

JOB SATISFACTION OF ACADEMICIANS IN TURKEY AND THE FACTORS AFFECTING JOB SATISFACTION

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Abstract: *The aim of this study is to measure the levels of job satisfaction among academicians in Turkey and to investigate the relationship between the job satisfaction and the factors that affect job satisfaction. The data was obtained by using sociodemographic data form, “job satisfaction” scale and “work and work environment” scale from 160 academicians that have been working in accounting and finance sub-department in Faculties of Economics and Administrative Sciences in 78 public and private universities. In the analysis of data, descriptive statistics, factor analysis, stepwise regression analysis and discriminant function analysis were used. The factor analysis of the 13 items which have possible effect on job satisfaction among academicians revealed five factors: Work environment, administrative workload, academic workload, promotion and evaluation and research fund. The stepwise regression analysis which was employed to determine the predictors that affect job satisfaction levels of academicians indicated that there was a meaningful relationship between the level of job satisfaction and the work environment and academic workload factors. Results of the discriminant analysis indicated that while work environment and academic workload were the predictor factors for academicians who had high and low level of job satisfaction, the other factors were no determining factors for academicians who had high and low level of job satisfaction.*

Keywords: *Job Satisfaction, Factors Affecting Job Satisfaction, Turkish Academicians, Factor Analysis, Stepwise Regression Analysis, Discriminant Analysis.*

Özet: *Bu çalışmanın amacı, Türkiye’deki akademisyenlerin iş tatmini düzeylerini ölçmek ve iş tatmini ile iş tatminini etkileyen faktörler arasındaki*

ilişkiyi araştırmaktır. Veriler, toplam 78 kamu üniversitesinin ve özel üniversitenin İktisadi ve İdari Bilimler Fakültelerinde muhasebe – finansman anabilim dalında görev yapan 160 akademisyenden, sosyo-demografik anket formu, “iş tatmini” ölçeği ve “iş ve iş çevresi” ölçeği kullanılarak toplanmıştır. Verilerin analizinde tanımlayıcı istatistik, faktör analizi, kademeli regresyon analizi ve diskriminant analizi kullanılmıştır. Akademisyenlerin iş tatmini düzeylerini etkileme olasılığına sahip 13 unsura uygulanan faktör analizinin sonucunda, söz konusu unsurlar beş temel faktör altında toplanmıştır. Bu faktörler; iş çevresi, idari işyükü, akademik işyükü, ilerleme ve değerlendirme ve araştırma fonudur. Akademisyenlerin iş tatmini düzeylerini etkileyen belirleyici değişkenleri bulmak için yapılan kademeli regresyon analizi, iş tatmini ile iş çevresi ve akademik işyükü faktörleri arasında anlamlı bir ilişki olduğunu göstermiştir. Diskriminant analizinin sonuçları; iş çevresi ve akademik işyükünün, yüksek ve düşük iş tatmini düzeyine sahip akademisyenler için belirleyici faktörler olduğunu, diğer faktörlerin ise, yüksek ve düşük iş tatmini düzeyine sahip akademisyenler için herhangi bir belirleyici unsur olmadığını göstermiştir.

Anahtar Kelimeler: İş Tatmini, İş Tatminini Etkileyen Faktörler, Türk Akademisyenler, Faktör Analizi, Kademeli Regresyon Analizi, Diskriminant Analizi.

1. Introduction

Employees in any organization have attitudes about every aspect of an organizational life, such as salary, level of position at work, promotion opportunity, top management, the work they do, reward system, co-workers' behavior, recognition, supervision, and relationships in the work. Some of the most important attitudes within any organization are attitudes related to job satisfaction. Job satisfaction is a general attitude toward the job; the difference between the amount of rewards employees receive and the amount they believe they should receive. A person with a high level of job satisfaction holds positive attitudes towards the job, while a person who is dissatisfied with his or her job holds negative attitudes about the job (Rocca and Kostanski, 2001).

Job satisfaction can be defined different ways but all definitions agree that it is a multidimensional concept. Locke (1976) defined job satisfaction as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experience". Spector (1985) defined job satisfaction as "an emotional affective response to a job or specific aspect of a job". Wagner and Hollenbeck (1992) defined job satisfaction as "a pleasurable feeling that results from the perception that one's job fulfills or allows for the fulfilment of one's important job values". Oshagbemi (1999) defined job satisfaction as "an affective reaction to a job that results from the person's comparison of actual outcomes with those that are desired, anticipated or deserved". In brief, job satisfaction can be defined as how much employees like or dislike their work and the extent to which their expectations concerning work have been fulfilled. Researchers have divided job satisfaction into two main categories: General satisfaction and specific satisfaction. General satisfaction, referred to as overall satisfaction, has been defined as an overall evaluation of a person's feeling for his or her job. Specific satisfaction has been defined as an evaluation of various aspects of the job. Examples of such aspects have included working conditions, pay, relationships with other workers and supervisor, organizational policies and the nature of the job itself (Petty et al., 2005).

