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# Determinants of Job Satisfaction of Accounting Professionals in Tunisia

*Lassaad Abdelmoula and Sami Boudabbous*

## Abstract

This study aims to identify the factors that affect the job satisfaction of professional accountants. It examines the relative effects of intrinsic and extrinsic factors on job satisfaction among accounting professionals. Our methodology was applied to 232 accounting professionals working in Tunisia. The methods of data analysis are principal component analysis (PCA) and multiple regression. The results show that intrinsic and extrinsic factors have a positive and significant effect on job satisfaction. However, promotion, growth and recognition do not have effect on job satisfaction.

**Keywords:** job satisfaction, intrinsic factors, extrinsic factors, achievement, promotion, the work itself, recognition, growth, salary, relationship with the supervisor and co-workers, working conditions, the company policy, accounting professionals

## 1. Introduction

The specific attitude of employees to job satisfaction is of major interest in the field of organizational behavior and human resource management practice today [1]. This interest stems from the belief that satisfied employees are more productive than those who are dissatisfied. An employee with a high level of job satisfaction has a positive attitude toward the job, while one who is dissatisfied with his job has a negative attitude toward the job [2]. Indeed, job satisfaction is defined as an affective or emotional response to various facets of one's job. This definition means that job satisfaction is not a unitary concept: an individual can be relatively satisfied with one aspect of their job and dissatisfied with one or more others [3].

Job satisfaction is defined as "a pleasant or positive emotional state resulting from the evaluation of one's work or professional experience" [4]. Workers do their jobs in defined areas and assess the environment according to their values. When the experience in the work environment is consistent with an employee's values, the employee expresses satisfaction with the job [4, 5].

The drivers of job satisfaction have been a controversial topic in previous literature [6]. Several studies have treated them, but the results are mixed. Most of these studies focused on various professions, such as teachers [7], doctors [8], nurses [9], and employees in general [10]. However, the results of these studies cannot be applied to the accounting profession in which very little research has been done. Therefore, the objective of our study is to fill this gap by studying the job satisfaction of accounting professionals in the Tunisian context.

The theory of [11] identified several determinants of satisfaction at work, namely achievement, promotion, the work itself, growth, recognition company policies, relationship with supervisor and co-workers, working conditions, and salary.

The objective of this study is to identify the factors affecting job satisfaction in Tunisia. Specifically, the study examines the relative effects of intrinsic and extrinsic factors on job satisfaction among accounting professionals.

The rest of the article is structured as follows. The following section presents a brief review of the literature on the determinants of job satisfaction. Subsequently, the method section describes the sampling method and the steps followed to develop the study instrument. The following analysis section presents the results of the study.

## 2. Literature review and hypotheses development

Relatively few studies have used Herzberg's theory to examine the job satisfaction of employees in the field of public administration [12]. Herzberg et al. [11] proposed motivating factors related to job satisfaction (intrinsic factors), such as success, recognition, advancement or promotion, work itself and responsibility, and hygiene factors (extrinsic factors), including company policy, job safety, relationship with supervisor, salary, peer relations and working conditions. According to [11], the absence of motivating factors does not necessarily lead to job dissatisfaction, and the preferred level of hygiene factors does not necessarily result in job satisfaction.

According to [11] the absence of motivating factors does not necessarily lead to job dissatisfaction, and the preferred level of hygiene factors does not necessarily result in job satisfaction.

Therefore, job satisfaction and dissatisfaction are not elements of a single continuum, hence the following hypotheses:

Hypothesis 1: Intrinsic factors have a positive and significant effect on the job satisfaction of professional accountants, hence the following hypotheses:

Hypothesis 2: Extrinsic factors have a positive and significant effect on the job satisfaction of professional accountants.

Some sub-hypotheses corresponding to variables of these factors are stated in what follows:

### 2.1 The intrinsic job satisfaction factors

#### 2.1.1 Achievement

Hur and Herzberg [12, 13] associated achievement with the feeling of success in performing a task or solving a problem. There is a significant relationship between extrinsic factors and the job satisfaction of accounting professionals. Employees who demonstrate a strong success orientation tend to work long hours accepting difficult tasks and demonstrating an ongoing commitment to doing whatever is necessary to achieve optimal results [6, 14]. In the same vein, many researchers [7, 15, 16] affirm the link between success and job satisfaction and believe that job satisfaction is an essential element that stimulates and encourages employees to achieve better results.

