

HIGHLIGHTING THE MAIN FACTORS OF JOB SATISFACTION AMONG JORDANIAN HOSPITAL EMPLOYEES

Marji Tania Issa EID

PhD Candidate,
Bucharest Academy of Economic Studies, Romania

E-mail: tania.raed@yahoo.com

Abstract:

The study of job satisfaction is justified on the basis of its potential value of understanding and in generating the positive outcomes from both the organisational and individual perspectives. As Spector(1997) stated job satisfaction is more about "how people feel about different aspects of their jobs".

The present study was conducted on the hospital employees as they are one of the most important stakeholders in hospitals to probe the factors influencing their job satisfaction.

The paper aims to identify the main factors of job satisfaction using a sample of 325 hospital workers from Jordan using the Minnesota Satisfaction Questionnaire developed by Weiss (1967) a 5-point Likert-type scale with 20 items. This scale has been widely used in the literature being a well-known and stable over the time instrument with previous researches yielding excellent coefficient alpha.

Factor analysis was performed using Principal component analysis (PCA) method for extracting factors to establish characteristic components of the job satisfaction variables measured.

The empirical results revealed the existence of a 2-factor structure. This work aims at improving our understanding of the nature and assessment of Job Satisfaction in the Portuguese healthcare context, providing a more stable ground for future research in this area.

Key words: Job Satisfaction, exploratory factor analysis, hospital employees, healthcare context, Jordan

1. Introduction

This paper aims to investigate the empirical results of Minnesota Satisfaction Questionnaire – Short Version (Weiss et al., 1967) on a sample of 325 hospital workers from six hospitals of Jordan: King Abdullah Hospital public and private hospital, Amman Specialist Hospital private hospital in Amman, Irbid Specialist Hospital private hospital, Ibn Alnafis hospital private hospital, Al-shoneh hospital and Princess Basma hospital the biggest public hospital in Irbid city.

The present study was conducted on the hospital employees as they are one of the most important stakeholders in hospitals to probe the factors influencing their job satisfaction. Factor analysis will be performed using principal component analysis (PCA) method for extracting factors to establish characteristic components of the job satisfaction variables measured.

Taking into account the fact that several scales were used in the literature, I have decided to use MSQ short version having the advantages of being well-known and stable over the time instrument; also, the MSQ has been widely studied and validated (Fields, 2002).

There is a need for research regarding job satisfaction and related factors to explore the development of good human resources strategies in the context of hospital. The investigation of job satisfaction of the employees especially for healthcare institutions like hospitals can make a significant contribution to better understanding of the complex phenomena of employee behaviour.

2. Literature review

The term job satisfaction is referred to an individual's general attitude toward his or her job.

In research, job satisfaction, has been an assessed using global aspect as well as multiple facets like salary, career progression, supervisor (Fisher, 2003). This notion that satisfied employees will perform their work more effectively is the basis of many theories of performance, reward, job design and leadership (Shipton et al., 2006).

Job satisfaction is indirectly related to the quality of life, which depends on the degree of economic development. Improving the quality of people's lives represents the essence of sustainable development (Moldovan, 2016), while job satisfaction influences the economic performance of organizations. Tyson (2006, p.214) remarked that the achievement of the organizational aims and objectives depends on the quality of their employees' work performance. These employees have motivational needs for development, recognition, status, and achievement that can and should be met through job satisfaction and performance achievement.

Job satisfaction has been studied in the early studies by the two factor theory of Herzberg(1968) who describes two factor theories: the hygiene and motivator factors. Extrinsic factors such as administration, company strategies, work conditions, salary, and relationships among co-workers are considered "hygiene" factors which can cause job dissatisfaction.

Intrinsic factors such as recognition, achievement, personal development, advancement, and responsibility are referred to as "motivators" that can create job satisfaction. Using a sample of 100 hospital respondents, Yafe(2011) found the job satisfaction to be independent of the gender and the job experience of the employees of the hospital. Demographic variables such as age, gender, current job position, marital status, and experience have effect on job satisfaction or dissatisfaction.

Study by Chaulagain and Khadka (2012) found job satisfaction of healthcare professionals to be significantly influenced by factors such as opportunity to develop, responsibility, patient care, and staff relations. However no association was found between socio-demographic characteristics and job satisfaction.

