# Revealing the Main Determinants of Employee Job Satisfaction in Jordanian Hospitals. An Empirical Analysis based on McCloskey/Mueller Satisfaction Scale

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## Abstract

*http://dx.doi.org/10.15405/epsbs.2016.09.63*

The paper aims to reveal the main determinants of job satisfaction based on McCloskey/Mueller Satisfaction Scale (MMSS) using exploratory factor analysis and for a sample of 325 employees from six hospitals at the level of the year 2015.

The empirical results revealed the existence of a four factor structure, highlighting the main factors of job satisfaction from the perspective of Jordanian employees as -"satisfaction with praise/recognition", "satisfaction with extrinsic rewards and satisfaction with the balance of family", "satisfaction with interaction opportunities", and "satisfaction with professional opportunities". The findings revealed that the financial incentives are very important but also non-financial incentives are fundamental in enhancing motivation among health employees.

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**Keywords:** Job satisfaction; survey; hospitals; Jordan; McCloskey/Mueller Satisfaction Scale.

## 1. Introduction

Health worker motivation can be defined "as the willingness to exert and maintain an effort toward organizational goals" (Franco, Bennett and Kanfer, 2002). Low motivation has a negative impact on the performance of individual health workers, facilities, and the health system as a whole (Mathauer & Imhoff, 2006).

The shortage of work motivation represents the major concern of health system performance in middle-income countries, taking into account the fact that it could have a large impact on health systems performance and for this reason it is very important to know more about the key factors that influence motivation in a country like Jordan.

***The main purpose of the study*** was to reveal the main determinants of job satisfaction based on McCloskey/Mueller Satisfaction Scale (MMSS) using exploratory factor analysis and for a sample of 325 employees from six hospitals at the level of the year 2015.

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 study sample is composed by doctors, nurses, helpers, support staff, administrative staff and other health related staff.

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

Although the general theme of worker motivation was intensively approached and investigated in the literature, there is a relative few studies that examines health worker motivation in a country like Jordan and even a smaller number of studies approaching the overall health employee motivation not only the satisfaction of nurses.

Amarneh and Al-Rub (2009) analysed the effect of social support from co-workers on job performance using a convenience sample of 365 Jordanian hospital nurses, revealing a positive effect of co-workers support on job performance.

Empirical studies concerning job satisfaction and job performance of Jordanian nurses are provided by Mrayyan (2007, 2008, 2009), Mrayyan and AlFaouri (2008), AbuAlRub, Omari, and Al-Zaru (2009).

Mrayyan (2007) surveyed a convenience sample of 433 nurses from both teaching and non-teaching Jordanian hospitals, pointing out that nurses were neither satisfied nor dissatisfied and the level of nurses' job satisfaction was higher in non-teaching hospital than teaching hospitals.

Mrayyan and AlFaouri (2008) surveyed a sample of 640 of Jordanian nurses, highlighting that there are no differences of nurses' career commitment in governmental hospitals, teaching hospitals, and private hospitals.

AbuAlRub, Omari and Al-Zaru (2009) compared the levels of nurses' job satisfaction in both public and private hospitals using a sample of 483 Jordanian nurses, revealing that the level of nurses' job satisfaction was higher in private hospitals than public hospitals.

It is important to mention that despite the fact that health employees are almost satisfied with their financial rewards, non-financial instruments of motivation could be very important and could be even more effective in the process of improving employee motivation and retention.

## 3. Methodology and data

In 1990, Mueller and McCloskey revised McCloskey's satisfaction scale had three dimensions of incentives hypothesized to promote job satisfaction: safety, social, and psychological dimensions (Mueller & McCloskey, 1990). The safety dimension included satisfaction with salary and benefits, balance of family and work, and opportunities to work straight days. The social dimension included satisfaction with supervisor support, relationships with peers, and opportunities to socialize with colleagues. The psychological dimension included satisfaction with praise and recognition, control over work activities, and professional opportunities (Mueller & McCloskey, 1974).

The MMSS was used to measure six components of job satisfaction- satisfaction with extrinsic rewards, balance of family and work, interaction opportunities, professional opportunities, praise and recognition, and control and responsibility (McCloskey & McCain, 1987; Mueller & McCloskey, 1990).

The studies of Jaiswal et al. (2015), Tourangeau et al.(2006), Kožuchová et al.(2015), and Lambrou et al. (2010) have used the McCloskey/Mueller Satisfaction Scale (MMSS) in order to analyse the employee motivation.

According to the short-form of the McCloskey/Mueller Satisfaction Scale (MMSS), the score of job satisfaction is represented by the mean of the 16 items rated on a five point Likert scale (5 = very satisfied, 4 = moderately satisfied, 3 = neither satisfied nor dissatisfied, 2 = dissatisfied, 1 = very dissatisfied) arranged into 6 dimensions:

- ✓ Satisfaction with extrinsic rewards (3 items: salary, vacation, benefits package);
- ✓ satisfaction with the balance of family (2 items: child care facilities, maternity/parental leave time);
- ✓ satisfaction with interaction opportunities (3 items: opportunities to interact professionally with other disciplines, social contact with colleagues at work and after work);
- ✓ satisfaction with professional opportunities (3 items: opportunities to write and publish, to participate in research, to belong to department and institutional committees);
- ✓ satisfaction with praise/recognition (3 items: recognition from superiors, recognition from peers, amount of positive feedback );
- ✓ satisfaction with control and responsibility (1 item: career advancement).