In this regard, we propose the following hypothesis:

Hypothesis 1-1: There is a positive and significant relationship between achievement and job satisfaction of accounting professionals.

### *2.1.2 Advancement or promotion*

Malik et al. [17] argue that the remuneration and promotion contribute to job satisfaction. It can be concluded that employers could meet the needs of employees not only from the point of view of safety and social needs, but also physiological needs. Noor et al. [18] prove that job promotion and job advancement have a positive relationship with job satisfaction.

Similarly [19–21], revealed that promotion opportunity is a central factor in determining employee job satisfaction.

Hence, the following hypothesis:

Hypothesis 1-2: Promotion has a positive and significant effect on job satisfaction of accounting professionals.

### *2.1.3 The work itself*

Work itself as a determinant of job satisfaction includes certain aspects, such as control over the method and pace of work, the use of skills and abilities and variety. People take pleasure in successfully coping with their environment. The use of valued skills and abilities gives workers a sense of pride, competence and self-confidence. Specialization and repetitiveness lead to consistency with job satisfaction.

According to [22], moderate stimulation provides great satisfaction to the worker [10, 23], showed that the work itself affects job satisfaction.

In this context, we formulate the following hypothesis:

Hypothesis 1-3: The work itself has a positive and significant effect on job satisfaction of accounting professionals.

### *2.1.4 Recognition*

Canlan and Still [24] suggest that burnout was associated with lower job satisfaction and higher job satisfaction was associated with rewards (remuneration and recognition) as well as cognitively challenging work.

Imran et al. [25–27] assert a positive correlation between recognition and employee job satisfaction.

Let us propose the following hypothesis:

Hypothesis 1-4: The recognition has a positive and significant effect on job satisfaction of accounting professionals.

### *2.1.5 Growth*

According to [28], employee job satisfaction is affected by several factors, some of which are intrinsic in nature, such as self-esteem, personal growth, accomplishment, and employee readiness.

Indeed, many previous studies, such as [29–32], concluded that growth contributes to job satisfaction.

Let us, therefore, pose the following hypothesis:

Hypothesis 1-5: The growth has a positive and significant effect on job satisfaction of accounting professionals.

## 2.2 The extrinsic job satisfaction factors

### 2.2.1 Salary

Salary is one of the basic elements used to motivate employees in a company. It helps in increasing workers' performance and productivity. Yong Yew et al. [9, 33–36] emphasized that salary is significantly correlated with job satisfaction. However, poor compensation will have negative effects on job satisfaction [37].

Nonetheless [38], showed that salary increases are directly related to decreased satisfaction.

From what has been advanced, the following hypothesis can be set:

Hypothesis 2-1: There is a positive and significant relationship between salary and job satisfaction of accounting professionals.

### 2.2.2 Relationship with the supervisor and co-workers

For [39], the determinants of job satisfaction show that people have emotions toward all or certain aspects of their work, such as the relationship with colleagues and co-workers. Many previous studies (e.g., [8, 40–44] have shown that the level of satisfaction from the work is closely correlated with the relationship with the supervisor and co-workers.

Hence, the following hypothesis:

Hypothesis 2-2: The relationship with the supervisor and co-workers have a positive and significant effect on job satisfaction of accounting professionals.

### 2.2.3 Working conditions

Khalifa and Truong [32] state that working conditions would not lead to an improvement in employee job satisfaction. However [22], find that “lone workers disliked their jobs and cited social isolation as the main reason”. The absence of such working conditions, among others, can have a negative impact on the mental and physical well-being of the worker [45]. Likewise [2, 46, 47], proved that working conditions are an essential factor in job satisfaction.