Job satisfaction research in healthcare has been conducted mainly accordingly to different professions, studying nurses, doctors, therapists, etc. separately. Therefore there

seems to lack a global approach to healthcare, namely at hospitals, envisaging all employees as an important part of the healthcare service.

Romanian employees' job satisfaction through Herzberg's two-factor theory have been treated by Casuneanu (2011), Alexandru and Casuneanu (2010) and Alexandru and Casuneanu(2011).

Casuneanu (2010) analyze the main characteristics of employee motivation system in the Romanian companies revealing the job stability occupies the first place in employee preferences followed by job type and wage offer. The vocational development and the job enrichment are also important for the Romanian employees. The results of the study do confirm the assumption that money is not everything in terms of work motivation, suggesting that managers need to focus more on non-financial incentives to better motivate employees.

A previous study on the field was the paper of Casuneanu (2011) in which it were analyzed the most important motivating factors from the point of view of the Romanian employee, ranking up the factors using a mean score for each factor that illustrates its importance relative to other motivational factors. The empirical results pointed out that the most important motivating factors are job authority, responsibility and autonomy, job stability and professional development.

Alexandru and Casuneanu (2010) and Alexandru and Casuneanu (2011) applies 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.

3. Minnesota Satisfaction Questionnaire

The Minnesota Satisfaction Questionnaire was one of the outputs from the "Work Adjustment Project" at the University of Minnesota; this is a self-reporting measure, suitable for individuals of all school levels that can be administrated separately or individually.

The 20 MSQ-short version items are rated on a 5-point Likert scale (1 "very dissatisfied with this aspect of my job", 2 "dissatisfied with this aspect of my job", 3 "can't decide if I'm satisfied or dissatisfied with this aspect of my job", 4 "satisfied with this aspect of my job" and 5 "very satisfied with this aspect of my job"). Item responses are summed or averaged to create a total score – the lower the score, the lower the level of job satisfaction. The MSQ "short form" includes only 20 of the 100 original items, namely, the ones that better represented each of the 20 original subscales (Ahmadi and Alireza, 2007).

