Full Length Research Paper

Students' perceptions of academic and institutional service quality at the Faculty of Agriculture: The case of Suleyman Demirel University, Turkey

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The aim of this study was to determine the academic and institutional service quality perception levels of students at the Faculty of Agriculture. This research was conducted with 343 students by using questionnaires in the faculty of agriculture at Suleyman Demirel University. For this purpose, 35 statements were given to students and the degree of agreement for each statement was determined by a likert scale. According to the results, the Cronbach alpha coefficient was found to be 0.892. Factor analysis was implemented with the Principal Component Method by using Varimax rotation to determine the factors on the quality perception of students. According to the results of the factor analysis, Eigen value belongs to 9 of 35 factors which were found higher than 1. Thus, the results of factor analysis were examined by considering 9 factors. These factors explain 57.1% of the total variance. The main factors affecting students' perceptions of academic and institutional service quality were found to be: the academic skills of staff, the social and physical facilities of the faculty, the physical facilities of the department and the student advisory service, course content and teaching techniques, supplementary features of courses and its effects on success, the caring attitude of academic staff, a sense of belonging to the department, to question of course contents in exams, examination of the timeliness and accuracy.

Key words: Students' perceptions, academic and institutional service quality, Faculty of Agriculture.

INTRODUCTION

Universities are institutions which provide research to serve humanity, and it also produces, teaches and imple-ments scientific information, hypothesis and methods; synthesis, and also, synthesis and extending of national culture with international values, developing liberal and creative thoughts (Anonymous, 1996). The universities make contributions directly to economic growth and the development of a country by developing human resources, analyzing economic policies and conducting research, making suggestions for economic growth and transferring information technologies to industry (SPO, 2000).

Higher education is transformed to global phenomena in the developed and developing countries. Since the key of success in economics is based on information, deve-loping techniques and intellectual skills, higher education is becoming more important (Randall, 2002).The quality of produced information and its usability in economics in higher education institutions has become important in terms of national and international competitive power in recent years (Gencel, 2001).

Higher education obtained an international dimension gradually by means of globalization. By globalization, rapid technological changes became important in the pro-cess of education-training in higher education. The rapid technological transformation in the university systems has brought about new expectations. Entrepreneurial efforts over the last hundred years have been associated with a student centred approach (Pearson and Chatterjee, 2004).

It is necessary that the requests and expectations of the internal customer (administrative staff and academic

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staff) and external customer (student, graduates, student families, society etc.) should be known in higher education. Higher education institutions should develop the necessary strategies for meeting these expectations (Gencel, 2001). Higher education institutions have become more competitive due to new education technologies and new electronic information sources.

The concern about education quality in the universities is due to the increase in competition in recent years. Quality of education in the universities depends on social, political, economical, organizational, psychological and pedagogic factors. Improving the education quality is a pedagogical issue. The right conditions need to be created in the education- training process. These conditions include the need to improve the training quality given to administration staff, the need to improve the content of education, development of more effective educational materials and to have suitable levels and quality of staff (Shabanov, 2005).

There were differences between the faculties of agriculture schools in Turkey in terms of resources education and training, goals, administration, research and development, communication, resources and capacities of informatics and access, data collection, opportunities for processing and producing information. This situation causes the differences in the perceptions about the institutions which were studied (Korukoglu, 2003). When the institutions which are willing to increase efficiency in education learn students' perceptions, their management approach and education process improve (Erdem and Isbasi, 2001).

Interest in the quality of academic and institutional service has grown considerably over the last decade. Higher education institutions are increasingly placing greater emphasis on meeting students' expectations and needs. As universities become more student orientated, students' perceptions of higher educational facilities and services are becoming more important. Measuring students' perceptions in higher education is very important for both students and the university administration.

The purpose of the study was to determine the academic and institutional service quality perceptions of students at the Faculty of Agriculture at Suleyman Demirel University. There were no studies relating to the academic and institutional service quality perceptions of students in the Faculties of Agriculture in Turkey. That's why this study is extremely important. It is thought that the results of this study will provide useful information for policymakers, the administration of the faculty and the university and academic staff.

