

The impact of age on the job satisfaction of Turkish academicians

Türker BAŞ*

Kadir ARDIÇ**

ABSTRACT

The aim of this study is to investigate the differences in the levels of Turkish academicians' job satisfaction according to age. Data were obtained from 831 academicians in 26 Universities in Turkey. A total of 346 responses were received, giving a response rate of 41,6 percent. The following conclusions are made: (a) there is positive linear relationship between age and job satisfaction, (b) the effect of rank on job satisfaction is not as strong as one might expect, (c) women tend to be slightly more satisfied in their careers than their male counterparts.

Introduction

Job satisfaction is a heavily researched area of inquiry. Campbell *et.al.* estimated that, as of 1976, the academic literature on job satisfaction encompasses something in excess of 3000 independent studies (Wright & Hemilton, 1978). In a more recent estimate, Oshagbami (1996) suggested that if a count of relevant articles and dissertations were made Campbell's estimate would probably be doubled. However, it is a concept, which is still surrounded by controversy, because much of the literature is inconclusive in nature. It is not surprising, therefore, that the authors were unable to find many robust definitions of job satisfaction. Nevertheless, some form of definitive framework is necessary in order to introduce the concept in the context of this study. Many writers such as Fincham and Rhodes (1988), Mobley *et al.* (1979), Graunberg (1979) draw on Locke's definition of job satisfaction: "...a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (1976, 1300). There are, of course, a few but largely unimportant differences to the general construct. Wanous and Lawler (1972, 95-105) discussed these variations. In general, we can say that, job satisfaction refers to an individual's positive emotional reactions to a particular job. It is affective

* Dr. Turkish Armed Forces, Mardin

** Dr. Gazi Osman Paşa University, Tokat

reaction to a job that results from the person's comparison of actual outcomes with those that are desired, anticipated or deserved.

The topic of job satisfaction is important, because of its job related implications for job related behaviors such as productivity, absenteeism or turnover. Research findings suggest that productivity would increase with job satisfaction (Wright&Crapanzano, 1997; Wagner&Gooding, 1987; Griffin,1981; Ruch&Heshauer, 1975). Consistent with this thinking, a negative relationship between job satisfaction and turnover has been reported by several researchers (Trevor, 2001; Lambert *et al.*,2001 ; Currivan, 1999 ; Shaw, 1999 ; Sommers, 1996 ; Locke, 1976; Karp *et al.*, 1973;Wild & Hill, 1970). Other researchers have also reported the same negative relationship between job satisfaction and absenteeism (Porters and Steers, 1973; Dittrich & Carrell, 1976; Bardo & Ross, 1982; Scott and Taylor, 1985; Maurice, 1998). Therefore it appears to manage productivity, turnover and absenteeism among other correlates of job satisfaction, organizations need to understand the factors affecting employee job satisfaction. This situation of relative importance of this subject prompted the present study and we believe that more studies on job satisfaction justified.

Literature review

Empirical research endeavors have found a U-shaped or a positive linear relationship between employee age and job satisfaction. That is, the employee becomes more satisfied with his job as his chronological age progresses or his job satisfaction decreases initially and then increases with age.

Herzberg *et al.* (1957) was among to first to report the U-shaped relationship between age and job satisfaction. Based on an extensive literature review, Herzberg and colleagues suggested that while morale is high among young workers, it tends to go down during the first few years of employment. The low point is reached when workers are in their middle and late twenties or early thirties. After this period, satisfaction steadily climbs with age. Handyside (1961) investigated the relationship between age and job satisfaction using data on the overall satisfaction of 1000 British men and women, and his findings supported U-shaped relationship. This general pattern also reported more recently by Warr (1992). According to these authors, in the first years of employment, new entrants feeling positively about their positions. But during subsequent years, perception of decreasing opportunities and increasing boredom has lead to some reduction in job satisfaction. When a person move into positions, which have more desirable characteristics a subsequent increase in job satisfaction, observed.

