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A Cross Sectional Study to Investigate Work Satisfaction among Nurses: The Impact of Occupational Features

*Corresponding author: **Paraskevi Theofilou**

General Hospital of Thoracic Diseases SOTIRIA, Athens, and Hellenic Open University, School of Social Sciences, Patra, Greece

Abstract

The aim of the present study was to investigate work satisfaction among nurses as well as the impact of occupational features. A hundred and fifty two nurses (28 men and 124 women) participated in the survey. To collect the data, Job Satisfaction Survey (JSS) was used. There were statistically significant differences between the positions regarding satisfaction (total score) ($p<0.05$) with those nurses who had a position of responsibility (supervisors) showing the greatest satisfaction ($p<0.05$). Also, there were statistically significant differences between hours regarding satisfaction (dimensions) ($p<0.05$) with those nurses who had morning work showing the highest satisfaction ($p<0.05$) in the salary dimension. An effect on the level of satisfaction of the nursing staff is observed from the factors of years of service, position of responsibility, working hours and monthly salaries.

Keywords: Work satisfaction; Nurses; Occupational features

Introduction

Job satisfaction is defined as the effective navigation one has man towards his work and consists of two aspects, the positive and the negative negative effectiveness. Positive efficacy is shown with high energy levels, enthusiastic mood and fun engagement, while the negative effectiveness is indicated by discomfort, unfun engagement and bitterness [1].

Job satisfaction can otherwise be described as the how much each person likes or dislikes their job [2] or whether feels that his claims and demands are met by his work [3]. There is a commonality among various models that explain the term labor satisfaction: can be affected by environmental factors such as working conditions that prevail in each workplace, as well as from personal factors, such as self-efficacy beliefs [4].

The main factor affecting nursing job satisfaction staff is the salary [5] and the recognition of his work. Often, nurses are not satisfied with extrinsic rewards praise and recognition of their work, which reflects on their belief that their stressful profession is not adequately covered financially and they do not morally compensated. Nurses feel the need for support from the team with which they are working on but also their subordinates regarding the existing ones difficulties, such as

lack of resources [6]. Much of the nurses believe that the state does not recognize their profession and they do not give the corresponding importance and appreciation that is due to it, although the people express reverence [7].

Another factor that can affect job satisfaction is the circular time.It has a negative effect both mentally and physically condition.It can also take on social dimensions, since it often can it interferes with the family's daily life and habits and schedule, beyond of work, of each person [8]. More specifically, nursing staff are often not happy with the program, the balance between work and family and group interaction, a worsening situation from the heavy workload caused by the outbreak of the COVID-19 disease [9]. Other factors that affect job satisfaction are: education, the duration of work and the type of participation against the pandemic as negative factors, while experience and daily sleep duration as positive [9]. Also the overwork, the lack of clarity, the conflicts between the role and the duties of each employee but also the lack of organization and of methodicality in the workplace affect nurses' satisfaction with his profession as well as the adverse work situations he may have they concern the facilities and services of a workplace [8].

The aim of the present study is to investigate work satisfaction among nurses as well as the impact of occupational features.

Method

Questionnaire

In this research, to collect the data, the following tool was used: Job Satisfaction Survey (JSS), a tool that has been widely used to assess job satisfaction worldwide and was created in 1997 by Paul E. Spector, a professor in the Department of Psychology at the University of South Florida. Although it was developed for research in healthcare organizations, it has finally been used in other types of organizations that wish to measure the job satisfaction of their employees. This survey tool is freely available online for educational and research purposes at http://paulspector.com/ in the English language. The tool translated into the Greek language of the present research comes from the translations into languages of other countries from the same web address together with the instructions for completing it, as well as the instructions for evaluating its results. The Job Satisfaction Survey (JSS) questionnaire is structured on the basis of 36 work-related items and describes 9 work factors that may be factors of satisfaction or dissatisfaction for employees. Each of the 9 factors corresponds to 4 elements and a total score is calculated from all the elements. Assessment of job satisfaction is achieved through the use of a Likert scale, with six options per item ranging from "strongly disagree" to "strongly agree". The items are written in both directions, with negative and positive wording, so that about half of the items must be reversed. The nine factors are salary, promotion, supervision/supervision, perks/benefits, contingent rewards (performance-based rewards), operating conditions (required rules and procedures), coworkers, nature of work, and communication. The internal consistency index ranges from 60-91 (http://paulspector.com/scales/our-assessments/job-satisfaction-survey-jss/). In addition to the aforementioned questionnaire, there were questions related to the socio-demographic and work characteristics of the sample, e.g. gender, age, educational level, years of service, etc.