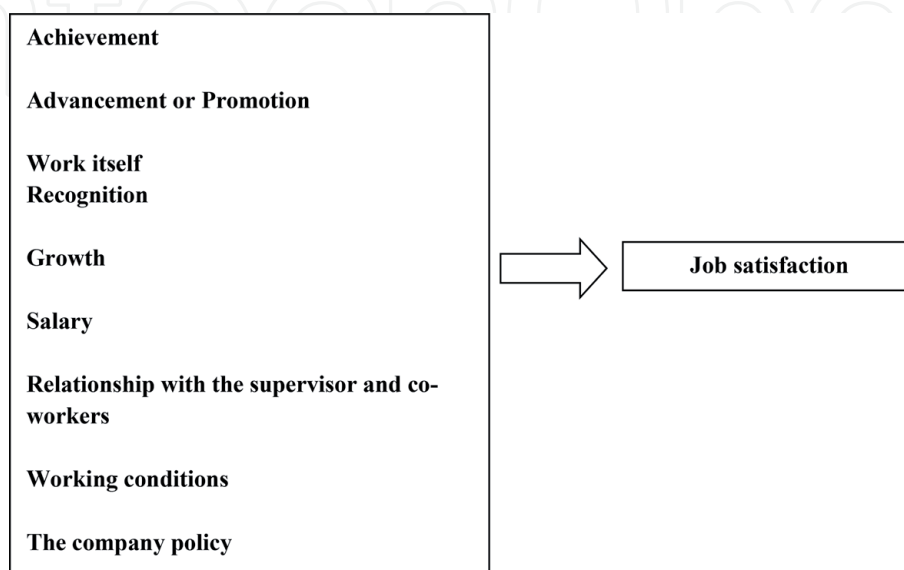


Figure 1.  
The research model.

Indeed, employees prefer pleasant working conditions because they facilitate work efficiency. The right tools and equipment help employees achieve their work goals [4]. In this regard, we propose the following hypothesis:

Hypothesis 2-3: Working conditions have a positive and significant effect on job satisfaction of accounting professionals.

#### 2.2.4 The company policy

Locke et al. [4, 48, 49] emphasize that company policy contributes to job satisfaction and dissatisfaction. Holmberg et al. [50–54] showed that the company policy affects satisfaction.

Hence, the following hypothesis:

Hypothesis 2-4: Company policy has a positive and significant effect on job satisfaction of accounting professionals.

Our research model is illustrated in **Figure 1**.

### 3. Research methodology

#### 3.1 Methods of data collection

This research was entirely based on the answers received from 232 accounting professionals in Tunisia. In fact, out of 250 respondents, 232 accounting professionals were selected. Two administration methods: face-to-face and internet surveys were chosen in this work.

#### 3.2 Measurement of the variables

**Table 1** shows the measurements of the variables.

#### 3.3 Data analysis method

The methods of data analysis are principal component analysis (PCA) and multiple regression. The former is used to analyze the relationship between quantitative

Variables	Measurements	Authors
Job satisfaction factors	Achievement (3 items)	[48]
	Advancement/promotion (2 items)	
	Work itself (3 items)	
	Recognition (3 items)	
	Growth (3 items)	
	Company policy: (3 items)	
	Relationship with supervisor and peers (6 items)	
	Salary (2 items)	
	Working conditions: (3 items)	
Job satisfaction	4 items	[48]

**Table 1.**  
*Measurement of the variables.*

data. It is the most used among the descriptive methods for cleansing and validation of scales. It is conducted on mean-centered data. The variables then have the same variability and have the same influence in the calculation of the distance between the individuals. It reveals a factorial structure through which the components identified are related to items.

It should be recalled that for the study of the validation of the research hypotheses, we chose the methods appropriate to the reference samples. Thus, we resorted to the multiple regression tests.

## 4. Results and discussion

### 4.1 PCA

#### 4.1.1 *The intrinsic determinants of job satisfaction*

From the 14 selected items, the factorial analysis highlighted a solution of five factors. The value of Kaiser – Mayer – Olkin (KMO) is 0.847, the anti-image correlation matrix, and the significance of Bartlett's sphericity test at the 1% threshold invite us to continue the analysis. The total explained variance is 74.8%, and the lowest factorial weight is 0.445. As a result, according to the scree-test and the Kaiser criterion, the PCA confirms a multidimensional structure with five factors [55, 56].

The determinant "Achievement" represents the first factorial axis which accounts for 29.2% of the total variance explained. However, "Advancement", which explains 15.7% of the total variance explained, is the second factorial axis. The variance explained by the determinant "Work itself" is 14.4% of the total variance explained. The fourth factorial axis, "Recognition", accounts for 12.8% of the total variance explained. Finally, the determinants related to "Growth" explains 12.7% of the total variance explained.