Hulin & Smith (1965) examined the worker satisfaction at organizational levels and tested Herzberg and his colleagues' U-shaped hypothesis. His findings showed that linear model best explain the effect of age on job satisfaction. According to Hulin & Smith the positive relationship was due to individual's ability to better adjust his expectations to what to job environment provides. The longer an individual has been in a particular environment, the more accurately he can predict and avoid frustration, and the closer the workers expectations and return, the higher the satisfaction level. Selah & Otis (1964) found positive linear relationship between age and job satisfaction of managers until their pre-retirement years. Quinn & Steins (1979) presented US Quality of Employment Survey results, which were gathered in 1969, 1973, and 1977 respectively. Except 1977, respondents below 20 reported the lowest job satisfaction. Weaver (1980) did similar investigation using general Social Survey results between 1972 and 1978 in the United States and he reported positive linear relationship in all years except 1974. Herman et al. (1980) and Sweeny (1982) found that older teachers were more satisfied with their jobs than were younger teachers. In a more recent study Hickson and Oshagbami (1999) examined the effect of age on the satisfaction of academicians with teaching and research separately. Their results surprisingly indicated that age has quite different effect on academic teaching staff from on academic research staff. The results for teaching satisfaction indicated that job satisfaction decreases with age but at a decreasing rate. On the other hand, the results for research satisfaction indicated positive linear relationship between age and job satisfaction.

But whatever the relationship is, the presence of particularly high job satisfaction among older employees appears to be generally accepted. Clark et al. (1996) has presented six arguments to account for this tendency. First he suggested that there was an influence for job change. Older workers possess more seniority and work experience, which enable them to move into more rewarding, attractive and satisfying jobs. Second, he suggested that older employees have specific work values, which make more attractive job characteristics that are less desirable to young people. Consistent with Wright & Hamilton (1978) and Kalleberg & Loscocco's (1983) studies he claimed that the rated importance of many job features stable across ages, but that income and promotion opportunities were less of concern to older employees. Third, grinding down was suggested as an explanation. Older workers come to lower their expectations in some respects. If an older people come to seek less from any possible job, then comparative assessments of their own position relative to other possibilities will give rise to more positive feelings about their own job. Forth he suggested that cohort differences might have an influence. That is, younger workers place significantly greater importance on intrinsic rewards like interesting and challenging jobs compared to older workers who are more concerned with

extrinsic rewards such as pay and fringe benefits. Hence, younger workers are more dissatisfied than older workers simply because they demand more than their jobs can provide. Fifth, he suggested that observed differences between age groups might be accounted for by varying rates of participation in the labor force. According to him, older employees somewhat less representative of their age group in comparison with younger ones; it is possible that, through greater self-selection into the sample, they have more positive work attitudes than those who are no longer employed. Sixth non-job variations explained as an explanation. It is possible that job satisfaction scores in part reflect context-free variations in mental health, which are not restricted to feelings about a job. Besides these explanations, the theory of accommodation was suggested by Mottaz (1984). According to him after having stayed in their jobs for some time, workers tend to adjust their work values to the conditions of the workplace, resulting in greater job satisfaction.

This study explores whether such general findings are applicable in Turkish academia. If so, the study will explore the reasons of age variations in job satisfaction of academicians. Beside overall satisfaction, it will examine the affects of age on satisfaction with pay (an aspect of extrinsic satisfaction) and satisfaction with job itself (an aspect of intrinsic motivation).

Research methodology

A questionnaire survey was conducted in August 2000. The population for this study comprised teachers from 26 universities in Turkey. The universities were selected to include sample institutions from all the regions of the country. Subjects were 346 university teachers who responded to a questionnaire on job satisfaction. These represent 41,6 percent of possible respondents who were randomly selected from universities web pages.

To measure the job satisfaction of university teachers, a questionnaire including 61 items about ten basic job satisfaction dimensions and some demographic questions were constructed. The job satisfaction dimensions are:

- (1) academic environment (18 items);
- (2) supervision/supervisor behaviour (8 items);
- (3) co-workers' behaviour (5 items);
- (4) job itself (7 items);
- (5) physical conditions/working facilities (7 items);
- (6) present pay (3 items);

- (7) teaching and research (5 items);
- (8) job guarantee (2 items);
- (9) freedom (4 items);
- (10) administrative duties (2 items);

Respondents were asked to check their responses these ten major job satisfaction dimensions, which were placed on a five point Likert type scale of measurement weighted as follows: 1 = "Completely satisfied, i.e. very much supporting the case described", 2 = "Satisfied, i.e. feeling all right with the case described", 3 = "Indifferent, i.e. uncertain with the case", 4 = "Unsatisfied, i.e. not satisfied with the case described", 5 = "Completely unsatisfied, i.e. very much dissatisfied with the case described".

