

WHAT DO PEOPLE WANT FROM THEIR JOBS? A DUAL FACTOR ANALYSIS BASED ON GENDER DIFFERENCES

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Abstract

The main purpose of the paper is to identify what employees want from their jobs from the perspective of Herzberg's two factor theory. The study wants to determine empirically the motivator-hygiene factors that have a significant impact on the overall level of Romanian employee job satisfaction using stepwise regression models, as well as to compare the existence of differences in the key dimensions of satisfaction according to workers' gender. The factor "work itself" was the most motivating aspect for Romanian employees while the least motivating aspect was "salary".

All of the job motivator and hygiene factors were moderately or substantially related to overall job satisfaction. The factors "working conditions," "salary" and "achievement" explained the variability among Romanian employees' overall level of job satisfaction.

Furthermore, a gender analysis was conducted in order to identify if there are significant differences between men and women regarding the overall job satisfaction and the job factors resulted from the regression analysis.

The empirical results of Mann-Whitney tests revealed that the gender characteristics were negligibly related to overall job satisfaction and also there are statistically significant differences between males and females about salary as one of factors that motivate employees.

Keywords: employees' motivation, Herzberg's Motivation-Hygiene theory, non-parametric tests, stepwise regression.

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1. Introduction

Motivation is a decisive factor in the process of training the attitude towards work. The behaviour at the workplace is a result oriented process, which derives from motivation.

Motivation assign those elements – formal or informal, economic or moral – spiritual – that the owners or managers administrate to the company’s employees, satisfying certain individual and group needs, in order to determine them, by means of their attitudes, efforts, decisions, actions and behaviour to take part to the execution of the activities and to the fulfilment of the company’s objectives.

In terms of motivation, money is not the only motivator. There are other incentives which can also serve as motivators such as: the level of benefits, perceived fairness of promotion system within a company, quality of the working conditions, leadership and social relationships, employee recognition, job security and career development opportunities.

The paper aims to determine empirically the motivator-hygiene factors that have a significant impact on the overall level of Romanian employee job satisfaction using logistic regression models, as well as to compare the existence of differences in the key dimensions of satisfaction according to workers' gender.

2. Literature review

Motivation being a very complex process creates the preconditions for the emergence of a large number of theories in motivation process grouped in classic(Maslow’s hierarchy theories of needs, McGregor’s X and Y theory, Herzberg’s theory of dual factors, Alderfer’s ERG theory) and modern(McClelland’s theory of success acquisition, Adam’s equity theory, needs-goal-setting theory, Vroom’s expectancy theory and reinforment theory).

At organizational level, there are various forms of motivation: positive and negative, intrinsic and extrinsic, cognitive and affective, economic and moral – spiritual, individual and at the company level, as well as the financial and non-financial motivation.

These theories have been integrated into complete and functional models able to provide a higher prediction power in terms of employees’ performances and job satisfaction (Porter & Lawler, Naylor in 1968, Pritchard & Ilgen in 1980, Katzell & Thompson in 1990).

One of the most known theory of motivation is the two-factor theory (also known as Herzberg's motivation-hygiene theory and dual-factor theory) stating that there are certain factors in the workplace that cause job satisfaction, while a separate set of factors cause dissatisfaction. The most important questions of Dual Factor Theory are:

- What do people want from their jobs?
- Do they want just a higher salary? Or do they want security, good relationships with co-workers, opportunities for growth and advancement – or something else altogether?

The five factors thought to facilitate job satisfaction (“motivators”) were achievement, recognition, work itself, responsibility, and advancement. The five factors identified by

Herzberg et al., as determinants of job dissatisfaction (“hygienes”) were company policy and administration, supervision, salary, interpersonal relations, and working conditions.

Motivation–Hygiene Theory of Motivation



Figure 1: The motivator-hygiene factors according to Padilla-Velez (1993, pp.20-21) and Bowen (1980, pp. 13-14)

The papers that treat the subject of Romanian employees' job satisfaction through Herzberg's two-factor theory are Casuneanu (2011), Alexandru and Casuneanu (2010) and Alexandru and Casuneanu (2011).