MATERIALS AND METHODS

Material

Data used in the study was obtained from the questionnaires applied to the students of the Faculty of Agriculture at Suleyman Demirel University. The surveys were distributed to volunteer

students by department advisers and students were asked to give genuine and truthful answers. Face to face survey method was not applied to maintain the objectiveness of the answer of the survey. The number of enrolled students in the faculty was 505 during the survey period. The numbers of students surveyed (343) constitute of 67.92% of the total number of students at faculty of agriculture. The surveys were conducted at between the first and Fifteenth of May 2007. A review of the relevant literature was conducted to help produce the questions for the questionnaire.

Statistical methods

Factor analysis

Factor analysis is a collection of methods which is often used in data reduction to identify a small number of factors that explain most of the variance observed in a much larger number of manifest variables. Factor analysis can also be used to generate hypotheses regarding causal mechanisms or to screen variables for subsequent analysis (Mardia et al., 1989).

Varimax method

The goal of the Varimax method is to obtain factors that have high loadings for a subset of variables on only one factor and zeros for the other factors. This generally leads to an easy interpretation since variables are not confounded by factors (Kaiser, 1958).

Analyzing data

Cronbach alpha test statistics were calculated for all scale values obtained in the research. Kaiser-Meyer-Olkin (KMO) and Bartlett's sphericity tests were applied to data before factor analysis in order to observe the pre-conditions. Then after the Varimax rotation, factor analysis was performed to data by using Principle Component Analysis (PCA) and question loads in 9 factors were determined.

Kaiser criteria (1) were used to determine the number of factors. Spearman's rank correlation coefficient were calculated among the characteristics which have higher factor loads (0.5) in order to observe the occurrence of a linear relationship among variables. Data was analyzed with SPPS 16.0 for Windows Statistic Program (SPSS, 2007).

Quality and students' perceptions in services of higher education

Perception is a sensory information mode and is related to abstract/ concrete objectives in the external world. Perception is a social and psychological phenomenon, which can be controlled and directed with external intervention (Inceoglu, 2000). The primary element of perception is attention and comment (Yelkikalan et al., 2006). Students' perception of their personal circumstances and surroundings can influence behaviour. Students' Perceptions of Academic and Institutional Service Quality in higher education affect the students' behaviour.

The quality of education can be measured by developing knowledge and skills. Education systems are accepted as high quality when students achieve great results. Improving the quality will increase student teaching (Chapman et al., 2005).

The first step taken to insure quality in the higher education services in Turkey was the introduction of the 'academic evaluation and quality control legislation in higher education institution' which was prepared and implemented by the Inter-University Council. The aim of this legislation was the 'Improvement of the quality of education-training and research of academic programs in higher

education institutions' (OG, 2002).

Student satisfaction with their faculties is important. Students who regularly attend the class five days a week have to spend all their time in the university. This period should be satisfied in terms of education, health and social life for the students. This is a considerable task for not only the students but also the administrators and academic staff. Satisfaction from the Universities/Faculties affects a student's physique as well as mental health. Dissatisfaction creates tension and causes several psychological or psychosomatic problems (Ongider and Yuksel, 2002).

For the university administration, it measures the opinions of students regarding their own institutions and it enables the administration team to build up a picture. Furthermore, the research results provide feedback to develop quality of service and programs for the faculty administration. Knowing the students' opinions of university helps with re-writing regulations, taking new decisions, and implementing the university's mission statement. In this circumstance, the task for faculty administrations is to determine the inadequate education level and competitive capacity and generate solutions (Ibicioglu and Dogan, 2003).

Higher education in agriculture

The share of agriculture in the country's economy, especially in the developed countries, has decreased. The changing role of agriculture in the economy forces changes in agricultural higher education. The factors imposing the changes in higher education in agriculture are developments in globalization, communication and informatics (Rehber, 2007). Besides, agriculture and developments in agricultural activity are the other factors which force changes in higher education.