The criteria were equally weighted and quantitative values were attached to the responses in the questionnaire. The means of responses were computed for each satisfaction dimension and by taking grand average of these means overall satisfaction score is found. And then, we examine the results for job satisfaction by testing the relationship between age and satisfaction with pay, age and satisfaction with job itself and age and overall satisfaction of academicians. We also take account effects of rank on satisfaction. To test this effect we regress overall these three constructs against age and rank. Since there was more than one explanatory variable, the null and alternative hypothesis set up as follows:

$H_0: \beta_1 = \beta_2 = 0$ (There is no linear relationship between job satisfaction and age or rank).

$H_1: \text{At least one } \beta_j \neq 0$ (At least one regression coefficient - age or rank is not equal to zero).

The null hypothesis tested with F test and the contribution of rank is determined by using *partial F test criterion*. To apply *partial F test criterion*, we evaluated the contribution rank after age had been included in the model. So the null and alternative hypothesis to test for contribution of rank to the model would be:

H_0 : Rank does not significantly improve the model once variable age has been included.

H_1 : Rank significantly improves the model once variable age has been included.

Background of respondents

Table I shows a breakdown of the university teachers who responded to our

questionnaire. The Table shows the distribution of respondents' age, rank, sex, length of service in present university, and their leadership or management responsibilities.

94 The distribution of the length of service spent in current universities on Table I shows that respondents included relative newcomers who had spent less than five years (about 38 percent) to academicians who had spent more than 15 years in the university system (about 17 percent). As would be expected, perhaps, a large percentage of workers (almost 44 percent) fall in between the newcomers, and the academicians whose service had been for a much longer period.

Table I. Background of respondents

		Percentage
<i>Age</i>		
30-39		49.2
40-49		25.9
50-59		18.1
60 + years		6.8
<i>Rank</i>		
Lecturer		55.8
Senior Lecturer		22.6
Professor		21.6
<i>Sex</i>		
Male		77.8
Female		22.2
<i>Length of service in present university</i>		
Less than 5 years		38.3
5-10		24.8
11-15		19.5
15+		17.4
<i>Leadership or management responsibility</i>		
Head, Director, Dean, Provost, etc.		15.4
Holding other managerial posts		13.5
Not currently in charge of academic unit or group.		71.1

Table I also shows that the majority of the respondents were lecturer as expected (about 56 percent). Only about 22.2 percent of the respondents were females. However, considering the estimated proportion of females in the academic staff, the percentage of those who responded to our questionnaire can be considered slightly low. It was observed from the results of the data analyses, that majority of respondents were between 36-45 years of age. It was further observed that the percentage of respondents who were less than 35 years old was about the same percentage of those who were older than 46 years. About 15 percent of the respondents held managerial posts as head of department or division, director of school, dean of faculty, provost or head of unit, e.g. an institute or center. The percentage of those who held other management posts, such as year tutor, chairperson of a research group, project coordinator, director of undergraduate programs, etc. was about 14 percent.

Overall satisfaction with aspects of the job

Table II summarizes the mean scores of respondents' ratings on the satisfaction or dissatisfaction derived from aspects of their jobs and the percentages of respondents who were satisfied, dissatisfied, or indifferent to aspects of their jobs. Ten aspects of the job are identified, and the mean scores for each aspect of the job ranges from 4.14 for co-worker behaviour to 2.36 for job security. It can be observed from the Table that there is a high correlation between the mean scores of respondents and the percentages of respondents who were satisfied or dissatisfied with aspects of their jobs.

The academicians appear to be generally satisfied with their jobs with mean scores in five out of ten identified aspects of the job greater than 3.5. More than 50 per cent of the respondents also indicated that they were satisfied with each of the following six aspects of their jobs - supervision/supervisor behavior, co-workers behavior, job itself, teaching and research, freedom and administrative duties. In fact, with co-workers behavior, the percentage of the respondents who were satisfied was as high as about 85 percent.