Sample

This is a cross-sectional study. The population and sample of the research was the nursing staff of all levels of hospitals in the broader area of Athens, with at least one year of experience. This particular sample is a sample of convenience. Participants were selected based on the inclusion criteria for the study, which are as follows: • The consent of the nursing staff • Age over eighteen years • Experience of at least one year • Ability to communicate in the Greek language All research participants were informed in writing and verbally and signed a consent form.The collection of the sample was preceded by written approval from the Scientific Committee of the Hospitals, following a relevant request of the researcher.

Data Collection Process

The data collection took place at the hospitals between May 2019 and June 2019, after the required permission was granted by the organization's Scientific Council. The data collection was done after distributing the questionnaires placed in yellow opaque envelopes with the instruction to the participant that after completing it, he should enclose it, seal the envelope and deliver it to a specific delivery point, which was designated by the researcher. This method ensured the complete anonymity of the participants and the confidentiality of their answers. The research participants with consent were also assured of the availability of the results in case they requested it.

Statistical analysis

For the presentation of the results related to the responses of the patients to the questionnaires, who participated in the research, a frequency analysis was carried out. Additionally, the descriptives command was run to examine the averages. Quantitative variables are presented as mean (± standard deviation) while qualitative variables are presented as frequency (%). Also, a test of normality of the sample was performed using the Kolmogorov Smirnov test. Non-parametric and parametric tests (Mann-Whitney test/Independent samples t test, Kruskal Wallis test/One-Way anova) were performed in order to investigate possible associations between nursing staff satisfaction and socio-demographic and work factors. The tool used in this research showed good reliability (Cronbach a), ranging at 0.741. Statistical analysis was performed with the IBM SPSS Statistics 23 statistical program. A p value <0.05 was considered to indicate statistical significance.

Results

A hundred and fifty two nurses (28 men and 124 women) participated in the survey, with the majority of them being in the 45-54 age group (70 people, 46.1%). The majority were also married (114 people, 75%), 2.6% (4 people) widowed, 13.8% (21 people) single while 7.2% (11 people) were divorced. With regard to their educational level, 75 had a degree from HEI/TEI (higher education) (49.3%). Only 18 nurses held master's/doctorate degrees (11.8%). Regarding the professional status, the majority (147 people, 96.7%) stated that they are permanent employees and only 5 nurses (3.3%) were contracted.

(Table 1) shows all the work characteristics of the sample. In particular, as can be seen in the said table, the majority of nurses had 11-20 years of experience, belonged to the category of nurses, worked shifts, received 1000-1500 euros and were permanent employees.

Table 1: Work characteristics of the sample.

		Frequency	Percent	Valid Percent	Cumulative Percent
Years of work	1-10 years	16	10,5	10,5	10,5
	11-20 years	59	38,8	38,8	49,3
	21-30 years	38	25,0	25,0	74,3
	31 years and above	39	25,7	25,7	100,0
	Total	152	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Position	Supervisor	9	5,9	5,9	5,9
	Department manager position	12	7,9	7,9	13,8
	Nurse	68	44,7	44,7	58,6
	Nurse's assistant	63	41,4	41,4	100,0
	Total	152	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Hours	Morning work	38	25,0	25,0	25,0
	Shifts	114	75,0	75,0	100,0
	Total	152	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Monthly income	Up to 1000 euro	54	35,5	35,5	35,5
	1000-1500 euro	95	62,5	62,5	98,0
	1501-2000 euro	3	2,0	2,0	100,0
	Total	152	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Type of work	Permanent employee	147	96,7	96,7	96,7
	Contract holder	5	3,3	3,3	100,0
	Total	152	100,0	100,0	

In the table below, we see the descriptive elements of the questionnaire dimensions. In particular, the overall score reached an average of 107.2237. Supervision/supervision reached 16.6579 and nature of work at 15.4276.

Table 2: Descriptive data of questionnaire dimensions.

	N	Minimum	Maximum	Mean	Std. Deviation
Total score	152	52,00	175,00	107,2237	21,24633
Salary	152	4,00	24,00	7,9276	3,79456
Promotion	152	4,00	23,00	9,8224	3,98856
Supervising	152	4,00	24,00	16,6579	5,49666
Benefits	152	4,00	19,00	8,6974	3,59919
Performance-based rewards	152	4,00	24,00	10,0000	4,43496
Operating conditions	152	4,00	21,00	12,8026	2,84486
Collaborators	152	4,00	23,00	14,5461	4,22048
Nature of work	152	4,00	24,00	15,4276	3,81978
Communication	152	4,00	22,00	11,3421	4,03971

Based on the results of the (Table 3), the majority of nurses (82 people, 53.9%) had a lack of satisfaction and only 6 people (3.9%) were satisfied.