Traditional education approaches for the agricultural higher education in the world have been replaced by "increasing agricultural production by using current technology and research results" (FAO, 1997). Nowadays, higher education in agriculture has still considerable importance in the field of food security, sustainable agricultural production, rural development and environmental issues. However, to support improvements in global food security and environmental sustainability, current agricultural education systems are in need of reform (Acker, 1999; Navarro, 2006). Worldwide agricultural universities are facing numerous challenges including increasingly limited resource allocations, declining enrolments, keeping up with advances in information and other technologies, remaining aware of and responsive to clientele, and the need to aggressively globalize their teaching, research, and outreach programs (Jischke et al.,1999). As well as being a part of a global education system, it is important to keep adapting to local conditions.

Agricultural higher education in Turkey has a long history. January 10, 1846 is accepted as the beginning of higher education in Turkey. Agricultural higher education in Turkey was originally based on the French system, and then it was influenced by the German system (Ayyildiz, 1982). Over the years many changes have been carried out in agricultural engineering education. While agricultural higher education in Turkey is usually affected by current problems all around the world, the needs for change have been accelerated since the 1980s. This is due to the rapid increase in the number of student's enrolled in agricultural schools. Developments in the world and the reconstruction of the Ministry of Agriculture brought about new challenges. The number of faculties increased from 7 - 23 in the period of 1980 - 1988. In that period, agricultural engineering education in the faculties of agriculture were performed in the following departments; Horticultural Crops, Plant Protection, Field Crops, Agricultural Economics, Soil Science Department, Agricultural Structures and Irrigation, Agricultural Machinery, Animal Science, Home Economics, Dairy Technology, Aquatic Products, Food Engineering and Landscape Architecture. Finally, the

departments mentioned above were replaced with new programs in 1988 for the purpose of redevelopment. Thus, the students were trained in three programs during the 3 years, Crop Production, Animal Production and Agricultural Technology, and they chose their department in the fourth year.

Although the faculties of agriculture in Turkey are in the process of reconstruction, implementations show that raising issues of educational quality and agricultural engineering unemployment could not be solved yet, and therefore the profession of agricultural engineering hasn't reached the respectable level in society (Eris et al., 2005). Debates on the re-structuring of the agricultural higher education system in Turkey are ongoing and new challenges lie ahead.

Suleyman Demirel University began to offer an undergraduate program in 1994. First graduates obtained their diplomas in 1997 - 1998. Higher Education and Council of Agriculture, Forestry and Aquatic Products made a new regulation in the undergraduate education system from the beginning of 1999-2000 educational terms. According to the regulations, undergraduate education in the faculty of agriculture was to include three common programs (Crop Production, Animal Production and Agricultural Technology) since 2001 - 2002 education periods. Then Higher Education Council decided to take make some changes in regulations in 2003 - 2004. Again, language preparation classes in English began in the same year. Currently, eight programs; horticultural crops, plant protection, field crops, agricultural economics, soil department, agricultural structures and irrigation, agricultural machinery and animal science "agricultural engineering program" were brought under the agricultural engineering program.

The Faculty of Agriculture was established 7 km away from the centre of Isparta province and in the east campus of the university. There are 13 classrooms, 1 computer lab, 10 research centres and practice laboratories, 1 meeting room and 1 cafeteria in the school. There are 82 offices divided between academic and administrative staff. The Faculty consists of 18 professors, 15 associated professors, 21 assistant professors, 4 lecturers and 22 research assistants. There is three foreign academic staff who is working under contract (Anonymous, 2008).

RESULTS AND DISCUSSION

To determine the perceptions of students on academic and institutional service quality to 35 statement codes and explanations were given in the Table 1.

The previous researches which are used in the stage of questionnaire preparation are basis of the source. Opinions of academic staff of Sociology and Psychology Department of Faculty of Science and Letters, and Faculty of Agriculture were consulted during the questionnaire preparation. Questionnaire consists of 35 statements. In fact it can be said that there may be various other variables positively and negatively affecting the determining perception level of student which are extremely complex socio-psychological conditions. However in this study, the most researched subject in the literature was investigated. Purposes on perceptions of academic and institutional service quality of students were measured by using a Likert scale. Participants chose the following answers which are classified as "5 = strongly agree, 4 = Agree, 3 = not sure, 2 = disagree, 1 = strongly disagree".

Descriptive statistics belonging to 35 statements in the

Table 1. Statements and codes relating quality perceptions scale of students.