Multiple theories of job satisfaction have been proposed. The foundation for job satisfaction or job motivation theory was introduced by Maslow with the five-stage hierarchy of human needs, now recognized as the deprivation/gratification proposition. The premise of the deprivation/gratification proposition is that when an individual identifies a need which is not being met, behavior occurs which is directed toward gratifying the need (Castillo et al., 1999). Another the

most notable theory was Herzberg's motivation-hygiene theory which investigated the concept of job satisfaction/job dissatisfaction. Herzberg suggested that factors involved in creating job satisfaction were separate and distinct from factors that led to job dissatisfaction. Job satisfaction (motivator) factors include achievement, recognition, the work itself, responsibilities and advancement. Job dissatisfaction (hygiene) factors are usually associated with the work environment and include pay, working conditions, supervision, company policy and interpersonal relationships. He theorized that work satisfaction resulted from the presence of motivator factors and absence of hygiene factors. As employers become aware of motivating and hygiene factors these could be addressed in the workplace (Moyle et al., 2003).

Job satisfaction is important not only to behavioural scientists, but also to managers and administrators. Because job satisfaction is related to employee motivation, employee morale, employee frustration, work performance, employee absenteeism and turnover. In general, while high job satisfaction contributes to job involvement, organizational commitment, greater quality of life and improved mental and physical health, job dissatisfaction contributes to turnover, absenteeism, labor grievances, lateness, leaving early, labor problems, attempts to organize labor unions and a negative organizational climate (Porter and Steers, 1973; Locke, 1976; Youngblood et al., 1983; Brown and Peterson 1993; Dahlke, 1996; Fisher, 2000; Barak et al., 2005). Therefore, understanding job satisfaction is critical to the success of an organization and most organizations are concerned with their employees' job satisfaction.

Although much of job satisfaction research has focused on employees in the private sector, various studies have also been done to measure job satisfaction of academicians. Job satisfaction level of academicians can show wide variations according to the various dimensions of their jobs and their demographic characteristics. In other words, the factors that contribute to job satisfaction or dissatisfaction can be divided into two groups: Demographic (personal) factors and environmental (organizational and work-related) factors.

There are several studies that investigate whether job satisfaction is influenced by demographic factors such as gender, age, tenure, length of service in higher education and academic rank. Results of some studies can be summarized as follows. Winkler (1982) investigated the perceptions of job satisfaction of university faculty members and differences in faculty job satisfaction relative to rank, age, tenure, department affiliation, academic discipline and gender. The

results of this study indicated that there was not statistical significance according to rank, age and tenure, but females expressed less job satisfaction than males and professors expressed the highest mean job satisfaction of all respondents. Pearson and Seiler (1983) explored job satisfaction levels of academicians in the United States and found that while the demographic variables which were tenure, teaching load, gender, institution and age explained the greatest amount of variance in job satisfaction scores, the demographic variables which were salary and academic rank had a lesser impact. Oshagbemi (1997a) explored the influence of rank on the job satisfaction and found that academics on higher ranks were generally more satisfied with their jobs than their lower rank colleagues. Oshagbemi (1998) explored the impact of age on the job satisfaction of university teachers and found that older university teachers were generally more satisfied with the job than their younger counterparts. He also found that female university teachers were generally more satisfied with their jobs than the male university teachers. Hickson and Oshagbemi (1999) explored the effect of age on the satisfaction of academics with teaching and research. Their results indicated that teaching job satisfaction decreased with age but at a decreasing rate and research satisfaction increased with age but at a decreasing rate. They also found that both teaching and research job satisfaction increased with rank and female were more satisfied in their career than male counterparts. Oshagbemi (2000a) investigated the effects of gender on the job satisfaction of UK academics and found that gender did not affect the job satisfaction of university teachers directly but there was statistically significant interaction effect of gender and rank, because female academics at higher ranks were more satisfied with their jobs than male academics of comparable ranks. Oshagbemi and Hickson (2003) examined how satisfied academicians were with their primary tasks of teaching and research. They found that research and teaching satisfaction were negatively affected with increasing age and length of service in higher education. They also investigated academicians' satisfaction with their pay and found a strong positive relationship between pay satisfaction and gender, indicating that women academics were more satisfied than the men counterparts. Terpstra and Honoree (2004) investigated the general job satisfaction and pay satisfaction levels of faculty by type of academic discipline and by geographic region and found that there were significant differences in the pay satisfaction levels of faculty as a function of discipline type and geographic region, but no significant differences in the job satisfaction levels. They also examined that the impact of individual-level variables (gender, age, seniority, academic rank and tenure status) and

