions develop their marketing mix according to the positions that they select (Arslan, 2012). Hence, universities need to use positioning processes and select an appropriate position before developing their marketing plans. The aim of this study is to determine how students studying in different campuses of Marmara University perceive their campus and to identify the position of the different campuses of Marmara University in terms of satisfaction. Therefore in this study initially the satisfaction of students of different campuses of Marmara University are determined and later multidimensional scaling is used in order to achieve a perceptual map showing the unique positions of the nine different campuses of Marmara University based on satisfaction dimensions.

2. Research Methodology

Students studying in different degrees (vocational school-2 year, bachelor-4 year, graduate and post graduate) in Marmara University during the 2011-2012 year term make up the universe of the study. Sampling frame of the study is the students studying in nine different campuses of Marmara University. Convenience sampling is used as the sampling method. Due to the fact that the satisfaction scale consists of 83 items, the sampling volume was determined as 830 respondents.

Initially two different focus groups were conducted with students studying at different campuses of Marmara University. The results of the two focus group studies were used for the preparation of the satisfaction scale. Additionally, the results of the literature survey were used to refine the satisfaction scale. Therefore the 83-item satisfaction scale used in the study was developed by conducting two focus group studies and by the use of satisfaction scales of Çokluk-Bökeoğlu and Yılmaz (2006), Wisniewski (1990), Murat and Çevik (2008), and Açıkan and Saydan (2009). The study questionnaire consisted of two parts. The first part consisted of the 83-item satisfaction scale prepared to measure the students' satisfaction levels about the university's infrastructure, education quality, student affairs, housing, etc. and the second part consisted of questions used to determine the demographic profile of the students. The satisfaction scale, consisted of a five-point Likert type scale is (1=Strongly Disagree to 5=Strongly Agree). The questions used to determine the demographic characteristics of the students consisted of nominal, open-ended and dichotomous scales.

Face to face and self-administered surveys were use as the methods of data collection. A total of 1012 surveys were collected. The collected questionnaires were edited by examination of incomplete and/or incorrectly filled ones and a total of 898 usable surveys were achieved.

The face validity of the satisfaction scale was achieved by obtaining the expert opinion of five experienced faculty members. The reliability of the satisfaction scale was tested with the use of reliability analysis (Cronbach's Alfa, $\alpha = 0.971$). This result shows that the internal consistency of the scale is quite high (Nunnally, 1978).

3. Findings

Among the total number of respondents (898), 52.9% are women and 47.1% are men, 62.4% are aged between 18-21 years old, 43.7% have 1001-2000 TL income, and 31.8% are Anatolian High School graduates. Most of the respondents live with their families (55.8%); the ones living away from their families live in housing out of the university (25.3%).

One of the items of the satisfaction scale was taken as the dependent variable for regression analysis and the remaining 82 items were subject to factor analysis. The factors with factor loadings below 0.50 were eliminated and factor analysis was repeated. After 5 repetitions, 60 items remained which were gathered under 12 factors (Table 1). The factor that has the highest variance value is factor 1, labelled as "Cultural events and activities".

Table 1: Factors Resulting from Factor Analysis

Factor No	Names Given to Factors	Mean	Standard Deviation	Cronbach's (α)	Variance (%)
1	Cultural Events and Activities	2.67	.92	.89	31.85
2	Courses	2.79	.91	.87	5.66
3	Taking a Role in the Decision Process	2.35	.95	.91	4.48
4	Cleanliness and Hygiene	2.75	.96	.87	3.59
5	Student Affairs and Communication	2.61	.94	.87	3.27
6	Library Services and Internet	2.55	.93	.85	3.25
7	Feeling like a University student and Values	3.20	1.06	.86	2.95
8	Laboratory and Technological Infrastructure	2.45	.94	.85	2.76
9	Consultancy	3.12	1.21	.89	2.40
10	Relationship with Friends	2.93	1.01	.80	2.13
11	Buildings, classrooms, and amphitheaters	2.58	1.19	.82	1.86
12	Administrators	3.02	1.16	.87	1.79

KMO: Bartlets Sphere test 0.951, X^2 :0.321, $p=0.000$.

When the factors achieved from the satisfaction scale according to the different campuses of Marmara University are examined (Table 2), Acıbadem campus has the highest satisfaction value overall (2.95) and Kartal campus has lowest value (2.00). Based on satisfaction factors of different campuses, the highest mean score achieved is for Haydarpaşa campus for the factor labeled “Buildings, classrooms, and amphitheaters” (4.13) and the lowest mean score is for Kartal campus for the same factor “Buildings, classrooms, and amphitheaters” (1.27).