Codes	Statements
X 1	There is consultancy service in the department for solving academic and personal problems.
X 2	There is a program in the department which provides to develop skill of critical thinking.
X 3	There is a program and approach which prepare me for the business life in the department X
4	Education in the department parallels to my career targets.
X 5	The time of Mid-term and final examination programs are suitable X
6	I advise my department to my friend who will make a choice.
X 7	I would like to continue my graduate and Ph.D. education in this department too.
X 8	Academic staff present the topics by planned and with examples.
X 9	Level of skills of academic staff is sufficient in teaching and using course materials efficiently and correctly.
X 10	Academic staff supports student participation to courses actively.
X 11	Academic staff has positive communications and interaction with students.
X 12	Academic staffs declare the outline syllabus in the beginning of semester and act in accordance with it.
X 13	Academic staff explains their expectations from course and exams in the beginning of semester.
X 14	Academic staff judges the context of course outline in the exams.
X 15	Academic staffs are attentive in courses to students in terms of speaking and behaviour.
X 16	Academic staffs help problems related with courses.
X 17	Academic staff makes objective evaluations on exams.
X 18	Examination time is enough for solving problems.
X 19	Academic staffs encourage us for reaching external resources.
X 20	There are exemplification persons among academic staffs as academician and human.
X 21	Academic staffs come to course in time and use their time effectively.
X 22	Academic staffs summarize all the topics in the end of the course.
X 23	Fundamental course materials may be found easily.
X 24	Courses are suitable for researching and critics.
X 25	Lab and library opportunities for courses are sufficient.
X 26	Notes I have taken at class are sufficient for passing the exams.
X 27	Courses I have taken are supplementary for other courses.
X 28	There is sufficient academic staff for each course.
X 29	I am pleased from scientific ambiance of faculty.
X 30	Social opportunities (canteen. garden and sitting place) of faculty are sufficient.
X 31	We may easily solve our problems in student affairs of faculty.
X 32	Level of education tools of visual and audio in faculty are sufficient.
X 33	We may easily communicate with faculty administration.
X 34	There are enough places to spend leisurely time in faculty.
X 35	Items of food and drinks in faculty canteen are sufficient and healthy.

study and obtained results of students' perceptions on quality were shown by sorting in an ascending order given in Table 2. Averages of agreeing level of students relating to faculty quality varied as X20 = 4,020; X35 = 1,883. The highest average was found for X20 "There are exemplification persons among academic staffs as academician and human" purpose and the lowest average was found for X35 "Items of food and drinks in faculty canteen is sufficient and healthily (X35)" purpose as well. As it is shown in the Table 2, 16 of 35 purposes (X20, X21, X14, X15, X12, X28, X11, X13, X6, X8, X16, X26, X17, X9, X7, and X18) in faculty quality were positively perceived by students (Mean = 4,020; 3,516). On the other hand, 19 purposes (X10, X33, X27, X22, X23, X19, X5, X24, X4, X1, X32, X3, X29, X30, X2, X25, X34, X31 and X35) were negatively perceived by students (Mean = 3.461; 1.883).

Results of factor analysis were given in Table 3. Cronbach alpha coefficients of 35 statements were found to be 0.892. Such high values show that students gave the similar grade for the 35 statements Generally, it is assumed that if Cronbach alpha value is less than 0.60, reliability is weak, if it is around 0.70 reliability is acceptable and if it is higher than 0.80, reliability is high (Sekaran, 2000). High cronbach alpha coefficient indicates that internal consistency and reliability of variables are high. KMO value which is the pre-condition of factor analysis was found to be 0.889. Because KMO value is

Table 2. Descriptive statistics related to perceptions of academic and institutional service quality.