organizational-level variables (institution size, public versus private status, unionization status and overall university salary level) on job and pay satisfaction. The results of this study indicated that only overall university salary level was significantly related to both job and pay satisfaction and overall salary level also differed significantly by geographic region. Okpara et al. (2005) examined the effects of gender on the job satisfaction of US academics. They found that there were gender differences apparent in the job satisfaction levels of university teachers. Female faculty were more satisfied with their work and co-workers, whereas, their male colleagues were more satisfied with their pay, promotions, supervision and overall job satisfaction. Results also indicated that ranks were significant in explaining gender differences and job satisfaction of the respondents.

Organizational and work-related variables such as pay, promotion, institution (public or private university), unionization status, job security, number of students or institution size, co-workers' behavior, management and administration, teaching and research-related activities, supervision/supervisor behavior, area of academic discipline, recognition and relationships have also influence on job satisfaction level of academicians. Several studies have been conducted examining the relationships of different organizational and work related variables and their impact on job satisfaction levels of academicians. Winkler (1982) investigated the perceptions of job satisfaction of university faculty members and identified the items contributing the most and least to faculty job satisfaction. According to the results of this study faculty members identified twenty-two items as contributing the most to their job satisfaction such as autonomy, academic freedom, independence and teaching and/or advising excellent students, and faculty members identified fifty-five items as contributing the most to their job dissatisfaction such as pay, poor administration and leadership, lack of support (equipment, budget, secretarial, public), university structure and reward system, and narrow, dogmatic, pompous colleagues. Pearson and Seiler (1983) explored job satisfaction levels of academicians in the United States and found that while teaching dimensions and research requirements were the most satisfying elements of the academic work environment, support and compensation aspects were the most dissatisfying. Diener (1984) investigated job satisfaction and college faculty. He found that working conditions, autonomy and flexible schedule were highly valued for job satisfaction while poor facilities, heavy teaching loads, lack of recognition, low salaries and student and colleague apathy caused

dissatisfaction. Satterlee (1988) investigated the job satisfaction of engineering and industrial technology faculty. The results concluded that some aspects of the job that were perceived as dissatisfying were opportunities for promotion in rank, top management, pay and job securities. Hagedorn (1996) examined the role of male/female wage differentials in a model of job satisfaction for full-time female faculty and found that as gender-based wage differentials increased, females' global job satisfaction decreased. Oshagbemi (1997b) investigated the job satisfaction characteristics of UK academics and classified academicians into three groups (happy workers, satisfied workers and unhappy workers). He found that the major characteristics of the job satisfaction profiles of unhappy workers were identified including their major concerns in the areas of pay, promotion and head of unit's supervision or behaviour. Oshagbemi (1997c) investigated job satisfaction and dissatisfaction in higher education and found that teaching and research-related activities contributed significantly to both job satisfaction and dissatisfaction of university teachers. Findings also showed that several miscellaneous dimensions of the jobs of the workers, such as relative job security and changes in university funding mechanisms, contributed to satisfaction and dissatisfaction respectively. Oshagbemi (1999) investigated the job satisfaction of academics and their managers and found that managers in universities exhibited similar characteristics to other academics in the satisfaction or dissatisfaction which they derived from some aspects of their jobs. The aspects of their jobs where there were significant differences in the level of job satisfaction of the academics and their managers were teaching, co-workers' behaviour, head of units' behaviour, physical conditions/working facilities and promotions. The aspects of their jobs where there were no significant differences were administration and management, research and present pay. Oshagbemi (2000b) investigated the pay satisfaction in higher education and found that over fifty per cent of the academicians were dissatisfied with their pay, and female academics were more satisfied with their pay when compared with their male colleagues. Leung et al. (2000) investigated sources of stress and their effects on job satisfaction among university teachers in Hong Kong and they found that recognition, perceived organizational practices and financial inadequacy were best predictors of job satisfaction. Latif and Grillo (2001) investigated job satisfaction of junior pharmacy faculty members with the academic role functions of teaching, research and service. Results of their study revealed that junior faculty members were most satisfied with the teaching role and least satisfied with the research role. Castillo and Cano (2004) tried to describe the amount of

variance in faculty member's overall level of job satisfaction according to the job motivator and hygiene factors. They found that the factor "work itself" was the most motivating aspect for faculty and the least motivating aspect was "working conditions." They also found that while all of the job motivator and hygiene factors were moderately or substantially related to overall job satisfaction, the factors "recognition," "supervision," and "relationships" explained the variability among faculty members' overall level of job satisfaction. Stevens (2005) analysed the determinants of satisfaction of academic staff with a number of elements of satisfaction and found that satisfaction with the non pecuniary aspects of the academic job decreased with seniority in the early years of careers, but increased later on. He also investigated the effects of satisfaction on academic staff's reported intentions to leave the job and found that dissatisfaction with both the pecuniary and the non-pecuniary elements of the job increased the likelihood of leaving. It can be said that there is not enough empirical data on the possible effects of demographic and organizational variables on the job satisfaction levels of academicians. Therefore this field continues to be a major topic of research interest.