Alexandru and Casuneanu (2010) and Alexandru and Casuneanu (2011) apply Herzberg's two-factor theory to 402 Romanian employees, determining empirically the motivator-hygiene factors that have a significant impact on the overall level of Romanian employee job satisfaction, using the technique of principal components analysis. The results show that a motivation-hygiene theory with three principal components (achievement, company policy and administration and interpersonal relationships) best explains the process of motivating employees. The study also indicates that achievement and the company policy have a significant impact on the overall level of employee job satisfaction, suggesting that managers need to focus more on these factors to better motivate employees.

Also Castillo and Cano (2004) describe the amount of variance in faculty member's overall level of job satisfaction explained by Herzberg, Mausner, and Snyderman's (1959) job motivator and hygiene factors. The factor "work itself" was the most motivating aspect for faculty. The least motivating aspect was "working conditions." The factors "recognition," "supervision," and "relationships" explained the variability among faculty members' overall level of job satisfaction.

3. Research Methodology

The target population of the study was employees who live in urban area, who work in companies with at least 10. The sample size included 300 Romanian employees. The study was conducted in 2013. The overall job satisfaction was measured using one-item measure, instead of a multi-item measure. Thus, job satisfaction levels were measured using a 5-point response scale in which '1' indicated 'very dissatisfied' and '5' indicated 'very satisfied'. Higher scores indicated greater levels of satisfaction.

The motivator-hygiene factors were measured through a 25-item four-point Likert type scale questionnaire, with responses varying from 1 (strongly agree) to 4 (strongly disagree). Lower scores indicated greater satisfaction regarding the job factors. The ten job factors scores have been calculated as mean scores for each item that describes the analysed factor jobs.

Appropriate descriptive statistics were calculated. The correlations between the motivator-hygiene factors and overall job satisfaction were computed and correlation coefficients were interpreted. Stepwise multiple regression analysis was used to describe the amount of variability among employees' overall level of job satisfaction by a linear combination of the job motivator and hygiene factors. The suitability of the data for multiple regression analysis was assessed by investigating the relationship among the job motivator/hygiene factors (independent variables) and the overall level of job satisfaction among employees. Gender differences are investigated for job factors resulted from stepwise multiple regression analysis using Mann-Whitney test. The statistical tool we used in the analysis is the SPSS package.

4. Research results

4.1. Sample profile

Of the 300 respondents, the majority were male employees (60.7%, n=182). Females had been in their current position for 5 to 10 years. Males had been in their current position for 10 years and over.

Respondents who were 36–45 years old (29.3%) comprised the largest age group. One-third of the respondents (39.5%) are engineers, while only 30% of the interviewed persons state that they are economists. Regarding the years of service, 39.8% of employees state that they have over 10 years old in the company.

About one-third of respondents confess that they have over 10 years of experience in management position. As regards, the number of subordinates, about 50% of respondents coordinates up to 49 persons.

4.2. Descriptive analysis

Based on a five point Likert type scale with responses ranging from very dissatisfied (1) to very satisfied (5), the overall level of job satisfaction was 3.77 (n = 300) (Table 1). The overall level of job satisfaction for females was 3.76 and 3.81 for males. The degree of satisfaction was moderate the Romanian employees being indifferent to at most satisfied with their jobs.

Table 1: Means and Standard Deviations for Overall Job Satisfaction

<i>Variable</i>	<i>Total employees</i>		<i>Female</i>		<i>Male</i>	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Overall Job Satisfaction	3.77	1.08	3.76	1.08	3.81	1.09

The empirical results of Mann-Whitney test revealed that there is not a significant difference between males and females regarding the overall level of job satisfaction, because the probability of Z-test is greater than the risk 10%. *The gender characteristics were negligibly related to overall job satisfaction.*

Table 2: The empirical results of Mann-Whitney test

Mann-Whitney Test

		Ranks		
Sexul respondentului		N	Mean Rank	Sum of Ranks
job_satisfaction	Masculin	181	153.66	27812.00
	Feminin	118	144.39	17038.00
	Total	299		