To confirm the consistency of each of these dimensions, we performed the Cronbach's alpha test. **Table 2** shows that the reliability coefficient  $\alpha$  is slightly higher than the selected threshold (0.8799122); it is all the more acceptable because this scale is exploratory.

#### 4.1.2 *Extrinsic determinants of satisfaction*

A first PCA based on the covariance matrix, on the 14 items, is launched without specifying the number of axes requested. According to the Kaiser criterion (eigenvalue greater than 1), five factors are extracted and allow to resituate 74.8% of the total variance. The results of the anti-image correlation matrix indicate that not all items are presented by two diagonally opposite points, and this indicates that they are not linked by a strong correlation, and therefore no item is duplicated. Furthermore, the factor analysis conducted on the 14 items shows that the first factorial axis is the "relationship with supervisor and colleagues", which explains 22.3% of the total variance explained. The second is the "company policy", explaining 19.4% of the total variance explained. The "working conditions" is the third factorial axis accounting for 16.1% of the total variance explained, and "Salary" is the fourth factorial axis explaining 11.9% of the total variance explained (**Table 3**).

#### 4.1.3 *Job satisfaction*

To study the factor structure of job satisfaction, we used the KMO and Bartlett tests. The value of KMO which is of the order of 0.72284, the examination of the

Items	Fact 1	Fact 2	Fact 3	Fact 4	Fact 5
I am proud to work in this company because it recognizes my achievements	<b>0.535</b>	0.062	0.043	0.013	-0.06
I feel satisfied with my job because it gives me a feeling of accomplishment	<b>0.464</b>	0.011	-0.08	-0.038	-0.113
I feel I have contributed to my firm in a positive manner	<b>0.445</b>	0.172	0.033	0.038	-0.012
I will choose career advancement rather than monetary incentives	0.025	0.155	0.061	-0.04	<b>0.775</b>
My job allows me to learn new skills for career advancement	0.167	0.157	0.009	0.07	<b>0.657</b>
My work is thrilling and I do diverse tasks	-0.140	-0.024	<b>0.751</b>	-0.02	-0.019
I am empowered enough to do my job	-0.026	0.107	<b>0.610</b>	-0.04	-0.079
My job is challenging and exciting	-0.071	0.092	<b>0.808</b>	-0.08	-0.014
I feel appreciated when I achieve or complete a task	-0.113	0.031	-0.131	<b>0.725</b>	0.212
My manager always thanks me for a well-done job	-0.143	-0.054	0.031	<b>0.568</b>	0.228
I receive adequate recognition for doing my job well	-0.013	-0.284	-0.089	<b>0.435</b>	-0.162
I am proud to work in my company because I feel I have grown as a person	-0.074	<b>0.642</b>	0.023	-0.14	-0.031
My job allows me to grow and develop as a person	-0.022	<b>0.746</b>	0.046	-0.18	0.048
My job allows me to improve my experience, skills, and performance	-0.019	<b>0.677</b>	-0.083	-0.07	-0.018
Variance explained	19.2	15.7	14.4	12.8	12.7
Eigenvalue	3.4578	2.8307	2.5961	2.309	2.277
Total variance	74.8%				
KMO	0.847				
Bartlett (p-value)	19.325 (0.000)				
Cronbach 's alpha	0.8799122				

**Table 2.**  
 PCA of intrinsic determinants (standardized Varimax).

anti-image matrix of correlations, and the significance of Bartlett's sphericity test at the threshold of 0.01 invite us to continue the analysis. The factorial structure obtained is satisfactory and explains 89.36% of the results. The lowest factorial score is 0.599 (**Table 4**).

To properly analyze the joint link between intrinsic and extrinsic determinants and job satisfaction, we used a multiple regression [57].

#### 4.2 Analysis and discussion of multiple regression results

To test the validity of our nine research hypotheses, we chose modeling the job satisfaction of accounting professionals using the Fully Modified Ordinary Least Square (FMOLS) approach, which allows us to estimate a set of relationships by taking into account the problem of the autocorrelation of errors and the presence of omitted variables [57].