According to Jaiswal et al. (2015), job satisfaction score for each respondent was worked out with the formula mentioned below and were classified into five groups according to the level of job satisfaction. A higher score indicated greater job satisfaction.

$$job\_(satisf\_score )=(total\ obtained\ score\ for\ a\ respondent)/(5*total\ number\ of\ questions) \tag{1}$$

The research was carried out among 325 health workers in six hospitals of Jordan: King Abdullah Hospital public hospital, Amman Specialist Hospital private hospital, Irbid Specialist Hospital private

hospital, Ibn Al-Nafees private hospital, Al-Shona public hospital and Princess Basma hospital the biggest public hospital.

These six hospitals were chosen because they represented the range of public/private hospital settings and circumstances. It was never intended for the results from these hospitals to be representative of all other hospitals in Jordan. The data was collected in the period July-September 2015.

In order to analyse the responses of items were used descriptive statistics (mean and standard deviation). For the revealing of the main determinants of job satisfaction, exploratory factor analysis using principal component technique with Varimax rotation was used. The Statistical Package for Social Sciences version 22.0 (SPSS) was used to perform the analysis.

This research aimed to answer the following research questions: (1) How satisfied are with their jobs the employees in Jordanian hospitals? (2) What are the main determinants of job satisfaction in Jordanian hospitals? (3) Are they financial incentives or not? (4) Can the non-financial incentives improve the Jordanian employees' satisfaction?

## 4. Empirical results

### 4.1. Sample profile

From the total of 325 respondents, 66.5% of them are from public hospitals, while only 33.5% of respondents work in private hospitals. Therefore, we can mention that about 33% of the respondents work in Princess Basma Hospital, while almost 22% of them are working in Irbid hospital and King Abdullah hospital. At the opposite side only 4.3% of the respondents are from IBN Al-Nafes hospital.

The majority of the respondents have ages lying between 25 and 35 years (51.4%) and most of the respondents are male (52.9% male respondents), 43.3% of respondents have bachelor degree in science as level of graduation. More than one-fourth of the employees were single (28.3%). The majority of respondents (40.3%) claimed to have more than 10 years' experience in the hospital. 33.5% of the employees declared to have more than 10 years' experience in the same position, only 38.8% of the respondents declared their intention to stay. The majority of the respondents (51.7%) work in therapeutic area.

In terms of the job, nursing staff represents 36.2% of the total staff while medical doctor take up about 19%. Regarding the unit's average daily census, 62.5% of the respondents declared that they have more than 20 patients per day. The majority of the respondents consider that heavy workload and health care financing issues are the changes that affect the hospitals in Jordan.

### 4.2. Key factors of employee job satisfaction in Jordanian hospitals

The mean level of job satisfaction for the 325 employees is 3.44 with a standard deviation of 0.75. Most of the employees are satisfied and very satisfied (49.2%) while 41.5% are somewhat satisfied. Only 17.3% of the respondents are dissatisfied. Analysing the main dimensions of job satisfaction according to MMSS, we can mention that the highest rank motivator factor was interaction

opportunities, followed by recognition and career advancement. At the opposite side, the most demotivating factor is the extrinsic rewards (salary, vacation and benefits package).

**Table 1.** Mean scores and SD by motivating factors

|  | Mean | Std. Deviation |
|---|---|---|
| extrinsic_rewards | 2.7344 | 1.04832 |
| family_balance | 2.8138 | 1.01530 |
| interaction_opport | 3.4974 | .83256 |
| prof_opport | 2.8841 | .91918 |
| recognition | 3.1097 | .89116 |
| control_resp | 3.1169 | 1.14875 |
| Job satisfaction level | 3.44 | 0.75 |

In order to identify the most important factors of employee job satisfaction, an exploratory factor analysis based on principal component analysis was applied.

In order to validate inclusion of items loading on a factor, the items must have a factor loading of at least .50 to be included in a factor. The minimum factor loading was set as .50. If an item cross-loads on two factors with a loading greater than .30 on the second factor, it must be eliminated from both factors. The Cronbach Alpha c=0.84, revealed an acceptable reliability rate on the present sample.

The value of Kaiser-Meyer-Olkin measure indicated an acceptable sampling adequacy for the analysis, takin into account the fact that its value KMO=0.876 is greater than the limit 0.5 according to Field (2009).

The empirical results of PCA analysis revealed the existence a four factor structure for eigenvalues greater than 1.0 who recovers a total of 65.6% of the original variables variance (Table 3).