Test Statistics ^a	
	job_satisfaction
Mann-Whitney U	10017.000
Wilcoxon W	17038.000
Z	-1.105
Asymp. Sig. (2-tailed)	.269

a. Grouping Variable: Sexul respondentului

Based on a four point Likert type scale with responses ranging from strongly agree (1) to strongly disagree (4), Romanian employees provided the following mean satisfaction scores with the job motivator and hygiene factors: achievement, 1.52; advancement, 2.58; recognition, 1.70; responsibility, 1.47; work itself, 1.27; interpersonal relations, 1.20; policy and administration, 1.48; salary, 2.25; supervision, 1.85; and working conditions, 1.59 (table 3). Lower scores indicated greater satisfaction regarding the job factors.

Table 3: Means and Standard Deviations for Job Motivator and Hygiene Factors

Job motivators	Mean	Std. Deviation
Achievement	1.5256	.64145
Recognition	1.7083	.82938
Responsibility	1.4717	.80552
Work_itself	1.2717	.50287
Advancement	2.58	1.954
Job hygienics		
Interpersonal relationships	1.2033	.88294
Company policy	1.4867	.73368
Salary	2.2550	1.27982
Spervision	1.8569	1.13099
Working_conditions	1.5933	.85071

On average, the factor “work itself” was the most motivating aspect for Romanian employees. The least motivating aspect was “salary”.

Table 4: Relationships between Overall Job Satisfaction and Selected Job Factors

	achievement	recognition	responsibility	work_itself	relationships	policy	advancement	salary	supervision	working_conditions	job_satisfaction
achievement	1	.398**	.406**	.372**	.021	.254**	.121*	.152**	.239**	.358**	-.302**
recognition		1	.358**	.198**	-.042	.322**	.085	.234**	.645**	.492**	-.238**
responsibility			1	.186**	-.046	.271**	.065	.170**	.206**	.460**	-.129*
work_itself				1	-.006	.193**	.089	.080	.151*	.157**	-.145*
relationships					1	-.019	.292**	-.020	.111	-.033	.000
policy						1	.081	.191**	.221**	.737**	-.245**
advancement							1	.026	.142*	.078	-.121*
salary								1	.203**	.138*	-.192**
supervision									1	.387**	-.108
working_conditions										1	-.305**
job_satisfaction											1

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Correlations were calculated to describe the relationships overall level of employee job satisfaction and the job motivator and hygiene factors (Table 4). *All of the job motivator and hygiene factors were moderately or substantially related to overall job satisfaction:* advancement, $r = -0.121$; achievement, $r = -0.30$; recognition, $r = -0.23$; responsibility, $r = -0.129$; work itself, $r = -0.145$; working conditions, $r = -0.305$; salary, $r = -0.192$; supervision, $r = -0.108$; policy and administration, $r = -0.245$; salary, $r = .25$; and interpersonal relations, $r = 0.00$.

Intercorrelations among the job motivator and hygiene factors indicated that collinearity was not a problem when the factors were entered into a regression equation model. Analyzing the intercorrelations of selected job factors we can conclude that: recognition is positively correlated with supervision (.645) and policy with working conditions (.737).

The multiple regressions revealed that three distinct factors could explain the variability among overall job satisfaction. The multiple regression analysis revealed that working conditions accounted for 11.4% of the variance in the level of overall job satisfaction. When salary was added to the regression equation, 15.6% of the variance in overall job satisfaction could be accounted for. Lastly, when achievement was added, 17.6% of the variance in the overall job satisfaction score was accounted for. All three regression models are statistically significant at the significance level of 1%.

One of the limitations of the study is related with the low values of R2 in all three regression models. For instance, taking into account all the three factors, we can mention that at most 17.6% of the variance of job satisfaction can be explained by the model, and the difference of 83.4% is explained by other factors non-included in the model.

Model Summary^d

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					Square Change	F Change	df1	df2	Sig. F Change	
1	.338 ^a	.114	.111	.64251	.114	32.687	1	253	.000	
2	.395 ^b	.156	.149	.62862	.041	12.306	1	252	.001	
3	.419 ^c	.176	.166	.62230	.020	6.145	1	251	.014	1.972

a. Predictors: (Constant), working_conditions

b. Predictors: (Constant), working_conditions, salary

c. Predictors: (Constant), working_conditions, salary, achievement

d. Dependent Variable: job_satisfaction

The Anova regression models highlighted that all models are valid at 1%.