Table 2: Satisfaction Factor Means of Campuses

Nr.	All	C1	C2	C3	C4	C5	C6	C7	C8	C9
1	2.67	2.98	3.02	2.47	2.71	2.34	2.42	2.63	1.77	2.91
2	2.79	2.67	2.86	2.89	2.74	2.56	3.22	2.00	2.21	3.12
3	2.35	2.46	2.77	2.20	2.43	2.04	2.42	3.17	1.78	2.46
4	2.75	2.88	2.89	2.50	2.96	2.46	2.62	3.33	2.50	3.01
5	2.61	2.81	3.04	2.49	2.52	2.29	2.85	3.17	1.94	2.58
6	2.55	2.91	2.87	2.53	2.75	2.02	2.04	2.17	1.61	2.45
7	3.20	3.24	3.11	3.21	3.37	3.11	3.37	3.00	1.99	3.53
8	2.45	2.50	2.64	2.35	2.87	1.71	2.25	3.00	1.65	2.65
9	3.12	3.32	3.16	3.24	2.76	2.76	3.58	4.00	2.16	3.19
10	2.93	2.88	3.06	2.89	3.05	2.97	2.72	2.67	2.85	3.04
11	2.58	2.45	3.02	2.47	4.13	1.82	1.70	3.00	1.27	2.87
12	3.02	3.18	3.00	2.99	3.10	2.71	3.38	3.00	2.24	3.02
Σ	2.75	2.85	2.95	2.69	2.95	2.40	2.71	2.93	2.00	2.90

C1: Göztepe, C2: Acıbadem, C3: Nişantaşı, C4: Haydarpaşa, C5: Bahçelievler, C6: Beyazıt, C7: Altunizade, C8: Kartal, C9: Anadoluhisari

In order to determine the factors of higher education satisfaction that has a statistically significant effect on the dependent variable, "I am satisfied with University Administration", a regression analysis was performed on the 12 factors achieved for the satisfaction scale disregarding campus distinction (Table 3). As can be seen in Table 3, a total of 7 factors have a statistically significant effect on satisfaction.

Table 3: Regression Analysis Results (Overall)

Satisfaction Factors	Beta Coefficient	T	Significance (p)	Tolerance	VIF
Constant	-0.368	-2.834	0.005		
Factor 1	0.120	3.295	0.001	0.434	2.304
Factor 2	0.097	3.168	0.002	0.617	1.621
Factor 3	0.191	5.721	0.000	0.515	1.941
Factor 4	0.000	-.024	0.981	0.628	1.593
Factor 5	0.081	2.235	0.026	0.437	2.289
Factor 6	0.030	0.862	0.389	0.481	2.079
Factor 7	0.124	3.661	0.000	0.505	1.982
Factor 8	-0.029	-.824	0.410	0.475	2.105
Factor 9	0.005	0.174	0.862	0.723	1.382
Factor 10	0.059	2.124	0.034	0.750	1.333
Factor 11	0.003	0.111	0.911	0.657	1.522
Factor 12	0.267	8.866	0.000	0.636	1.574

*Dependent Variable: "Satisfaction from administration", R²:0.491, F: 71.060, p=0.000.

Independent variables which have statistically significant effects on the dependent variable of satisfaction can be formulized as follows:

$$\text{Satisfaction from Administration} = -0.368 + 0.267 \text{ Administrators} + 0.191 \text{ Taking a Role in the Decision Process} + 0.124 \text{ Feeling like a University student and Values} + 0.120 \text{ Cultural Events and Activities} + 0.097 \text{ Courses} + 0.081 \text{ Student Affairs and Communication} + 0.059 \text{ Relationship with Friends}$$

Figure 1 shows the perceptual map achieved as a result of multidimensional scaling (MDS). In the map, positions of the nine different campuses of Marmara University based on satisfaction and the 12 factors achieved as a result of factor analysis are given. As seen from Figure 1, in terms of satisfaction from “buildings, classrooms, and amphitheatres” Haydarpaşa campus has the best position, and Beyazıt campus has the worst. Based on courses, the students most satisfied are of Nişantaşı and the least satisfied ones are of Altunizade campus. Beyazıt is the most satisfied campus on relationship with friends, and Haydarpaşa is the least satisfied one. Nişantaşı and Göztepe are the ones most satisfied with cultural events and activities, and the least satisfied ones are Haydarpaşa, Kartal ve Altunizade. In terms of student affairs none of the campuses are fully satisfied; however Beyazıt has the most positive student perceptions of satisfaction among others. There are no campuses which are fully satisfied with administrators and feeling like a university student factors. For these two factors, Nisantasi seems to be more satisfied as compared to other campuses.