The aim of this study is to explore the levels of job satisfaction among accountant-finance academicians in Turkey and to investigate the relationship between job satisfaction and the factors that affect job satisfaction. There are a few studies about job satisfaction among Turkish academicians (Kusku, 2001; Bas, 2002; Bas and Ardic, 2002; Kusku, 2003; Koyuncu et al., 2006). In these studies, Kusku (2001) explored the satisfaction level of the academic staff of state universities and found that satisfaction levels in different dimensions were not high, but institutional job satisfaction and professional satisfaction were the dimensions that most academicians were satisfied with. Bas (2002) investigated job satisfaction profiles of academicians and compared satisfaction levels of academicians based on ten different job dimension and found that academicians enjoyed especially for job itself, prestige, academic environment, supervision/supervisor behavior and co-workers behavior dimensions. Bas and Ardic (2002) investigated the job satisfaction of public and private university academicians and found that private university academicians' job satisfaction level was higher in many respects than that of academicians working at public universities. Kusku (2003) explored the differences in satisfaction dimensions between the academic and administrative employees in higher education and found that there were certain differences in factors such as "colleague relations satisfaction", "colleague competition level

satisfaction”, “other work group satisfaction”, “professional satisfaction”, “work environment satisfaction” and “salary satisfaction” with respect to the satisfaction of academic and administrative employees. Koyuncu et al. (2006) investigated gender differences among academicians based on different variables such as personal demographic and work situation characteristics, job behaviors, work and extra-work satisfactions and psychological well-being and found that female and male academicians had similar satisfaction levels. As seen, there is not enough study that investigate the job satisfaction level of Turkish academicians and relationships between job satisfaction and the factors affecting job satisfaction. Therefore, one of the aims of this study is to address these informational deficiencies.

2. Methodology

2.1. Population of the Study and Sample

The population of the study comprised academicians that have been working in accounting and finance sub-department in Faculties of Economics and Administrative Sciences in 78 public and private universities in Turkey. Respondents were reached from universities' web pages and the Association of Accounting and Finance Academicians, and the questionnaires were sent to 400 academic staff which constitutes the universe of the study through electronic mail. The survey was conducted between May 1, 2006 and July 30, 2006. A total of 160 completed questionnaires were received back, giving a response rate of 40%.

2.2. Data Instruments

The questionnaire form which was developed to collect the research data consists of three parts. The first part of questionnaire was sociodemographic data form which was designed to gather information regarding gender, age, marital status, children number, level of education, academic title, institution, years in occupation and years in institution. The second part of questionnaire was “job satisfaction scale” which was developed by Houston et al. (2004) for measuring subjects' job satisfaction level. This scale consists of seven items and is designed to measure seven dimensions of job satisfaction. The frequency scale ranges from 1 (completely dissatisfied) to 5 (completely satisfied), and a high score reflects high satisfaction. The third part of questionnaire was

“work and work environment” scale which was developed by Houston et al. (2004). This scale consists of 18 items with five alternative responses i.e., strongly agree, agree, undecided, disagree and strongly disagree which are scored 1 to 5.

2.3. Analysis of Data

The data was analyzed by using SPSS 13 (The Statistical Package for Social Sciences). The descriptive data analysis was conducted by calculating frequencies and mean scores. Exploratory factor analysis was used to uncover the latent structure (dimensions) of the items in the “work and work environment” scale. Stepwise regression analyses were used to determine effect of the factors on the job satisfaction. For validity and reliability of the job satisfaction scales which was used in this study, Cronbach’s alpha was used. Cronbach’s alpha coefficient was 0,784 for job satisfaction.

2.4. Findings

The findings of the study were examined in two sections. In the first section, the demographic characteristics of the respondents were presented and in the second section, the results of the analyses were presented.

2.4.1. Demographic Characteristics of the Respondents

Table 1 shows a breakdown of the academicians who responded to our questionnaire. The table shows the distribution of respondents by gender, age, marital status, number of children, level of education, institution (public or private university), academic title, years in institution and years in occupation (tenure).