Statements	N	Mean*	SE Mean	St Dev	Minimum	Maximum	Ordered statements	Mean
X 1	343	2.907	0.076	1.399	1	5	X 20	4.020
X 2	343	2.388	0.064	1.179	1	5	X 21	3.942
X 3	343	2.665	0.069	1.269	1	5	X 14	3.916
X 4	343	2.936	0.064	1.181	1	5	X 15	3.813
X 5	343	3.061	0.082	1.520	1	5	X 12	3.802
X 6	343	3.586	0.073	1.350	1	5	X 28	3.764
X 7	343	3.516	0.072	1.335	1	5	X 11	3.606
X 8	343	3.583	0.061	1.131	1	5	X 13	3.589
X 9	343	3.525	0.061	1.123	1	5	X 6	3.586
X 10	343	3.461	0.063	1.166	1	5	X 8	3.583
X 11	343	3.606	0.065	1.209	1	5	X 16	3.569
X 12	343	3.802	0.062	1.145	1	5	X 26	3.542
X 13	343	3.589	0.068	1.267	1	5	X 17	3.528
X 14	343	3.916	0.060	1.117	1	5	X 9	3.525
X 15	343	3.813	0.063	1.175	1	5	X 7	3.516
X 16	343	3.569	0.065	1.207	1	5	X 18	3.516
X 17	343	3.528	0.069	1.281	1	5	X 10	3.461
X 18	343	3.516	0.076	1.404	1	5	X 33	3.423
X 19	343	3.096	0.069	1.284	1	5	X 27	3.324
X 20	343	4.020	0.058	1.066	1	5	X 22	3.289
X 21	343	3.942	0.059	1.099	1	5	X 23	3.146
X 22	343	3.289	0.068	1.262	1	5	X 19	3.096
X 23	343	3.146	0.065	1.200	1	5	X 5	3.061
X 24	343	3.041	0.068	1.254	1	5	X 24	3.041
X 25	343	2.364	0.072	1.342	1	5	X 4	2.936
X 26	343	3.542	0.065	1.206	1	5	X 1	2.907
X 27	343	3.324	0.068	1.258	1	5	X 32	2.872
X 28	343	3.764	0.064	1.182	1	5	X 3	2.665
X 29	343	2.601	0.073	1.345	1	5	X 29	2.601
X 30	343	2.490	0.080	1.485	1	5	X 30	2.490
X 31	343	2.023	0.070	1.295	1	5	X 2	2.388
X 32	343	2.872	0.076	1.400	1	5	X 25	2.364
X 33	343	3.423	0.079	1.463	1	5	X 34	2.324
X 34	343	2.324	0.072	1.332	1	5	X 31	2.023
X 35	343	1.883	0.069	1.283	1	5	X 35	1.883

*Likert scale: 1 - 5. 5= strongly agree. 4 = agree. 3 = not sure. 2 = disagree. 1 = strongly disagree.

high and Bartlett's Test of Sphericity is significant ($p < 0.01$), preconditions are fulfilled. When it is assumed that KMO is high if it is around 0.90 and when it is good if it is around 0.80, KMO value (0,889) were accepted as ideal (Joseph et al., 1992). According to results of factor analysis, 9 of Eigen values belonging to 35 statements were determined as higher than 1 (*Kaiser Criterion*). Therefore, results of factor analysis were investigated according to 9 factors. These 9 factors represented the 57.1% of total variance. Statements with its factor loads above 0.50 were considered according to the Varimax rotation results during the determining statements in each factor.

According to the results of factor analysis, Factor 1 is called as "Academic skill adequacy of academic staff" in the perception of faculty quality of students. This factor explains 10% of total variance. Academic staff practices are important facts in terms of perceptions of faculty practices by students. This dimension contains following perceptions, such as relationships between academic staffs and students, interest with students, situations in the classroom, efforts for students' progress, orienting the students, evaluation of exams, usage of different teaching methods and techniques, technology utilization in classroom and situations in education-training of academic staff. There is a positive relation between the

Table 3. The results of factor analysis on perceptions of academic and institutional service quality of students.