Table 3: Levels of satisfaction

	Frequency	Percent	Valid Percent	Cumulative Percent
36-108 lack of satisfaction	82	53,9	53,9	53,9
108-144 of questionable rating	64	42,1	42,1	96,1
144 to 216 satisfaction	6	3,9	3,9	100,0
Total	152	100,0	100,0	

In the table below, the values of the Kolmogorov-Smirnov test regarding the normality of the sample are displayed. There was no normality in any of the dimensions (p<0.05) other than the total score (p>0.05).

Table 4: Sample normality.

	Kolmogorov-Smirnov		
	Statistic	df	Sig.
Total score	,044	152	,200*
Salary	,161	152	,000
Promotion	,095	152	,002
Supervising	,143	152	,000
Benefits	,131	152	,000
Performance-based rewards	,109	152	,000
Operating conditions	,124	152	,000
Collaborators	,089	152	,005
Nature of work	,100	152	,001
Communication	,080	152	,019

As can be seen from (Table 5), there were no statistically significant differences between years of service regarding satisfaction (total score) (p<0.05).

Table 5: Differences between years of work regarding satisfaction (dimensions).

	Years of work	N	Mean Rank	Sig.
Salary	1-10 years	16	76,38	0,783
	11-20 years	59	72,49	
	21-30 years	38	81,78	
	31 years and above	39	77,47	
	Total	152		
Promotion	1-10years	16	65,91	0,771
	11-20 years	59	78,55	
	21-30 years	38	78,16	
	31 years and above	39	76,13	
	Total	152		
Supervising	1-10 years	16	82,94	0,243
	11-20 years	59	70,72	
	21-30 years	38	71,68	
	31 years and above	39	87,29	
	Total	152		
Benefits	1-10 years	16	81,28	0,238
	11-20 years	59	78,15	
	21-30 years	38	84,03	
	31 years and above	39	64,71	
	Total	152		
Performance-based rewards	1-10 years	16	93,72	0,214
	11-20 years	59	70,85	
	21-30 years	38	82,34	
	31 years and above	39	72,29	
	Total	152		
Operating conditions	1-10 years	16	80,91	0,131
	11-20 years	59	85,45	
	21-30 years	38	72,55	
	31 years and above	39	65,00	
	Total	152		
Collaborators	1-10 years	16	82,03	0,608
	11-20 years	59	72,70	
	21-30 years	38	73,17	
	31 years and above	39	83,22	
	Total	152		

Nature of work	1-10 years	16	64,91	0,048
	11-20 years	59	71,07	
	21-30 years	38	72,76	
	31 years and above	39	93,12	
	Total	152		
Communication	1-10 years	16	86,84	0,222
	11-20 years	59	70,41	
	21-30 years	38	86,38	
	31 years and above	39	71,85	
	Total	152		

As can be seen from (Table 6), there were statistically significant differences between the positions regarding satisfaction (total score) (p<0.05) with those nurses who had a position of responsibility (supervisors) showing the greatest satisfaction (p<0.05).

Table 6: Differences between positions regarding satisfaction (total score).

Total score								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Supervisor	9	126,4444	30,04210	10,01403	103,3520	149,5368	83,00	175,00
Department manager position	12	104,4167	20,65940	5,96385	91,2903	117,5430	71,00	139,00
Nurse	68	106,2059	20,78357	2,52038	101,1752	111,2366	52,00	144,00
Nurse's assistant	63	106,1111	19,56718	2,46523	101,1832	111,0390	67,00	151,00
Total	152	107,2237	21,24633	1,72331	103,8188	110,6286	52,00	175,00

Total score					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3567,916	3	1189,305	2,725	,046
Within Groups	64594,479	148	436,449		
Total	68162,395	151			

As can be seen from (Table 7), there were statistically significant differences between the positions regarding satisfaction (dimensions) (p<0.05) with those nurses who had a position of responsibility (supervisors) showing the greatest satisfaction (p<0.05) in dimensions of salary, promotion and nature of work. In the dimension of working conditions, nursing assistants presented the highest levels of satisfaction.

Table 7: Differences between positions regarding satisfaction (dimensions).