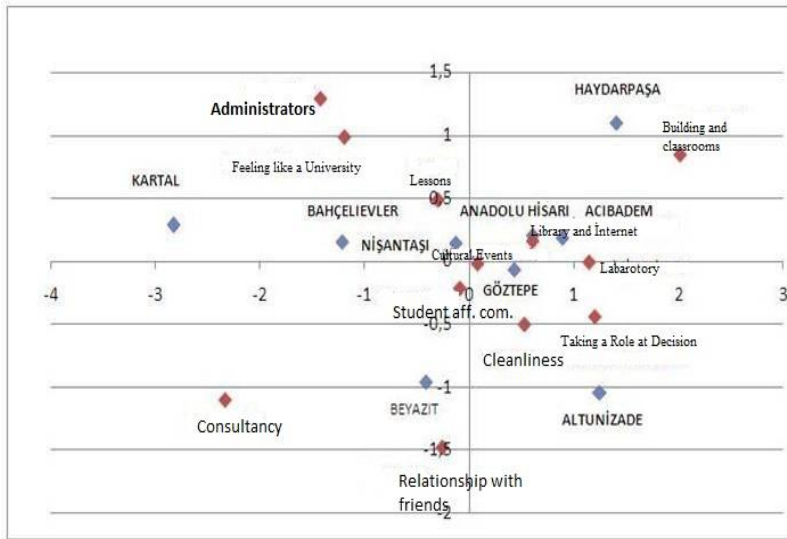


Figure 1: Perceptual Map of Satisfaction Factors and Campuses of Marmara University Based on These Satisfaction Factors

4. Conclusion

The results of this study conducted on Marmara University students show that the issues that create satisfaction in higher education may be gathered under 12 factors. When considered in terms of satisfaction from higher education, it was seen that for the nine campuses of Marmara University included in the study, all campuses have scored under the average score of 3. Therefore, it can be said that students are not satisfied with the campuses of Marmara University based on the items used to measure their satisfaction. Referring to different campuses, it was seen that all of the campuses have differing satisfaction scores. The lowest scores achieved are for the factors of “laboratory and technological infrastructure” and “buildings, classrooms, and amphitheatres”. The highest scores are achieved for the factors “consultancy” and “feeling like a university student”. Therefore it could be said that, Marmara University

students are not satisfied with the infrastructure of the different campuses but are satisfied with human relations and services like consultancy.

When regression analysis results are evaluated according to Marmara University students' satisfaction on administration, it is seen that the most effective factors are "administrators", "taking a role in the decision process", "feeling like a university student", "cultural events and activities", "courses", "student affairs", and "relationship with friends" respectively. Thus it could be said that in order to increase the satisfaction of students the following may be done: (i) hiring successful and friendly administrators, (ii) including students in the decision processes of the university, (iii) organizing academic, professional, and cultural events to make students feel like university students, (iv) conducting student affairs more effectively and efficiently which includes tasks such as registration, announcing grades, preparing official documents and letters, etc., and (v) organizing projects and activities among students of differing departments, faculties and campuses to motivate friendships.

When the perceptual maps obtained from multidimensional scaling are examined, it can be seen that the nine campuses of Marmara University are all perceived in different positions in terms of satisfaction. Each campus is positioned near a different satisfaction factor. Haydarpaşa campus is perceived as being satisfactory in the factor of buildings and classrooms. Göztepe, Anadolu Hisarı, Nişantaşı and Acıbadem campuses are perceived to be satisfactory on library, cultural events, and laboratories. Altunizade campus is perceived as satisfactory in the factors of taking a role in the decision process and cleanliness, whereas Beyazıt campus is perceived as being satisfactory on the factor of relationship with friends. Kartal and Bahçelievler campuses are not perceived as being very strong on any factor specifically, but are perceived as average on the factors of administrators, feeling like university student, courses, consultancy, and relationship with friends.

People position institutions in specific places in their minds according to their perceptions about the institution. As the results of this study show, Marmara University is positioned very differently by students as it has campuses located in very different parts of Istanbul in which each campus provides services of differing quality. Thus, it shows that students evaluate and position Marmara University based on the perceptions they have on the campus that they are familiar with. According to the study results this situation can cause the university (in fact the campuses) to be perceived at different positions based on satisfaction. This may confuse students. Additionally, this situation may make it difficult for managers in developing marketing strategies of Marmara University as people perceive the university in very different positions. The ideal situation would be to hold the same position in the minds of everyone concerning Marmara University disregarding the different campuses. In order not to cause differences in perceptions of Marmara University, it is suggested that all of the campuses should place importance to all of the factors that create satisfaction. Having high levels of satisfaction in all campuses will help in being perceived as being a university of high quality. Thus, Marmara University will have a desirable and unique position in the minds of its customers. Additionally, this situation will provide ease in creating and administering marketing strategies for the university which will in turn cause competitive advantage for the university.

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