Statements codes	Factors									
	1	2	3	4	5	6	7	8	9	h²
X 9	0.582	0.002	0.214	0.196	0.327	0.137	-0.129	0.121	0.143	0.600
X 10	0.621	0.049	0.194	0.280	0.268	-0.016	0.066	-0.013	0.093	0.590
X 11	0.659	0.047	0.227	0.124	0.036	0.251	0.026	-0.135	0.022	0.588
X 12	0.681	0.089	0.023	-0.004	0.129	0.066	-0.143	-0.070	-0.193	0.555
X 13	0.553	0.089	-0.036	0.017	0.071	0.113	-0.284	-0.255	-0.113	0.492
X 15	0.520	0.032	0.094	0.200	-0.033	0.433	-0.079	-0.254	0.093	0.588
X 30	0.016	0.690	0.159	0.240	0.143	0.101	-0.022	0.119	0.021	0.604
X 31	0.080	0.581	0.267	-0.191	0.045	0.153	0.063	-0.007	0.189	0.518
X 34	0.047	0.750	0.010	0.187	-0.004	0.044	-0.085	0.072	0.007	0.614
X 35	0.030	0.714	0.099	0.128	0.016	-0.081	0.066	-0.052	-0.003	0.550
X 1	0.152	0.176	0.699	0.088	-0.062	0.222	-0.081	-0.023	0.014	0.611
X 2	0.232	0.184	0.694	0.131	-0.055	0.011	-0.165	-0.124	0.021	0.633
X 25	0.024	0.124	0.562	0.144	0.444	0.047	0.229	-0.033	-0.015	0.604
X 22	0.192	0.171	-0.003	0.652	0.025	0.241	-0.103	-0.141	-0.176	0.611
X 23	0.102	0.187	0.116	0.695	0.182	-0.016	-0.078	-0.040	0.053	0.585
X 24	0.160	0.102	0.291	0.602	0.345	0.071	-0.001	-0.051	0.182	0.642
X 26	0.200	00.043	-0.076	0.073	0.630	-0.059	-0.056	-0.254	0.178	0.553
X 27	0.167	.0086	-0.009	0.195	0.610	0.232	-0.117	-0.021	-0.107	0.525
X 20	0.272	0.131	0.063	-0.026	0.156	0.639	-0.180	-0.120	-0.003	0.575
X 6	-0.055	-0.051	0.155	0.106	0.011	0.270	-0.696	-0.087	0.182	0.639
X 7	0.190	0.045	-0.074	0.013	0.056	0.085	-0.595	0.070	0.079	0.420
X 14	0.404	0.001	-0.015	0.057	0.094	0.196	-0.064	-0.545	0.028	0.516
X 5	-0.013	0.106	-0.009	0.003	0.007	-0.027	-0.185	-0.141	00.809	0.721
X 3	0.237	0.084	0.485	0.189	0.116	-0.227	-0.491	-0.053	-0.095	0.652
X 4	0.329	-0.027	0.336	0.082	0.385	-0.054	-0.402	-0.023	-0.099	0.552
X 8	0.493	0.003	0.168	0.285	0.171	0.342	-0.149	0.266	0.178	0.623
X 16	0.363	-0.024	0.270	0.265	-0.009	0.461	-0.019	-0.223	0.158	0.564
X 17	0.138	-0.010	0.168	0.256	0.114	0.326	-0.244	-0.472	-0.137	0.533
X 18	0.020	-0.036	0.147	0.099	0.147	0.050	0.112	-0.720	0.193	0.626
X 19	0.327	0.116	0.349	0.430	-0.019	0.078	-0.030	-0.184	-0.060	0.472
X 21	0.225	0.016	0.166	0.263	0.226	0.442	-0.174	-0.187	-0.242	0.518
X 28	0.265	0.125	-0.021	0.105	0.473	0.462	-0.095	-0.046	-0.147	0.568
X 29	0.097	0.493	0.301	0.024	0.398	0.174	-0.050	-0.079	-0.065	0.546
X 32	-0.023	0.341	0.390	0.114	0.355	0.137	0.028	-0.077	0.021	0.434
X 33	0.080	0.490	-0.334	-0.056	-0.012	-0.324	-0.172	-0.286	-0.028	0.579
Eigen values	3.506	2.743	2.678	2.242	2.174	2.091	1.744	1.670	1.150	-
Total variance explained	0.100	0.078	0.076	0.064	0.062	0.060	0.050	0.048	0.033	-
Cumulative variance explained	0.100	0.178	0.254	0.318	0.380	0.440	0.490	0.538	0.571	-

Loadings of > 0.50 are in italics.

Factor 1 and variables such as X9, X10, X11, X12, X13 and X15. This result show that knowledge of academic staffs on their topics, teaching techniques, communication skills, exam evaluations and personalities are related with perceptions of students in faculty quality. Thus, literature review supports that especially the quality of academic staff increase the satisfaction of students in any conditions (Guolla, 1999; Cashin and Downey, 1992).