	Position	N	Mean Rank	Sig.
Salary	Supervisor	9	114,83	0,023
	Department manager position	12	80,75	
	Nurse	68	78,44	
	Nurse's assistant	63	68,12	
	Total	152		
Promotion	Supervisor	9	120,33	0,017
	Department manager position	12	83,00	
	Nurse	68	73,19	
	Nurse's assistant	63	72,57	
	Total	152		
Supervising	Supervisor	9	90,44	0,746
	Department manager position	12	75,71	
	Nurse	68	77,52	
	Nurse's assistant	63	73,56	
	Total	152		

	Position	N	Mean Rank	Sig.
Benefits	Supervisor	9	69,83	0,154
	Department manager position	12	54,83	
	Nurse	68	83,74	
	Nurse's assistant	63	73,76	
	Total	152		
Performance-based rewards	Supervisor	9	97,44	0,361
	Department manager position	12	66,08	
	Nurse	68	78,51	
	Nurse's assistant	63	73,32	
	Total	152		
Operating conditions	Supervisor	9	44,83	0,012
	Department manager position	12	49,04	
	Nurse	68	80,19	
	Nurse's assistant	63	82,27	
	Total	152		
Collaborators	Supervisor	9	98,22	0,300
	Department manager position	12	73,04	
	Nurse	68	71,14	
	Nurse's assistant	63	79,84	
	Total	152		
Nature of work	Supervisor	9	106,33	0,001
	Department manager position	12	99,29	
	Nurse	68	62,19	
	Nurse's assistant	63	83,34	
	Total	152		
Communication	Supervisor	9	97,39	0,183
	Department manager position	12	85,46	
	Nurse	68	79,42	
	Nurse's assistant	63	68,66	
	Total	152		

As can be seen from (Table 8), there were no statistically significant differences between the hours regarding satisfaction (total score) (p<0.05).

Table 8: Differences between hours regarding satisfaction (total score).

	Hours	N	Mean	Std. Deviation	Std. Error Mean	Sig.
Total score	Morning work	38	109,8421	24,87648	4,03550	0,382
	Shifts	114	106,3509	19,93751	1,86732	

As can be seen from (Table 9), there were statistically significant differences between hours regarding satisfaction (dimensions) ($p < 0.05$) with those nurses who had morning work showing the highest satisfaction ($p < 0.05$) in the salary dimension. In the dimension of working conditions, nurses who worked shifts presented the highest levels of satisfaction.

Table 9: Differences between hours regarding satisfaction (dimensions).

	Hours	N	Mean Rank	Sum of Ranks	Sig.
Salary	Morning work	38	90,22	3428,50	0,025
	Shifts	114	71,93	8199,50	
	Total	152			
Promotion	Morning work	38	84,41	3207,50	0,199
	Shifts	114	73,86	8420,50	
	Total	152			
Supervising	Morning work	38	81,71	3105,00	0.398
	Shifts	114	74,76	8523,00	
	Total	152			
Benefits	Morning work	38	65,46	2487,50	0,073
	Shifts	114	80,18	9140,50	
	Total	152			
Performance-based rewards	Morning work	38	80,42	3056,00	0,525
	Shifts	114	75,19	8572,00	
	Total	152			
Operating conditions	Morning work	38	56,66	2153,00	0,001
	Shifts	114	83,11	9475,00	
	Total	152			
Collaborators	Morning work	38	78,12	2968,50	0,793
	Shifts	114	75,96	8659,50	
	Total	152			
Nature of work	Morning work	38	86,09	3271,50	0,119
	Shifts	114	73,30	8356,50	
	Total	152			
Communication	Morning work	38	83,26	3164,00	0,272
	Shifts	114	74,25	8464,00	
	Total	152			

As can be seen from (Table 10), there were no statistically significant differences between salaries regarding satisfaction (total score) ($p < 0.05$).

Table 10: Differences between salaries regarding satisfaction (overall score).

Total score

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	95% Confidence Interval for Mean Upper Bound	Minimum	Maximum
Up to 1000 euro	54	104,4074	18,40172	2,50416	99,3847	109,4301	58,00	147,00
1000-1500 euro	95	108,5474	22,78193	2,33738	103,9065	113,1883	52,00	175,00
1501-2000 euro	3	116,0000	17,34935	10,01665	72,9018	159,0982	105,00	136,00
Total	152	107,2237	21,24633	1,72331	103,8188	110,6286	52,00	175,00

Total score

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	825,821	2	412,910	,914	,403
Within Groups	67336,574	149	451,923		
Total	68162,395	151			

As can be seen from (Table 11), there were statistically significant differences between salaries regarding satisfaction (dimensions) ($p < 0.05$) with those nurses who had salaries of 1501-2000 euros showing the greatest satisfaction ($p < 0.05$) in dimension of supervision/supervision.

Table 11: Differences between salaries regarding satisfaction (dimensions).