Items	Fact 1	Fact 2	Fact 3	Fact 4
The attitude of the administration is very accommodative in my firm	0.142	<b>0.766</b>	0.05	-0.04
I am proud to work for this firm because the company policy is favorable for its workers	0.126	<b>0.893</b>	0.052	0.138
I completely understand the mission of my firm	0.174	<b>0.515</b>	0.186	0.138
I feel my performance has improved because of the support from my supervisor	<b>0.754</b>	0.003	-0.65	0.132
I feel satisfied at work because of my relationship with my supervisor	<b>0.607</b>	0.122	0.059	0.069
My supervisors are strong and trustworthy leaders	<b>0.504</b>	0.011	0.099	0.073
It is easy to get along with my colleagues	<b>0.773</b>	0.093	0.531	0.160
My colleagues are helpful and friendly	<b>0.696</b>	0.149	0.057	0.055
Colleagues are important to me	<b>0.797</b>	0.209	0.709	0.065
I am encouraged to work harder because of my salary	0.311	0.042	0.09	<b>0.714</b>
I believe my salary is fair	0.130	0.040	0.02	<b>0.867</b>
I feel satisfied because of the comfort I am offered at work	0.120	0.244	<b>0.805</b>	0.10
I am proud to work for my firm because of the pleasant working conditions	0.184	0.195	<b>0.676</b>	0.139
Variance explained	22.3	19.4	16.1	11.9
Eigenvalue	4.0078	2.471	2.008	2.031
Total variance		69.7%		
KMO		0.899		
Bartlett (p-value)		29.338 (0.000)		
Cronbach's alpha		0.88195		

**Table 3.**  
PCA of extrinsic determinants (standardized Varimax).

Items	Fact 1
I am satisfied with my job	0.8213
I am happy with the way my colleagues and superiors treat me	0.6332
I am satisfied with what I achieve at work	0.599
I feel good at work	0.7325
Variance explained	89.36
Eigen value	6.897
KMO	0.72284
Bartlett (p-value)	18.88 (0.00)
Cronbach's alpha	0.83364

**Table 4.**  
PCA of Job satisfaction (standardized Varimax).

The relationships between the intrinsic/extrinsic variables and job satisfaction are estimated using the following two tests:

- Ramsey Regression Equation Specification Error Test (RESET) that consists of verifying the presence of omitted variables in the model.
- Durbin Watson (DW) test shows if we will accept the hypothesis of the existence of an auto correlated error.

The results of these two tests are presented in **Table 5**. As can be seen in this table, the problem of the autocorrelation of errors for all intrinsic and extrinsic variables is verified.

Indeed, the Durbin-Watson statistic shows a value of 2.31, this indicates that we will accept the hypothesis of the existence of autocorrelated errors problem. The Ramsey Reset test confirms the absence of omitted variables in our model, which implies a good prediction of the job satisfaction of the accounting professionals in our sample.

The overall significance of the model is also verified using the Fischer statistic at the 0.1% threshold.

Hypothesis (H2-4) regarding the positive and significant effect of the company policy on job satisfaction is validated ( $\alpha = 0.41105$ ;  $p = 0.000$ ), which corroborates this result of [56].

Hypothesis (H2-2) regarding the positive effect of relationship with supervisor and co-workers on job satisfaction is corroborated ( $\alpha = 0.18456$ ;  $p = 0.084$ ,  $p < 0.1$ ). This result is in line with that of [8].

The hypothesis related to the positive effect of salary on job satisfaction (H2-1) is validated ( $\alpha = 0.3841$ ;  $p = 0.0011$ ). Thus, confirming a previous result by [36].

Moreover, the result related to Hypothesis (H2.3) postulating the relationship between working conditions and job satisfaction shows a positive and significant relationship ( $\alpha = 0.3382$ ;  $p = 0.064$ ,  $p < 0.1$ ). This last finding is consistent with the result found by [46].

Variables	Coefficient	t-stat	p-value
The company policy	0.4110548	2.32	<b>0.000</b>
Relationship with the supervisor and co-workers	0.1845661	1.72	<b>0.084</b>
Salary	0.384122	2.02	<b>0.0011</b>
Working conditions	0.338201	1.88	<b>0.064</b>
Achievement	0.28227	1.74	<b>0.088</b>
Advancement (promotion)	-0.043652	-0.87	0.922
The work itself	0.65541	3.06	<b>0.000</b>
Growth	-0.007447	-0.7123	0.544
Recognition	0.000745	0.76	0.84
Number		232	
R2 adjusted		0.67	
Fisher (p-value)		142.186 (0.000)	
Durbin		2.31	
Ramsey Reset (p-value)		13.28 (0.0014)	

**Table 5.**  
*Result of FMOLS estimation.*

Hypothesis (H1–1) concerning the positive and significant effect of achievement on job satisfaction is validated ( $\alpha = 0.2822$ ;  $p = 0.088$ ,  $p < 0.1$ ), which is consistent with the finding of [16].