Table 1: Demographic Characteristics

Variables	N	%	Variables	n	%
Gender			Marital Status		
Female	105	66,0	Married	113	71,1
Male	54	34,0	Single	46	28,9
Age			Children Number		
21-30	46	28,9	No	69	43,7
31-40	71	44,7	1	49	31,0
41-50	31	19,5	2	32	20,3
51-60	9	5,7	3	8	5,1
61 or above	2	1,3	4 or more	-	-
Level of Education			Academic Title		
University	12	7,5	Research Assistant	56	35,2
Master	35	22,0	Lecturer	20	12,6
Doctorate (Ph.D)	112	70,4	Assistant Professor	48	30,2
Institution			Associated Professor	20	12,6
Public University	141	88,7	Professor	15	9,4
Private University	18	11,3			
Years in Institution			Years in Occupation		
Under 1 year	6	3,8	Under 1 year	6	3,8
1-5 years	43	26,9	1-5 years	35	22,0
6-10 years	43	26,9	6-10 years	40	25,2
11-15 years	43	26,9	11-15 years	45	28,3
16-20 years	8	5,0	16-20 years	14	8,8
21 or above	17	10,6	21 or above	19	11,9
Total	159	100,00	Total	159	100,00

As seen Table 1, 66% of the respondents were female and 34% of the respondents were male. According to the age of academicians, 28,9% of the respondents were between 21-30 years, 44,7% of the respondents were between 31-40 years, 19,5% of the respondents were between 41-50 years. Only 1,3% of the respondents were 61 or above years of age. Most of the participants were married (71%). 43,7% of the participants had no any children while 56,3% of the participants had one or more children. According to the level of education, %70 of the academicians had Ph.D. degree. According to the academic title, 35,2% of the respondents were research assistant, 12,6% of the respondents were lecturer, 30,2% of the respondents were assistant professor, 12,4% of the respondent were associated professor and 9,4% of the respondents were professor. While 88,7% of the

participants had worked in a public university, 11,3% of the participants had worked in a private university. According to the years in occupation or tenure, 22% of the participants had been in high education between 1-5 years, 25,2% of the participants had been in higher education between 6-10 years, 28,3% of the participants had been in higher education between 11-15 years and 11,9% of the participants had been in higher education for more than 20 years. According to the years in institution, percent rates were equal for 1-5 years, 6-10 years and 11-15 years. 15,6% of the participants had been at the institution for more than 15 years.

2.4.2. Results

2.4.2.1. Job Satisfaction Levels of Academicians

The percentage values of the general job satisfaction and job satisfaction elements are shown in Table 2. As seen Table 2, 79% of the academicians reported that they were satisfied or completely satisfied with their jobs as a whole, while approximately 8% of the academicians reported that they were dissatisfied or completely dissatisfied with their jobs as a whole. These findings show clearly that academicians are generally satisfied with their jobs. More than 50% of the respondents reported that they were satisfied with each of the following aspects of their jobs – freedom to choose your own method of working, recognition and the amount of variety in your job. Also, while 45% of the respondents reported that they were satisfied with responsibility, 26% of the respondents reported that they were dissatisfied with responsibility and 28,7% of the respondents reported indifferent. However it can be seen that more than 74% of the academicians were dissatisfied or completely dissatisfied with their pay while only approximately 19% of the academicians were satisfied or completely satisfied with their pay. Another aspect of the jobs which job satisfaction level of academicians is low is chance for advancement or opportunities for promotion. While approximately 43% of the academicians were satisfied or completely satisfied with opportunities for promotion, 41% of the academicians were dissatisfied or completely dissatisfied with their opportunities for promotion and 16,4% of the academicians reported indifferent. In a consequence accountant and finance academicians were generally satisfied with aspects of their jobs such as freedom, recognition, the variety in the job and responsibility while they were dissatisfied with aspects of their jobs such as pay and promotion.

Table 2: The Percentage Values of the General Job Satisfaction and Job Satisfaction Elements

Dimensions/Elements of Job Satisfaction	Completely Dissatisfied	Dissatisfied	Indifferent	Satisfied	Completely Satisfied
Freedom to choose your own method of working	4 2,5%	12 7,5%	10 6,3%	84 52,8%	49 30,8%
The recognition you get for good work	4 2,5%	25 15,7%	35 22%	71 44,7%	24 15,1%
The amount of responsibility you are given	8 5,1%	33 21%	45 28,7%	57 36,3%	14 8,9%
Your salary or rate of pay	66 41,5%	53 33,3%	10 6,3%	26 16,4%	4 2,5%
Your chance for advancement	27 17%	38 23,9%	26 16,4%	51 32,1%	17 10,7%
The amount of variety in your job	3 1,9%	9 5,7%	18 11,3%	87 54,7%	42 26,4%
Now taking everything into consideration, how do you feel about your job as a whole?	7 4,4%	6 3,8%	20 12,6%	96 60,4%	30 18,9%

2.4.2.2. Factor Analysis

Exploratory factor analysis was used to assess the factors that affect job satisfaction among academicians. Firstly, KMO (Kaiser-Meyer-Olkin) sampling adequacy measure was calculated for determining the convenience of data for factor analysis. KMO sampling adequacy measure was 0,734 therefore sampling was convenient for factor analysis. Also, significant level of Barlett test was calculated as 0,00. Consequently, both of the tests showed that factor analysis could be applied to data.