ANOVA^d

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regr	13.494	1	13.494	32.687	.000 ^a
	Resi	104.443	253	.413		
	Total	117.937	254			
2	Regr	18.357	2	9.178	23.227	.000 ^b
	Resi	99.580	252	.395		
	Total	117.937	254			
3	Regr	20.737	3	6.912	17.849	.000 ^c
	Resi	97.201	251	.387		
	Total	117.937	254			

a. Predictors: (Constant), working_conditions

b. Predictors: (Constant), working_conditions, salary

c. Predictors: (Constant), working_conditions, salary, achievement

d. Dependent Variable: job_satisfaction

Moreover, it is observed that the level of job satisfaction is determined by three factors: “working conditions”, “salary”, and “achievement”. All the coefficients of job factors are statistically significant at 5% level of significance.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics		
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	2.084	.096		21.665	.000						
	working_conditions	-.315	.055	-.338	-5.717	.000	-.338	-.338	-.338		1.000	1.000
2	(Constant)	2.300	.112		20.449	.000						
	working_conditions	-.294	.054	-.316	-5.426	.000	-.338	-.323	-.314		.988	1.012
	salary	-.106	.030	-.204	-3.508	.001	-.239	-.216	-.203		.988	1.012
3	(Constant)	2.462	.129		19.066	.000						
	working_conditions	-.254	.056	-.273	-4.529	.000	-.338	-.275	-.260		.905	1.105
	salary	-.096	.030	-.184	-3.153	.002	-.239	-.195	-.181		.968	1.033
	achievement	-.165	.066	-.151	-2.479	.014	-.264	-.155	-.142		.890	1.123

a. Dependent Variable: job_satisfaction

The tolerance is the percentage of the variance in a given predictor that cannot be explained by the other predictors. Thus, the small tolerances show that 70%-90% of the variance in a given predictor can be explained by the other predictors. A variance inflation factor (VIF) greater than 2 is usually considered problematic, but in our case VIF is almost 1, stating that there are not problems with multicollinearity.

Excluded Variables^d

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	achievement	-.178 ^a	-2.909	.004	-.180	.909	1.100	.909

	recognition	-.121 ^a	-1.832	.068	-.115	.798	1.253	.798
	responsibility	-.034 ^a	-.554	.580	-.035	.935	1.070	.935
	work itself	-.035 ^a	-.580	.563	-.036	.971	1.030	.971
	relationships	.019 ^a	.326	.745	.021	1.000	1.000	1.000
	policy	-.020 ^a	-.245	.807	-.015	.530	1.886	.530
	advancement	-.087 ^a	-1.446	.149	-.091	.959	1.042	.959
	salary	-.204 ^a	-3.508	.001	-.216	.988	1.012	.988
	supervision	.027 ^a	.417	.677	.026	.850	1.176	.850
2	achievement	-.151 ^b	-2.479	.014	-.155	.890	1.123	.890
	recognition	-.081 ^b	-1.227	.221	-.077	.770	1.299	.770
	responsibility	.002 ^b	.031	.975	.002	.908	1.102	.908
	work itself	-.021 ^b	-.351	.726	-.022	.966	1.035	.962
	relationships	.035 ^b	.596	.552	.038	.994	1.006	.983
	policy	.013 ^b	.158	.874	.010	.523	1.912	.523
	advancement	-.070 ^b	-1.173	.242	-.074	.952	1.050	.952
	supervision	.068 ^b	1.060	.290	.067	.824	1.214	.824
3	recognition	-.041 ^c	-.600	.549	-.038	.716	1.398	.716
	responsibility	.050 ^c	.794	.428	.050	.829	1.206	.813
	work itself	.031 ^c	.493	.622	.031	.860	1.163	.793
	relationships	.044 ^c	.766	.445	.048	.990	1.010	.886
	policy	.009 ^c	.116	.907	.007	.523	1.913	.503
	advancement	-.063 ^c	-1.071	.285	-.068	.950	1.053	.879
	supervision	.087 ^c	1.373	.171	.086	.813	1.231	.804