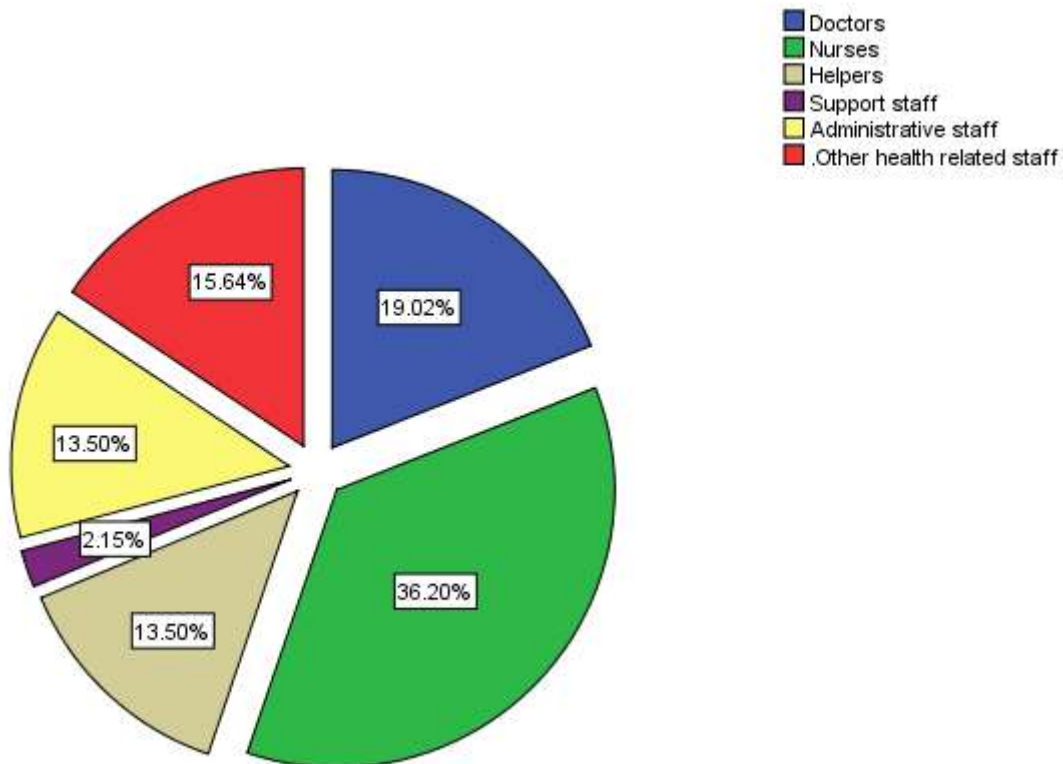
4. Sample and data analysis

The exploratory qualitative research was carried out among 400 health workers (doctors and nurses, from which we had 325 respondents and 75 does not filled properly) from six hospitals of Jordan both public and private hospitals.

The majority of the respondents have ages lying between 25 and 35 years(50.9%) and most respondents are male(53.1% male respondents), 43.3% of respondents have bachelor degree in science as level of graduation and 70.2% of the respondents are married.

In terms of the job, the distribution of staff per job group is shown in Figure 1, where nursing staff represents 36.2% of the total staff, medical doctor take up about 19%, helpers, that is to say the operational assistants for nurses and doctors, are about 13.5%, other health related staff (such as physical therapists, speech therapists, psychologists) represent 15.6%, administrative/support staff (employees with clerical functions, take up 13.5% and finally 2% are support jobs, related to maintenance and other logistics.

Fig.1. Percentages of staff in different job functions in our sample



In terms of seniority, the majority of the respondents have more than ten years' experience in working in the current hospital and also in the same positions.

Regarding the area of work, the majority of the respondents (52.1%) work in therapeutic area, while 70.9% of the respondents declared that they don't have management positions.

Regarding the unit's average daily census, 62.3% of the respondents declared that they have more than 20 patients per day.

In the present sample, descriptive statistics for each item revealed that the answers to almost all items ranged between the minimum and the maximum (Table I). The frequen-

cy's analysis in each response option revealed an acceptable distribution in all the items, with no percentages above 50% in a single response alternative. In most items, means and medians are similar; skewness and kurtosis values are acceptable, indicating that its distribution approximates the normal distribution.

Table 1. Content, means and standard deviations of the items

Descriptive statistics	Mean	Std. Deviation
Being able to keep busy all the time.	3.77	1.051
The chance to work alone on the job.	3.35	1.220
The chance to do different things from time to time.	3.20	1.185
The chance to be "somebody" in the community.	3.75	1.087
The way my boss handles his/her workers.	3.32	1.173
The competence of my supervisor in making decisions	3.36	1.185
Being able to do things that don't go against my conscience.	3.68	1.191
The way my job provides for steady employment.	3.78	1.058
The chance to do things for other people.	3.98	.908
The chance to tell people what to do.	3.73	1.018
The chance to do something that makes use of my abilities.	3.68	1.069
The way company policies are put into practice.	3.15	.996
My pay and the amount of work I do.	2.66	1.264
The chances for advancement on this job.	3.04	1.220
The freedom to use my own judgment	3.35	1.129
The chance to try my own methods of doing the job	3.51	1.086
The working conditions.	3.20	1.160
The way my co-workers get along with each other.	3.78	1.068
The praise I get for doing a good job.	2.94	1.236
The feeling of accomplishment I get from the job.	3.11	1.283

Exploratory factor analysis (EFA) has traditionally been employed by researchers as a tool to determine the number of underlying dimensions in a data set by grouping variables that are correlated (Tabachnick and Fidell, 2007).

5. Empirical results

A principal components analysis (PCA) was conducted on the 20 items with oblique rotation (promax) using SPSS software. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, KMO=0.85 and all KMO for individual items (measures of sample adequacy) were >0.7 which is well above the acceptable limit of 0,5 (Field, 2009). Bartlett's test of sphericity $\chi^2(45)=685.67$, $p < 0.001$, indicated that correlations between items were sufficiently large for PCA.