In the factor analysis, principal component analysis and varimax rotation technique were used. The variables whose factor loadings were under 0,50 and ninth question were eliminated. As consequence Table 4 includes 13 factors, SPSS was told to extract only factors with eigenvalues of 1.0 or higher. Five factors explained 68,12% of the total variance. Factor 1 explained most proportion of the total variance (20,1%) and consisted of variables which contained "work environment". Factor 2 explained 13,94% of the total variance and consisted of variables which were related to "administrative workload". Factor 3 explained 13,67% of the total variance and consisted of variables which were related to "academic (occupational) workload". Factor 4 explained

11,74% of the total variance and factor 5 explained 8,69% of the total variance and they consisted of variables which were related to “promotion and evaluation” and “research fund”, respectively. Table 5 shows groups of questions.

Table 3: Grouping of the Questions According to the Factor Analysis

The Factors That Affect Job Satisfaction	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
<i>Work Environment</i>					
I feel acknowledged for a job well done. (11)	,884				
I am supported when change and new initiatives are being introduced. (12)	,848				
Staff morale is high within my department, institute, school, or unit. (13)	,767				
I am willing to put in a great deal of effort in order to help this university be successful. (10)	,447				
<i>Administrative Workload</i>					
The amount of administration I am expected to do is reasonable. (3)		,526			
The number of students I am expected to teach and/or supervise is reasonable. (4)		,819			
I have time to do good quality research. (5)		,692			
<i>Academic Workload</i>					
My workload has increased over the past 12 months. (1)			,805		
I often need to work after hours to meet my work requirements. (2)			,771		
<i>Promotion and Evaluation</i>					
I believe the promotion procedures recognize the variety of work that staff do. (7)				,857	
I believe that teaching and research achievements are considered equally by promotion committees. (8)				,615	
I know what is expected of me in my role. (9)				,522	
<i>Research Fund</i>					
I have difficulties to find research funds. (6)					,860

For internal reliability of the factors, Cronbach’s alpha coefficient was calculated and reliability of the factors were 77,2%, 66,1%, 64,8% and 54,9%, respectively. Also, total reliability that explained five factors

was 75%. Therefore, the factors that affect job satisfaction were reliable.¹

2.4.2.3. Stepwise Regression Analysis

Stepwise regression analysis was used to determine the factors that affect the job satisfaction of academicians. Work environment, administrative workload, academic workload, promotion and evaluation and research fund for academic purposes were considered as the predictor variables. After the examination of the residuals, it was found that there was no data which was unsuitable. The significance level was taken as 0,05. The regression model below has been formed to test the effect of the all independent variables on the level of job satisfaction of academicians.

$$y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \beta_5x_5 + \epsilon^2$$

Table 4: Stepwise Regression Analysis Results of Job Satisfaction of Academicians

Predictor Variables	Nonstandard beta	Standard beta	T value	P
(Constant)	,874		35,779	,000
Work Environment	,095	,277	3,742	,000
Academic Workload	-,088	-,257	-3,470	,001
F=13,023; p=,000; R=0,377; R ² = 0,142				

Table 4 above demonstrates the stepwise regression analysis carried out to predict the job satisfaction of academics. The factors that affect the job satisfaction (work environment, administrative workload, academic workload, promotion and evaluation and research fund) explained 14,2% of the variance of the job satisfaction score. Work environment and academic workload variables were included in the model. When the F value in the table is looked at it is observed that

¹ Reliability coefficients which are between 40% and 60% show that the scale is reliable, and reliability coefficients which are between 60% and 80% show that the scale is quite reliable (Kalaycı, 2005).

² Model explains β_0 = Constant, y = Job satisfaction, x_1 = Work environment, x_2 = Administrative workload, x_3 = Academic workload, x_4 = Promotion and evaluation, x_5 = Research fund.

there was a meaningful relationship between the level of job satisfaction and work environment and academic workload variables ($p < 0,05$). The beta value in Table 4, expresses that work environment variable parameter affected in a positive direction the level of job satisfaction of academicians at significance level of $p < 0,05$ with the powerful beta coefficient such as 0,277 ($p < 0,05$). However, Table 4 shows that academic workload variable parameter affected in a negative direction the level of job satisfaction of academicians at significance level of $p < 0,05$ with the powerful beta coefficient such as 0,257 ($p < 0,05$). It can be seen that the most important predictors of job satisfaction scores were work environment and academic workload. In this context, the job satisfaction scores were found to increase as the level of work environment scores increase, but the job satisfaction scores were found to decrease as the level of academic workload scores increase.