a. Predictors in the Model: (Constant), working_conditions

b. Predictors in the Model: (Constant), working_conditions, salary

c. Predictors in the Model: (Constant), working_conditions, salary, achievement

d. Dependent Variable: job_satisfaction

There are no eigenvalues close to 0, and all of the condition indices are much less than 15. The strategy has worked, and the model built using stepwise methods does not have problems with collinearity. The condition indices are computed as the square roots of the ratios of the largest eigenvalue to each successive eigenvalue. Values greater than 15 indicate a possible problem with collinearity; greater than 30, a serious problem. In our case, indices are much less than 30, suggesting the absence of collinearity.

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	working_conditions	salary	achievement
1	1	1.908	1.000	.05	.05		
	2	.092	4.562	.95	.95		
2	1	2.732	1.000	.02	.02	.03	
	2	.188	3.809	.01	.35	.75	
	3	.080	5.851	.97	.63	.22	
3	1	3.627	1.000	.01	.01	.01	.01
	2	.197	4.296	.00	.18	.83	.04
	3	.110	5.733	.02	.69	.06	.54
	4	.066	7.400	.97	.12	.10	.41

a. Dependent Variable: job_satisfaction

The factors “working conditions,” “salary” and “achievement” explained the variability among Romanian employees’ overall level of job satisfaction.

The main element of financial motivation –the salary is important because employees that are deeply de-motivated will go to informal sector in order to increase their earnings (Davidescu (2013), Davidescu (2014), Davidescu and Strat (2015)).

But, the money should not be overestimated as motivating factor. The idea that the money motivates, that the people work only for money, is not always true. A higher salary does not always ensure an increase of employees’ motivation. The employee is attracted by money, but the money does not confer a high fidelity.

There are important also for Romanian employees the working conditions and the need of achievement. The Romanian employees want to be valorised like human beings. What the employees appreciated the most are the work climate and opportunity for achievement. It is fundamental for managers to find a balance between these motivator factors.

The results are consistent with the studies of Alexandru and Casuneanu (2010), Alexandru and Casuneanu (2011) and Casuneanu (2010) who also found that salary, achievement and working conditions are the determinants of employee satisfaction in Romania.

A subsequent analysis according to workers' gender of these job factors shows that although men and women take into account the same dimensions, the opinions of employees males and females on working conditions and achievement are not quite different(Asymp.Sig.>10%).

There are statistically significant differences between males and females about salary as one of factors that motivate employees.

Test Statistics^a

	salary	working_ conditions	achievement
Mann-Whitney U	9400.000	10241.500	10139.000
Wilcoxon W	26053.000	17262.500	17160.000
Z	-1.857	-.721	-.849
Asymp. Sig. (2-tailed)	.063	.471	.396

a. Grouping Variable: Sexul respondentului

5. Conclusions

The main purpose of the paper is to identify what employees want from their jobs from the perspective of Herzberg's two factor theory. The study wants to determine empirically the motivator-hygiene factors that have a significant impact on the overall level of Romanian employee job satisfaction using stepwise regression models, as well as to compare the existence of differences in the key dimensions of satisfaction according to workers' gender. The factor "work itself" was the most motivating aspect for Romanian employees while the least motivating aspect was "salary".

All of the job motivator and hygiene factors were moderately or substantially related to overall job satisfaction. The factors "working conditions," "salary" and "achievement" explained the variability among Romanian employees' overall level of job satisfaction.

Furthermore, a gender analysis was conducted in order to identify if there are significant differences between men and women regarding the overall job satisfaction and the job factors resulted from the regression analysis.

The empirical results of Mann-Whitney tests revealed that the gender characteristics were negligibly related to overall job satisfaction and also there are statistically significant differences between males and females about salary as one of factors that motivate employees.

The main results of this study are a knowledge of the variables that affect the level of employee satisfaction, which should be useful to the management of companies, and those that should be considered in order to take better advantage of the competitive opportunities that can provide a company with motivated to committed staff.

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- *** SPSS package.