However, there are aspects of the university teachers' jobs where the respondents indicated that they were not satisfied - present pay and job security. On each of these aspects of their jobs, the mean score was less than 3.0. On present pay, the percentage of the respondents who were satisfied was only about 28 while 52 percent expressed dissatisfaction. Almost one out of every five respondents indicated indifference. It would appear that university teachers are least

satisfied with job security. The mean score of respondents was less than 2.4. In addition, more than 55 percent of the respondents indicated that they were dissatisfied with job security, while less than 22 percent expressed satisfaction with this aspect of their job.

Table II. Some statistics on respondents' satisfaction or dissatisfaction with aspects of their jobs.

Aspect of job	Mean score	Percentage satisfied ^a	Percentage dissatisfied ^b	Percentage indifferent ^c
Academic environment	3.199	37.9	24.7	37.4
Supervision/supervisor behavior	3.594	57.9	21.7	20.4
Co-workers behavior	4.149	84.6	5.2	10.2
Job itself	3.871	72.4	4.9	22.7
Physical conditions/working facilities	3.251	42.3	21.4	36.3
Present pay	2.692	28.6	51.8	19.6
Teaching and research	4.015	75.6	4.3	20.1
Job security	2.360	21.7	56.8	21.5
Freedom	3.345	49.7	19.1	31.2
Administrative duties	3.915	77.4	10.3	12.3

Note: ^a Incorporates respondents whose satisfaction score ≥ 3.5 ; ^b incorporates respondents whose satisfaction score ≤ 2.5 .

While it would probably be true to say that academicians appear to be generally satisfied with their jobs, the information on Table II shows aspects of their jobs with which they are dissatisfied. An appropriate summary would therefore, perhaps, be that overall, academicians enjoy only a moderately high level of job satisfaction.

Nevertheless, our research findings imply that overall measures of job satisfaction should, perhaps, always be accepted with some caution, as they may be deceptive or they may hide some important information. In addition, according to Oshagbami (1997), while general measures of job satisfaction are very useful for comparing the satisfaction of workers at different times, in different occupations, at different levels of hierarchy, and in different demographic groups, they may be problematic in providing correct estimates of absolute levels of satisfaction.

Comparison of job satisfaction levels

Table III shows the distribution of the three forms of job satisfaction for different age groups of academicians, in terms of the percentage of respondents who are "highly satisfied" (reporting the two highest satisfaction scores of 4 or 5). The first three columns show the pattern for intrinsic job satisfaction, using data about satisfaction with job itself. Column 1 shows that 44,07 percent of the youngest age group are overall highly satisfied; this percentage linearly increases to its maximum of 76,19 at 60 years and above. The same linear pattern is present in data for men. But the proportion of women highly satisfied with their job drops after 30-39 years, from 51,35 to 47,05, before increasing in later decades.

Columns 4 to 6 repeat these analyses for extrinsic job satisfaction, namely satisfaction with pay. Curvilinear, U-shaped pattern is present in all data for satisfaction with pay, but it is particularly strong in the results from male respondents. The proportion of men highly satisfied with pay drops substantially after 30-39 years, before increasing later decades.

Table III. Age and three forms of job satisfaction. Percentage of academics who are "highly satisfied".

	Satisfaction With Job Itself			Satisfaction With Pay			Overall Job Satisfaction		
	All	Men	Women	All	Men	Women	All	Men	Women
30-39 years	44,07	41,73	51,35	23,68	28,69	8,1	12,5	11,3	16,21
40-49 years	50	50,79	47,05	17,5	20,63	5,8	16,25	14,28	23,52
50-59 years	53,57	50,98	80	37,5	33,33	80	25	23,52	40
60 + years	76,19	73,68	100	42,85	36,84	100	38,09	36,84	50
All ages	49,51	48,38	54,09	25,89	28,22	16,39	17,47	16,53	21,31
N	351	249	62	354	251	62	349	248	61

Finally the last three columns show the results of overall satisfaction, which takes into account other eight satisfaction dimensions beside satisfaction with job itself and satisfaction with pay. For all three columns, there is a strong positive linear relationship between age and overall job satisfaction, when the latter is indexed in terms of "highly satisfied" responses.