**Table 2.** Total Variance Explained

| Component | | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|
| | | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| | 1 | 6.263 | 39.146 | 39.146 | 6.263 | 39.146 | 39.146 |
| | 2 | 1.940 | 12.123 | 51.269 | 1.940 | 12.123 | 51.269 |
| | 3 | 1.332 | 8.324 | 59.593 | 1.332 | 8.324 | 59.593 |
| | 4 | .960 | 6.002 | 65.594 | .960 | 6.002 | 65.594 |
| | 5 | .783 | 4.896 | 70.491 | | | |
| | 6 | .691 | 4.319 | 74.809 | | | |
| | 7 | .637 | 3.982 | 78.791 | | | |
| | 8 | .552 | 3.447 | 82.238 | | | |
| | 9 | .511 | 3.195 | 85.434 | | | |
| | 10 | .471 | 2.943 | 88.377 | | | |
| | 11 | .413 | 2.582 | 90.959 | | | |
| | 12 | .346 | 2.160 | 93.119 | | | |
| | 13 | .318 | 1.990 | 95.109 | | | |
| | 14 | .284 | 1.772 | 96.882 | | | |
| | 15 | .272 | 1.698 | 98.580 | | | |
| | 16 | .227 | 1.420 | 100.000 | | | |
| **Extraction Method: Principal Component Analysis.** | | | | | | | |

All sixteen items had loadings greater than .50 on at least one of four factors. Examination of all item loadings showed that six additional items loaded on two factors and also should be eliminated from (items 4, 5, 6, 7, 8, 11 and 12). The first component who explains 30.14% of total variance can be

interpreted in terms of "satisfaction with praise/recognition". The second one who recovers an additional 12.12% of the total variance can be interpreted in terms of "satisfaction with extrinsic rewards and satisfaction with the balance of family". The third one who recovers another 8.32% of total variance cane be named "satisfaction with interaction opportunities" The last one, who recovers 6% of total variance, can be interpreted in terms of "satisfaction with professional opportunities".

**Table 3.**Rotated Component Matrixa

|  | Component | | | |
|---|---|---|---|---|
|  | **1** | **2** | **3** | **4** |
| **1.Opportunities to belong to ward and institutional committees** | .169 | .040 | .233 | **.806** |
| **2.Opportunities for social contact at work** | .029 | .242 | **.730** | .221 |
| **3.Opportunities for social contact with colleagues after work** | .097 | .124 | **.813** | .013 |
| **4.Opportunities to interact professionally with people from other disciplines** | .274* | -.117 | .651 | .322 |
| **5.Opportunities to interact with faculty of the college of nursing** | .257* | .046 | .420 | .582 |
| **6.Recognition of work from peers** | .571* | .149 | .526 | .002 |
| **7.Recognition of work from superiors** | .560* | .222 | .134 | .412 |
| **8.Opportunities for career advancement** | .701* | .240 | .320 | -.009 |
| **9.Amount of encouragement and positive feedback** | **.769** | .192 | .129 | .271 |
| **10.Opportunities to participate in research** | .760 | .235 | .095 | .156 |
| **11.Opportunities to write and publish** | .652* | .325 | -.039 | .402 |
| **12.Salary** | .404* | .539 | -.135 | .482 |
| **13.Vacation** | .178 | .708 | .004 | .379 |
| **14.Benefit package (insurance, retirement)** | .173 | **.797** | .170 | .051 |
| **15.Maternity leave time** | .222 | **.762** | .136 | -.061 |
| **16.Child care facilities** | .213 | **.737** | .105 | .009 |
| **Extraction Method: Principal Component Analysis.** **Rotation Method: Varimax with Kaiser Normalization.** | | | | |
| **a. Rotation converged in 8 iterations.** | | | | |

## 5. Conclusions and discussions

The main purpose of the analysis was to highlight the main determinants of job satisfaction among Jordanian hospital employees, using McCloskey/Mueller Satisfaction Scale on the basis of PCA analysis using a sample of 325 employees at the level of 2015.

The empirical results pointed out that the majority of employees in Jordanian hospitals was somewhat satisfied or satisfied with their jobs however there is scope for further enhancement within a realistic range.

Analysing the respondent responses, the highest rank motivator factor was interaction opportunities, followed by recognition and career advancement. At the opposite side, the most demotivating factor is the extrinsic rewards (salary, vacation and benefits package).

The empirical results of PCA revealed the existence of a four factor structure, which recover almost 65% of the variance of original variable, highlighting the main factors of job satisfaction from the perspective of Jordanian employees as -"satisfaction with praise/recognition", "satisfaction with extrinsic rewards and satisfaction with the balance of family", "satisfaction with interaction opportunities", and "satisfaction with professional opportunities".

The findings revealed that the financial incentives are very important but also non-financial incentives are fundamental in enhancing motivation among hospital employees. People need to have accomplished the needs related with balance of family, interaction and professional opportunities and recognition in order to be more motivated and to increase the retention level among the hospital employees. It is important to create a balance between financial/non-financial incentives and the hospital managers need to be very focus on 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 decrease the level of retention and for some of them could increase the propensity of going into the informal sector to supplement their earnings (Davidescu, 2013; 2014a; 2014b).

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*** SPSS software version 22