2.4.2.4. Discrimination Analysis

In this section, how the job satisfaction levels of academics showed a discrimination between the work environment, administrative workload, academic workload, promotion and evaluation and research fund variables will try to be explained. For this purpose, the discriminate analysis was used which is one of the multi variables statistical techniques and aimed to apprise the relationships between the dependent variable and metric independent variables. As it is known, for the implementation of discriminate analysis and to obtain reliable results make necessary the realization of some hypothesis. Within this framework, first of all the correlation matrix related to the considered job satisfaction dimensions has been examined it is seen that the correlation coefficients were smaller than 0,70, depending on this, it is possible to reach the hypothesis that there is no multi linear relationship among the independent variables. After this, hypothesis was obtained, it was attempted to designate whether the group co variations were equal or not. In the situation which the group co variations are equal using the linear discriminate, in the situation which the group variations are not equal using the squared discriminate, the equality was established.

Our target is to put forth the probable effect of the job satisfaction levels to the the work environment, administrative workload, academic workload, promotion and evaluation and research fund variables. First of all, the job satisfaction has been taken in hand, the academics in the level of low (G1) and high (G2) have been dual classified. Because it was seen in the analysis made that the groups co

variation matrix was not equal (Box's $M=15,694$ $F=5,016$ $p=0,002$), being applied to squared discriminate this equality was established (Box's $M=1,912$ $F=1,876$ $p=0,171$). The F values show if there is a difference or not among the groups which were formed according to the academicians' job satisfaction levels on the significance level of 0,05. When the Table 5 is looked at, it will be seen that there are meaningful differences among the academician groups for factor 1 and factor 3 (work environment and academic workload).

In the structure matrix, correlation coefficient between the discriminate function which was formed the academicians' job satisfaction levels and work environment took the highest which is seen. Academic workload coefficient was the other meaningful coefficient which appear in the structure matrix. According to the table, to group the academicians according to their job satisfaction levels (low and high), factor 1 and 3 were the characteristic factors. The standardized canonic discriminate function coefficients have the same meaning as the coefficients which appear in the multi regression analysis. These coefficients show how independent variables contributed to the separation of the groups (how good estimator they are). In the classification which was made according to the levels of the academicians' job satisfaction, factor 1 and factor 3 were effective variables which are seen.

Group 1 and group 2 columns which appear in Table 5 show the Fisher discriminate function coefficients. Fisher linear discriminate function is aimed to grade the independent variables (the factors that affect the job satisfaction) depending on the scores. The coefficients here show how the factors that affect the job satisfaction contributed to the classification of the groups (how good estimator they are). The big coefficients appear in the column express the big contribution; the small coefficients express the small contribution. However, according to the Table it can be seen that work environment factor was the characteristic factor from the point of view of the academicians which have high job satisfaction (Group 2). Together with this, academic workload factor was the characteristic factor from the point of view of the academicians which have low job satisfaction (Group 1).

Table 5: Structure Matrix, Standardized Canonical Discriminant Function Coefficients and Fisher's Linear Discriminant Functions

Variables	Structure Matrix	Variables	1 Function	1 Group	2 Group
Work Environment (Factor 1)	,705	Work Environment (Factor 1)	,763	-,863	,127
Academic Workload (Factor 3)	-,650	Academic Workload (Factor 3)	-,712	,800	-,118
Administrative Workload (Factor 2)	-,057				
Promotion and Evaluation (Factor 4)	-,022				
Research Fund (Factor 5)	,004				
Constant		(Constant)		-2,645	-,150

Table 6 shows the meaningfulness level of the discriminate function which was formed according to the levels of academicians' job satisfaction. According to the table, the formed function was meaningful as statistical. The eigenvalue in the table expresses that 17,7% part of the variation in the dependent variables could be explained by function. And when the canonic correlation coefficient in the table is examined it is possible to say that the function could explain only the 15,05% of the difference between the groups. And also in the analysis which was made with Wilks Lambda (0,850) that the chi-square value in the 2 degree of freedom was meaningful as statistical can be seen (chi-square=23,604 $p < 0,01$).

Table 6: Eigenvalues and Wilks' Lambda

Function	Eigenvalue	Canonical Correlation	Wilks' Lambda	Chi-square	Df	Sig.
1	,177(a)	,388	,850	23,604	2	,000

a: First 1 canonical discriminant functions were used in the analysis.