	Net monthly income (after taxes and deductions)	N	Mean Rank	Sig.
Salary	Up to 1000 euro	54	67,27	0,110
	1000-1500 euro	95	80,95	
	1501-2000 euro	3	101,67	
	Total	152		
Promotion	Up to 1000 euro	54	71,96	0,083
	1000-1500 euro	95	77,41	
	1501-2000 euro	3	129,33	
	Total	152		
Supervising	Up to 1000 euro	54	64,39	0,032
	1000-1500 euro	95	82,59	
	1501-2000 euro	3	101,50	
	Total	152		
Benefits	Up to 1000 euro	54	79,46	0,392
	1000-1500 euro	95	75,83	
	1501-2000 euro	3	44,50	
	Total	152		
Performance-based rewards	Up to 1000 euro	54	74,00	0,713
	1000-1500 euro	95	78,38	
	1501-2000 euro	3	62,00	
	Total	152		

Operating conditions	Up to 1000 euro	54	79,56	0,275
	1000-1500 euro	95	75,97	
	1501-2000 euro	3	38,17	
	Total	152		
Collaborators	Up to 1000 euro	54	76,99	0,811
	1000-1500 euro	95	75,73	
	1501-2000 euro	3	92,17	
	Total	152		
Nature of work	Up to 1000 euro	54	72,22	0,368
	1000-1500 euro	95	77,99	
	1501-2000 euro	3	106,17	
	Total	152		
Communication	Up to 1000 euro	54	82,06	0,424
	1000-1500 euro	95	72,96	
	1501-2000 euro	3	88,67	
	Total	152		

As can be seen from (Table 12), there were no statistically significant differences between working relationships regarding satisfaction (total score) (p<0.05).

Table 12: Differences between work relationships regarding satisfaction (total score).

	Type of work					
Total score	Permanent employee	147	107,2517	21,52280	1,77517	0,930
	Contract holder	5	106,4000	11,48042	5,13420	

As can be seen from (Table 13), there were no statistically significant differences between working relationships regarding satisfaction (dimensions) (p<0.05).

Discussion

The findings from the said research study are significant and can be summarized as follows:

An effect on the level of satisfaction of the nursing staff is observed from the factors of years of service, position of responsibility, working hours and monthly salaries.

Al-Dossary et al. [10] studied 50 Saudi nurses and 167 non-Saudi nurses working in a teaching hospital in Saudi Arabia and found that most socio-demographic factors, namely age, gender and level of education, did not affect the degree of job satisfaction. However, the number of years of nursing experience was significant. Job satisfaction was positively related to pay, contingent rewards, coworkers, supervision, and job nature, while job promotion and working conditions had a moderate association with job satisfaction. The most satisfying factor for nurses was leadership style. Regarding the limitations of the present research, it is noted that the results obtained from the said study can be further investigated in samples from other hospital contexts, private or even public, giving the possibility to control the variables under study, to compare the results, so that more general conclusions can be drawn. However, it should be noted that this study was conducted in only one hospital and therefore, because the sample is small, the results cannot be generalized.

Table 13: Differences between work relationships regarding satisfaction (dimensions).

	Type of work	N	Mean Rank	Sum of Ranks	Sig.
Salary	Permanent employee	147	76,57	11256,50	0,909
	Contract holder	5	74,30	371,50	
	Total	152			
Promotion	Permanent employee	147	76,76	11283,00	0,697
	Contract holder	5	69,00	345,00	
	Total	152			
Supervising	Permanent employee	147	77,29	11361,50	0,230
	Contract holder	5	53,30	266,50	
	Total	152			
Benefits	Permanent employee	147	76,99	11317,50	0,455
	Contract holder	5	62,10	310,50	
	Total	152			
Performance-based rewards	Permanent employee	147	76,60	11260,50	0,876
	Contract holder	5	73,50	367,50	
	Total	152			
Operating conditions	Permanent employee	147	76,61	11261,50	0,868
	Contract holder	5	73,30	366,50	
	Total	152			
Collaborators	Permanent employee	147	75,57	11109,00	0157
	Contract holder	5	103,80	519,00	
	Total	152			
Nature of work	Permanent employee	147	75,40	11084,00	0,094
	Contract holder	5	108,80	544,00	
	Total	152			
Communication	Permanent employee	147	76,68	11272,50	0,780
	Contract holder	5	71,10	355,50	
	Total	152			

Among all the fields, the field of health is the one that traditionally seems to be the most affected by this type of situation, especially regarding to nurses, who are a professional branch that contains a large responsibility, work demands and insecurity but at the same time great dedication to work [11]. The contribution of nurses to the global health is indisputable and investing in their quality of life would benefit all of them society [12,13].

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