The percentages in Table III are helpful in summarizing one extreme aspect of the distribution of scores: the percentages who are "highly satisfied". However, proper tests of the relationships between age and satisfaction need to be based on the full distribution of responses rather than merely on extreme

scores. The complete distribution of scores will therefore be used in formal significance tests of linear components of age relationship. These tests will also control for rank.

98 Thus the results of our tests for satisfaction with pay, satisfaction with job itself and overall satisfaction are reported in Table IV. Rank is included in third equation as a control variable. The explanatory power for each equation, as measured by the R^2 and the overall goodness of fit for each equation, as measured by the F statistic is reported at the end of the appropriate row.

Table IV. Equations for satisfaction with age

		Age	Rank	R^2	F	N
Overall	Equation 1	1,71E-02* (4,643)		0,066	21,553	309
	Equation 2		0,110 (2,441)	0,16	5,960	309
	Equation 3	1,87E-02* (3,943)	3,046E-02 (0,537)	0,066	10,896	309
Present pay	Equation 4	2,63E-02* (3,308)		0,034	10,945	309
Job itself	Equation 5	1,22E-02* (3,166)		0,31	9,710	309
Notes: * = denotes a 99 per cent confidence level reached						

As can be noted easily from Table IV, all our regressions except Equation 2 fit criterion at the 99 percent confidence level. So we can say that, there is strong positive linear relationship between age and job satisfaction. From the parameter signs in Equation 1, we note that overall satisfaction increases with age. The result continues to hold again for Equation 4 and Equation 5 respectively. The parameter for rank in Equation 2 is also has a positive sign, which means overall satisfaction decreases with rank. However since this parameter estimate is not significant, we can't make confident claims.

To determine the whether rank significantly improves model after age has been included (Equation 3), we used partial F test criterion and results are given in Table VI. Since there are 1 and 308 degrees of freedom respectively, if a level

of 0,01 is selected, the critical value for F will be 6,63. Since the computed F value is smaller than critical F value ($0,287 < 6,63$), we can conclude that the addition of rank does not improves the model.

Table VI. ANOVA table dividing the regression sum of squares into components to determine the contribution of rank.

Source	df	Sums of Squares	Mean Square	F
Regression	2	8,629	4,315	
$\left. \begin{array}{l} \text{Age} \\ \text{Rank} \text{Age} \end{array} \right\}$	$\left. \begin{array}{l} 1 \\ 1 \end{array} \right\}$	$\left. \begin{array}{l} 8,515 \\ 0,114 \end{array} \right\}$	8,515	
			2,472	0,287
Error	306	121,169	MSE = 0,396	
Total	308	129,798		

Summary and conclusions

The primary focus of this paper is on the affect of age on academic job satisfaction. For this, we investigated findings in respect of satisfaction with pay (an aspect of extrinsic satisfaction), satisfaction with job itself (an aspect of intrinsic satisfaction) and overall satisfaction (aggregate of ten satisfaction constructs). Our results indicate that job satisfaction linearly increases with age. Although percentages of highly satisfied academicians on satisfaction with pay go down during the first years of employment, this U-shaped pattern disappeared when all respondents were taken into account.

The contribution of rank, which is reported in Table VI, indicates that addition of rank does not improve model. So we can conclude that rank doesn't have significant influence on job satisfaction. This finding is contradictory to Clark *et al.*' view, which was older people move into more desirable jobs and as a result of this they might be expected to be more satisfied. But Clark *et al.*' thesis about observed differences between age groups might be accounted for by varying rates of participation in the labor force is valid for our research. It is evident that older academicians are less representative of their age group in com-

parison with younger ones, as the information from Table I, where less than 25 percent of academicians are above 40, suggests. So we can say that through greater self-satisfaction into the sample, old people may have more positive attitudes than those who are no longer employed. Our findings also suggest that women tend to be slightly more satisfied in their career than males. However since our parameter estimates about gender are not significant we can't make confident claims. Furthermore, there may be both a cohort effect and an age profile effect mixed together. This issue is left for future study.

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