Factor 2 is effective in the perception of faculty quality of students is called as "Social and physical facilities of faculty". There is a positive relation between the Factor 2 and variables such as X30, X31, X34 and X35. This factor explains the 7.8% of total variance. This result shows that social and physical facilities of faculty are effective in the perceptions of faculty quality of students. University students spend the most of their time in the faculty. Faculty perceptions of students are consisted of

being pleasure of membership of faculty, equal and fair procedures in every kind of applications, situation of social, cultural and sportive activities, relationships among students, relationships with faculty administration, participa-tion to activities, usage of tools and equipment and situation of physical and social place. Nowadays, opinions of students on quality of faculty life of students and facilities offered by faculty are very important.

Therefore, most of university in the West make researches on the quality of faculty life and enhance politics and action plan according to these researches and make considerable effects to increase the quality (Bokeoglu and Yilmaz, 2007). Social facilities of faculties, availability of place in the leisure time, canteen and restaurant services increase the satisfaction of student and affect the perceptions positively. From this point, pro-viding the contributively services like dormitory, dinning service, library, computer service are important in terms of student perception (Hoffinan and Kretovics, 2004).

Factor 3 is called as "Physical facilities of department and student consultancy service". This factor explains 7.6% of total variance. Factor 3 is found to be related with X1, X2 and X25 statements. This result shows that physical opportunities of department and student consul-tancy service are effective in the perception of faculty quality of students.

Factor 4 is called as "Course contents and teaching technique". This factor explains 6.4% of total variance. Factor 4 is found as related with X22, X23 and X24 statements. This result proves that course contents and teaching technique is influence in the perception of faculty quality of students. Usage of different teaching methods and techniques and technology utilization in the classroom, easy reaching to reference resources, proficiency of academic staffs, active participation to education process affects the perceptions of course of students. Changing technologies cause changes in the methods and implementations of teaching. New alterna-tive and implementations like distance learning, common education programs, students and academic staff exchanges appears in higher education, electronic communication opportunities are widely launched in the classroom. Meanwhile, "Student Oriented" and "Qualified Education" certify workings are growing up (Rehber, 2002). Many researchers studied on determining the size of students' perceptions directed to teaching quality. According to literature review, academic staff began to increase the technology utilization in the classroom in order to stimulate the learning and to attract the student's concern and attention. More effective and creative lessons became possible by the use of internet in the last years (Cramer et al., 2007). Nevertheless, it is assigned that correctly selected textbooks and reference resources increase the perception of student (Rich et al., 1988).

Factor 5 is called "supplementary features of courses and its effects on success". This factor explains 6.2% of total variance. Factor 5 was found as related to X26 and X27 statements. This result shows that effect of supple-mentary features of courses and its effects on success are effective in the perception of faculty quality of students.

Factor 6 is called "humanitarian behaviours of academic staff". This factor explains 6% of total variance. Factor 6 contains the X20 statement. This result shows that behaviours of academic staff are effective on the perception of faculty quality of student.

Factor 7 is called "sense of belonging to department". This factor explains 5% of the total variance. Factor 7 was found related to X6 and X7 statements. This result showed that availability of feeling of attachment to department is related with the perception of faculty quality of students. Demands of private sectors should be considered during the establishing departments in higher education, graduated who skilled at solving problems should be aimed (Lindley, 1998). A research which is conducted by staffs of faculty of agriculture in USA on the knowledge and skills which is need to be required bringing to students by education programs, solving problem and analytic thinking skills is in the first order, communication skills, technical ability which is principal aim of programs can be arranged respectively. These are followed by coordination skills, computer knowledge, professional experience and international point of view in pre-working period (Navarro, 2006). Over specialization should be avoided and integrated approach should be accepted during the establishing departments. It is determined that over specialization negatively affects the flexible career opportunities (Csaki, 1999) . It is deter-mined that the importance of necessity in programs of department should contain all the innovations as diversity and inclusivity (Foster, 1999).

Factor 8 is called "To question of course contents in exams". This factor explains 4.8% of the total variance. Factor 8 contains X14 statements. This result shows that examination of course contents in exams is effective in perception of faculty quality of students.