The classification results which were made according to the levels of academicians' job satisfaction are presented in Table 7. In the classification which was made according to levels of academicians' job satisfaction; the 5,3% of 19 academicians which have a low job satisfaction level and 99,2% of 129 academicians which have a high job satisfaction level were appointed correctly. With the analysis made the correct classification rate was found as 87,2%. These results obtained show that the discriminating characteristic of discriminate function is in a high level.

Table 7: Classification Results

Predicted Group Membership					
Original	Count	Group	1	2	Total
		1	1	18	19
		2	1	128	129
	%	1	5,3	94,7	100,0
		2	,8	99,2	100,0

3. Discussion

Job satisfaction levels of academicians and the factors that affect job satisfaction levels of academicians were investigated in this study. The population for this study comprised of academicians from 78 universities in Turkey. But this study only comprised of academicians who have been working in accountant and finance sub-department in Faculties of Economics and Administrative Sciences. For the aim of the study, the questionnaire which consists of three parts (sociodemographic data form, "job satisfaction" scale and the "work and work environment" scale) sent to 400 academic staff through electronic mail. 160 academicians responded the questionnaires. The response rate was 40%. In the analysis of data, descriptive statistic, factor analysis, stepwise regression analysis and discriminant function analysis were used.

The percentage values of job satisfaction levels indicated that academicians were generally satisfied with their jobs as a whole. Addition to this, while accountant and finance academicians were satisfied with aspects of their jobs such as freedom, recognition, the variety in the job and responsibility, they were dissatisfied with aspects of their jobs such as pay and promotion.

The factor analysis of the 13 items which have possible effect on job satisfaction among academicians revealed five factors: Work environment, administrative workload, academic workload, promotion and evaluation and research fund. These five factors explained 68,12% of the total variance. After the factor analysis, stepwise regression analysis was employed to determine the predictors that affect job satisfaction levels of academicians. According to the result of the stepwise regression model, the factors that affect the job satisfaction (work environment, administrative workload, academic workload, promotion and evaluation and research fund) explained 14,2% of the variance of the job satisfaction score. There was a meaningful relationship between the level of job satisfaction and the work environment and academic workload factors ($p < 0,05$). Therefore, it can be said that job satisfaction scores increase as the levels of work environment scores increase. However the job satisfaction scores were found to increase as the level of academic workload scores decrease.

The study shows the probability of relationship among the changing job satisfaction levels and the factors that affect job satisfaction levels. The discriminate analysis which was done for this purpose put forth that the factors that affect job satisfaction levels can appear the academicians high and low job satisfaction. According to the academicians' job satisfaction levels discriminate function, from the point of the academicians which have high level of job satisfaction, work environment variable was determining factor. Together with this, academic workload variable was determining factor for the academicians which have a low level of job satisfaction. However, it can be said that in the circumstances that the academicians have high and low job satisfaction level, the other factors that affect job satisfaction don't have any determining effect on the separation of academicians groups.

Academicians do complex work in an increasingly demanding environment. Universities are the only organizations focused on dual core functions of knowledge creation and knowledge transmission through the processes of research and teaching. But academicians have faced some problems such as heavy teaching loads,

unsatisfactory reward structure, high number of students, budget concerns and insufficient research funds, low salaries and long working hours. These factors can affect the job satisfaction levels of academicians. An understanding of the factors involved in job satisfaction is crucial to improving the happiness and accomplishment of academicians. Also, determining job satisfaction factors relevant to academicians can lead to improvements and innovations in teaching and research. Job satisfaction has often been linked to organizational commitment, turnover intentions and absenteeism. These variables are costly to organizations, as they often lead to poor performance and high turnover. Therefore, determining and understanding of the factors that affect job satisfaction levels of academicians are important both academicians and administrators.

The results of this study carry important implications for university administrators or educators in Turkey. Academicians are generally satisfied with their jobs. While freedom, recognition and the variety in the job are the most satisfying elements of their job, salary and promotion are the most dissatisfying elements of their jobs. This finding may have an impact on performance, absenteeism and productivity for academicians. Therefore, salaries of academicians should be increased and promotion policy should be based on objective evaluations of performance. But, salaries of university members are based on the economic and political policies of the Turkish state. Therefore, maybe university administrators can not do anything directly for low satisfaction level from salary, but they can improve the promotion system. University administrators must ensure that performance evaluations are fair and free of bias. Promotions based on merit and performance evaluations will be perceived by academicians as being fair and equitable and would enhance performance, give a greater degree of job satisfaction and, ultimately, lead to higher productivity and commitment. However, the other job dimensions such as work environment, freedom, responsibility, recognition and relationships are very important as well as salary and promotion. As a consequence, university administrators are aware of job satisfaction, they identify the variables that contribute to job satisfaction (or dissatisfaction) and they are concerned with ways of improving job satisfaction level of academicians. The studies related to job satisfaction among academicians can help and guide to university administrators.

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