Table 2. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.851
Bartlett's Test of Sphericity	Approx. Chi-Square	2360.889
	df	190
	Sig.	.000

An alternative way to investigate the degree of correlation among a set of variables is to use the Cronbach coefficient alpha (c-alpha), which is the most common estimate of internal consistency of items in a model or survey. Coefficient alpha (c-alpha) measures the

internal consistency in the set of individual indicators, how well they describe a unidimensional Construct (OECD, 2008).

C-alpha is not a statistical test, but a coefficient of reliability based on the correlation between individual indicators. That is, if the correlation is high, then there is evidence that the individual indicators are measuring the same underlying construct. Nunnally (19780 suggests 0.7 as an acceptable reliability threshold. Yet some authors use 0.75 or 0.80 as a cut-off value, while others are as lenient as 0.6. In our case, The C-alpha value of 0.877 revealed a good reliability of original data.

Table 3. Total Variance Explained

Component		Initial Eigenvalues			Extraction Sums of Squared Loadings	
		Total	% of Variance	Cumulative %	Total	% of Variance
dimension	1	6.132	30.658	30.658	6.132	30.658
	2	2.181	10.906	41.564	2.181	10.906
	3	1.634	8.172	49.736	1.634	8.172
	4	1.114	5.569	55.305	1.114	5.569
	5	.990	4.951	60.256	.990	4.951
	6	.924	4.619	64.875	.924	4.619
	7	.804	4.019	68.894		
	8	.747	3.737	72.631		
	9	.667	3.335	75.966		
	10	.658	3.289	79.256		
	11	.630	3.148	82.404		
	12	.537	2.685	85.089		
	13	.518	2.589	87.678		
	14	.457	2.286	89.964		
	15	.429	2.145	92.109		
	16	.380	1.901	94.010		
	17	.369	1.844	95.855		
	18	.297	1.487	97.342		
	19	.289	1.447	98.788		
	20	.242	1.212	100.000		

Extraction Method: Principal Component Analysis.

Information on quality adjustment is expressed using the variance explained with the help of the eigenvalues (presented in Table 3). The table presents the variance explained by the initial solution (components), the extracted components and also the rotated components. Therefore, the analysis of the quality of the cloud of points 'adjustment is performed using the eigenvalues.

The first six principal components from the extracted solution explain 64.87% of the variability in the original twenty variables and they are the only ones with eigenvalues almost 1. One of the most commonly used techniques is Kaiser's criterion, or the eigenvalue rule. Regarding the entire process, step by step, we notice that adjusting the points' cloud by a single factorial axis (accepting only the first synthetic indicator), explains 30.65% of total variance; then, adjusting the points' cloud by the first two factorial axes (accepting two synthetic indicators), we recover an additional 10.90% of the total variance (a total of 41.56% of the initial variance). The last two principal components explain almost the same amount of the remaining variance, 4% of total variance.

Six components had eigenvalues over Kaiser's criterion of almost 1 and an analysis of the scree plot indicated the existence of four components as well. Table 4 shows the factor

loadings after the rotation. The items that cluster on the same components suggest that component 1 represents satisfaction with advancement, component 2 satisfaction with empowerment, component 3 satisfaction with task enrichment, component 4 satisfaction associated with the freedom to using own judgment, component 5 satisfaction with the ability of doing things that don't go against its own conscience and component 6 satisfaction with the way in which company policies are put into practice.

Davidescu(2013) and Davidescu(2014a, 2014b) stated that it is important to take into account also the main element of financial motivation-the salary-having in mind the fact that a low level of wages will deeply demotivated employees and thus will increase the propensity of going into the informal sector in order their earnings.