The hypothesis of a positive effect of work itself on job satisfaction is also accepted (H1–3) ( $\alpha = 0.6554$ ;  $p = 0.000$ ). This result seems to be justified by the fact that work itself is the most important variable in predicting job satisfaction. This result is in agreement with that of [23].

Our results show the absence of a significant relationship between promotion (H1–2), recognition (H1–4), and growth (H1–5) and job satisfaction which have a  $P > 0.1$ . In fact, a survey of accounting firms revealed how intrinsic and extrinsic motivational factors can have an impact on the accounting professionals' job satisfaction. Therefore, faced with the competitiveness requirements, personal achievement, responsibility, initiative, recognition, as well as good working conditions and salary policy are ultimately important adjustment variables for professional accountants because they can contribute to the value creation. However, the survey results showed that variables, such as promotion, recognition and growth do not have any impact on the professional accountants' job satisfaction. More specifically, professional accountants seek personal growth and development much more than the desire for recognition or promotion.

## **5. Conclusion**

The work aimed to investigate the determinants of the accounting professionals' job satisfaction in the Tunisian context. For this end, we posed two main hypotheses that deal with the relationship between the intrinsic and extrinsic factors and the accounting professionals' job satisfaction, respectively. The first hypothesis was subdivided into five sub-hypotheses, which present the intrinsic factors. The second was composed of four sub-hypotheses about the extrinsic factors. The results showed that three intrinsic factors, namely achievement, the work itself, recognition, along with four extrinsic ones, i.e., salary, relationship with supervisor and co-workers, working conditions, and the company policy, significantly affect the job satisfaction. However, we did not prove the existence of a significant relationship between growth, promotion, and recognition as well as job satisfaction. The research presented two limitations: The first was related to the small size of the sample. The second limitation concerned the imbalance in the composition of the sample and the selection of accounting professionals. Finally, new avenues of research could be explored by studying the relationship between the intrinsic and extrinsic factors, and the audit team job satisfaction.

## **A. Appendix**

### **B. Intrinsic satisfaction factors**

#### **B.1 Achievement**

1. I am delighted to work in this firm as it acknowledges my achievements.
2. I feel fulfilled with my job because it gives me a feeling of accomplishment.
3. I feel I have participated in my firm positively.

## **B.2 Advancement**

4. I will choose career development rather than financial incentives.
5. My job enables me to learn new skills for career development.

## **B.3 Work Itself**

6. My work is stimulating, and I do diverse tasks.
7. I am qualified enough to do my job.
8. My job is challenging and exciting.

## **B.4 Recognition**

9. I feel appreciated when I achieve or complete a task.
10. My director always expresses recognition for a well-done job.
11. I receive adequate recognition for doing my job well.

## **B.5 Growth**

12. I am proud to work in my firm because I feel I have grown as a person.
13. My job enables me to progress and develop as an individual.
14. My job enables me to improve my experience, skills and performance.

## **C. Extrinsic satisfaction factors**

### **C.1 Company policy**

1. The attitude of the administration is very accommodative in my firm
2. I am proud to work for this firm because the company policy is favorable for its workers
3. I completely understand the mission of my firm

### **C.2 Relationship with the supervisor**

4. I feel my performance has improved because of the support from my supervisor
5. I feel satisfied at work because of my relationship with my supervisor
6. My supervisors are strong and trustworthy leaders

### C.3 Relationship with the co-workers

7. It is easy to get along with my colleagues
8. My colleagues are helpful and friendly
9. Colleagues are important to me

### C.4 Salary

10. I am encouraged to work harder because of my salary
11. I believe my salary is fair

### C.5 Working conditions

12. I feel satisfied because of the comfort I am offered at work
13. I am proud to work for my firm because of the pleasant working conditions

### D. Job satisfaction

1. I am satisfied with my job
2. I am happy with the way my colleagues and superiors treat me
3. I am satisfied with what I achieve at work
4. I feel good at work

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