Factor 9 is called "examination of the timeliness and accuracy". This factor explains the 3.3% of total variance. Factor 9 contains the X5 statements. This result shows that adequacy of examination times is effective on the perceptions of faculty quality of students.

As it is shown in Table 4, effective factors in the perception of faculty quality of students, Spearman rho correlation coefficients in order to determine the level of linear relationship among intra-factors were determined as statistically significant ($p < 0.01$). Although Spearman rho correlation coefficients which prepared for all statements in Table 4 were statistically significant, these values were low in the practice.

Conclusions

Any institution which needs to raise efficiency in education system would like to learn perception of students increase the number of the studies conducted on

Table 4. Spearman rho correlation coefficients matrix.

	Factor 1							**Factor 5**	
	X9	**X10**	**X11**	**X12**	**X13**	**X15**		**X26**	**X27**
X9	1.000	0.469	0.387	0.398	0.280	0.374	X26	1.000	0.325
X10	0.469	1.000	0.412	0.329	0.341	0.393	X27	0.325	1.000
X11	0.387	0.412	1.000	0.410	0.352	0.505			
X12	0.398	0.329	0.410	1.000	0.480	0.327			
X13	0.280	0.341	0.352	0.480	1.000	0.315		**Factor 6**	
X15	0.374	0.393	0.505	0.327	0.315	1.000		**X20**	
	Factor 2						X20	1.000	
	X30	**X31**	**X34**	**X35**
X30	1.000	0.324	0.540	0.490					
X31	0.324	1.000	0.339	0.376				**Factor 7**	
X34	0.540	0.339	1.000	0.443				**X6**	**X7**
X35	0.490	0.376	0.443	1.000			X6	1.000	0.246
	Factor 3						X7	0.246	1.000
	X1	**X2**	**X25**
X1	1.000	0.497	0.335						
X2	0.497	1.000	0.310					**Factor 8**	
X25	0.335	0.310	1.000					**X14**	
	Factor 4						X14	1.000	
	X22	**X23**	**X24**
X22	1.000	0.354	0.394					**Factor 9**	
X23	0.354	1.000	0.436					**X5**	
X24	0.394	0.436	1.000				X5	1.000	

** 0.01 important in the level of significant (2-tailed).

students' perceptions of academic and institutional service quality in the higher education. Measurement of quality perception of students is important in terms of both students and faculty administration.

In this study, determining factors was studied to investigate about quality perception of students at Faculty of Agriculture in Suleyman Demirel University. To achieve this purpose, Varimax rotation was implemented and a factor analysis was carried out through the principal component analysis. As a result of the factor analysis, academic skill adequacy of academic staff, social and physical facilities of faculty, physical facilities of department and student consultancy service, course contents and teaching technique, supplementary features of courses and its effects on success, humanitarian behaviour of academic staff, sense of belonging to department, to question of course contents in exams, examination of the timeliness and accuracy were grouped in nine factors. These factors influence students' perceptions about the academic and institutional service quality of the faculty.

According to results, the students think that the education programs implemented at their department do not improve their critical thinking skills and to prepare them for work life. They also think that the faculty does not have facilities such as library, laboratory, canteen food service and social facilities and adequate recreational facilities such as student affairs service does not have capacity to solve problems of students. Results obtained are important because they allow let the faculty administration to self evaluate and improve new management approaches. Based on the research findings and results, following recommendations can be proposed to increase the positive perception and satisfaction of students about their faculty;

1. Library and laboratory facilities should be increased.
2. A program to improve critical and creative thinking skills should be implemented.
3. A program to provide a comprehensive multidisciplinary approach and flexible career facilities should be established.
4. Education program should be revised to prepare students for market requirements therefore increasing their acceptability at job market.
5. Scientific environment of the faculty should be improved and scientific activities (congress, conference etc.) should be increased.
6. Social facilities of the faculty (canteen, garden, seating places) should be improved, cultural and sportive and art environment where students spend time should be

formed.

7. Capacity of the student affairs department should be increased.

8. Canteen and food services should be improved, quality and healthy food should be provided at reasonable prices.

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