Table 4. The empirical results of Pattern Matrix of PCA analysis

	Component					
	1	2	3	4	5	6
Being able to keep busy all the time.	-.529	-.125	.350	.285	.266	.202
The chance to work alone on the job.	-.037	-.082	.751	-.177	.018	.302
The chance to do different things from time to time.	.063	.166	.811	-.071	-.164	.013
The chance to be "somebody" in the community.	-.159	.538	.427	-.007	.056	-.114
The way my boss handles his/her workers.	.229	.004	.727	-.037	.045	-.100
The competence of my supervisor in making decisions	.373	-.157	.622	.032	-.027	.053
Being able to do things that don't go against my conscience.	.191	.033	-.058	-.106	.963	-.213
The way my job provides for steady employment.	.093	.139	-.108	.055	.570	.315
The chance to do things for other people.	-.116	.718	.034	.098	.140	-.093
The chance to tell people what to do.	.138	.768	.023	-.177	-.013	.096
The chance to do something that makes use of my abilities.	.010	.683	-.003	.099	-.085	.243
The way company policies are put into practice.	.262	.083	.100	.035	-.131	.763
My pay and the amount of work I do.	.709	-.165	.056	.053	.017	.430
The chances for advancement on this job.	.525	-.101	.110	.495	.045	-.170
The freedom to use my own judgment	.113	-.007	-.139	.897	.064	-.055
The chance to try my own methods of doing the job	.020	.187	-.100	.767	-.223	.227
The working conditions.	.637	.045	-.048	-.048	.161	.352
The way my co-workers get along with each other.	.076	.606	-.133	.143	.046	-.019
The praise I get for doing a good job.	.746	.124	.069	-.051	.113	.106
The feeling of accomplishment I get from the job.	.575	.069	.286	.157	-.002	-.132
Extraction Method: Principal Component Analysis.						
Rotation Method: Promax with Kaiser Normalization.						
a. Rotation converged in 10 iterations.						

After the original Weiss et al.'s (1967) factor solution, Schriesheim and colleagues (1993) conducted a content adequacy assessment of the MSQ short-form intrinsic and extrinsic subscales. Using its classification we can revealed the type of intrinsic or extrinsic motivation in our principal components.

Table 5. Summary of previous factor solutions found in the literature

	Original	Schriesheim et al., 1993	Martins, 2008	Sousa et al., 2011
The chance to do different things from time to time.	Intrinsic	Intrinsic	*	*
Being able to do things that don't go against my conscience.	Intrinsic	Intrinsic	*	*
The chance to tell people what to do.	Intrinsic	Intrinsic	Intrinsic	*
The way company policies are put into practice.	Extrinsic	Extrinsic	Extrinsic	Extrinsic
The freedom to use my own judgment	Intrinsic	Intrinsic	Extrinsic	*
The praise I get for doing a good job.	Extrinsic	General	*	*

6. Discussion and conclusions

The results of this study provide evidence that the MSQ-Short Version is a valid and reliable scale for the measurement of job satisfaction of hospital workers. Construct validity of the MSQ was explored by factor analysis, which determined the convergent assignment of constructs to items within each subscale of the MSQ. The items show good communalities and strong factor loadings.

For the majority of the workers it makes sense the mostly intrinsic satisfaction items, with major latent constructs: task enrichment, satisfaction with rightness, satisfaction with empowerment, satisfaction with the freedom of acting.

As extrinsic satisfaction items we have two latent constructs: satisfaction related with the way company policies are put into practice and the praise for doing a good job. The main conclusion of this paper is that the MSQ is a valid instrument for measuring job satisfaction of global hospital workers.

References

1. Alexandru, A., Casuneanu, C., **The Herzberg Model for Romanian employees' motivation, Recent Researches** in Sociology, Financing, Environment and Health Sciences, 2011, pp.229-234, ISBN: 978-960-474-287-5.
2. Ahmadi, Khodabakhsh, and Alireza, Kolivand, **"Stress and Job Satisfaction among Air Force Military Pilots"**, Journal of Social Sciences, 3, 2007, pp. 159-63.
3. Casuneanu, C., **Estimation of employees' job satisfaction: An empirical research of the Romanian Companies**, Metalurgia International, no.3, 2010, pg.165-170, ISSN 1582-2214.
4. Casuneanu, C., **The Romanian employee motivation system: an empirical analysis**, INTERNATIONAL JOURNAL OF MATHEMATICAL MODELS AND METHODS IN APPLIED SCIENCES, issue 5, Volume 5, 2011, pg.931-938, 2011, ISSN: 1998-0140.
5. Chaulagain, N., & Khadka, D. K., **Factors Influencing Job Satisfaction among Healthcare Professionals** at Tilganga Eye Centre, Kathmandu, Nepal. Age, 35(56), 2012, pp. 74-67.
6. Davidescu Adriana A., **"Estimating the size of Romanian shadow economy using Guttman's simple currency ratio approach"**, Theoretical and Applied economics, ECTAP, Volume X, No. 10(587), 2013, pp. 33-48, ISSN 1844-0029.
7. Davidescu(Alexandru) Adriana A., **"ESTIMATING THE SIZE OF ROMANIAN SHADOW ECONOMY A LABOUR APPROACH"**, Journal of Social and Economic Statistics, vol.3, no.3/2014, pg.25-37, ISSN 2285-388X.

8. Davidescu Adriana A., **Evaluating the relationship between official economy and shadow economy in Romania. A Structural Vector Autoregressive approach**, Journal of Social and Economic Statistics, vol.3, no.2, winter 2014, pg.57-65, ISSN 2285-388X.
9. Ferreira, J. A., Fernandes, R., Haase, R. F. and Santos, E. R., "**Minnesota Satisfaction Questionnaire - Short Form: Estudo de Adaptação e Validação Para a População Portuguesa**", Psychologica, 51, 2009, pp. 251-81.
10. Field, Andy, **Discovering Statistics Using SPSS (and Sex and Drugs and Rock 'N' Roll)**. Los Angeles, CA: Sage, 2009.
11. Fields, D. L., **Taking the Measure of Work: A Guide to Validated Scales for Organizational Research and Diagnosis**. Thousand Oaks, CA: Sage, 2002.
12. Fisher, Cynthia D., "**Why Do Lay People Believe That Satisfaction and Performance Are Correlated? Possible Sources of a Commonsense Theory**", Journal of Organizational Behavior, 24(6), 2003, pp. 753-77.
13. Lefter V., Manolescu A., Chivu I., **Managementul resurselor umane**. Studii de caz. Probleme. Teste, Ed. Economică, Bucuresti, 1999.
14. Martins, H., "**Impact of Firm-Promoted Accreditation of Prior Learning Processes on the Worker-Organization Relationship: A Cross-Sectional Survey in Portuguese Industrial Firms**", Master Dissertation, Universida de de Coimbra, 2008.
15. Moldovan (Gavril), I.A., **Aspects regarding Romania`s progress towards sustainable development**, Annals of the „Constantin Brâncuși” University of Târgu Jiu, Economy Series, Issue 1, 2016, „Academica Brâncuși” Publisher
16. Mueller, Charles W., and McCloskey, Joanne C., "**Nurses' Job Satisfaction: A Proposed Measure**", Nursing Research, 39(2), 1990, pp. 113-17.
17. Nunnally, J.C., **Psychometric Theory**, 2nd ed., New York: McGraw-Hill, 1978.
18. Schriesheim, Chester A., Powers, Kathleen J., Scandura, Terri A., Gardiner, Claudia C. and Lankau, Melenie J., "**Improving Construct Measurement in Management Research: Comments and a Quantitative Approach for Assessing the Theoretical Content Adequacy of Paper-and-Pencil Survey-Type Instruments**", Journal of Management, 19(2), 1993, 385-417.
19. Shipton, Helen, West, Michael A., Dawson, Jeremy, Birdi, Kamal and Patterson, Malcolm, "HRM as a Predictor of Innovation", Human Resource Management Journal, 16(1), 2006, 3-27.
20. Smith, P. C., Kendall, L. M., and Hulin, C. L., **The Measurement of Satisfaction in Work and Retirement**. Chicago: Rand McNally, 1969.
21. Spector, P. E., **Job satisfaction: Application, assessment, causes, and consequences** (Vol. 3). Sage publications, 1997.
22. Sousa, J., Cruz, A. and Martins, H., "**Minnesota Satisfaction Questionnaire – Propriedades Psicométricas e Validação numa População de Profissionais de Farmácia**", Paper presented at the Jornadas de Iniciação à Investigação Clínica, Centro Hospitalar do Porto, Portugal, 2011.
23. Weiss, D. J. , Dawis, R. V. England, G. W. and Lofquist, L. H., **Manual for the Minnesota Satisfaction Questionnaire**. Vol. 22, Minnesota Studies in Vocational Rehabilitation, Minneapolis: University of Minnesota, Industrial Relations Center, 1967.
24. *** **SPSS 20 software**