

Relationship between Working Conditions and Job Satisfaction: The Case of Croatian Shipbuilding Company

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Abstract

Job satisfaction is a complex concept that is influenced by many factors. The aim of this paper is to analyze the impact of working conditions to job satisfaction. For that purpose the empirical research has been conducted in 2012 in one Croatian shipbuilding company. The research results show that there is no statistically significant difference in overall job satisfaction between workers who work under difficult working conditions (at the facility) and those who work in normal working conditions (in the administration); workers who work in normal working conditions are more satisfied with working conditions than workers who work under difficult working conditions; in the case of workers who work under difficult working conditions, the working conditions are important factor of their overall job satisfaction.

Keywords: job satisfaction, working conditions, company, employees

1. Introduction

Job satisfaction shows how much an employee likes his work as well as the level of his preoccupation with work. Generally, it can be stated that job satisfaction is a sense of comfort and positive experience that an employee have related to his job. Job satisfaction can affect work behavior, and through that, the organizational performance. For a long time job satisfaction has been viewed as a unique concept, but today it is seen as a very complex cluster of attitudes towards different aspects of the work (Rollinson et al., 1998). Therefore, the definitions of job satisfaction should include a variety of factors such as nature of work, salary, stress, working conditions, colleagues, superiors, working hours etc. Working conditions as a factor of job satisfaction include: the influence of factors related to the employee, so called subjective factors; the impact of environmental factors; and the impact of organizational factors that are primarily related to the organization of production.

The studies that have dealt with the working conditions as a factor of job satisfaction shows that employees prefer working conditions which are not dangerous and unpleasant (Robbins, 1998). They like working conditions which are similar to the conditions that they have in their homes. Furthermore, researches have shown a link between working conditions and job satisfaction (Brill et al., 2001; Newsham et al., 2004; Finnegan and Solomon, 1981; Leather, et al., 1998, Veitch et al., 2005; Newsham et al., 2009; Kinzl et al., 2005). The aim of this paper is to elucidate the impact of working conditions to the job satisfaction by analyzing and comparing two categories of employees, the employees who work in the normal (pleasant) working conditions and the employees who work in difficult working conditions. Therefore, this paper will attempt to answer the following research questions: (1) whether there are differences in overall job satisfaction between employees who work in difficult working conditions, and those who work in normal working conditions, (2) do the working conditions represent the important factor of overall job satisfaction of the employees who work in difficult working conditions, (3) whether there is a difference in the satisfaction with working conditions between these two categories of employees.

2. Theoretical background

2.1 The concept and meaning of job satisfaction

In theory there are many definitions and explanations of job satisfaction. While some definitions focus on job satisfaction as a central feeling and do not share it to the individual components, others take into consideration each of the factors that affect overall job satisfaction. So Locke (1976, p. 1300) definite job satisfaction as a pleasurable or positive emotional state that is related to the work that individual performs. Leap and Crino (1993) defines job satisfaction as the attitude of worker toward his job, rewards which he gets, social, organizational and physical characteristics of the environment in which he performs his working activities. Furthermore, job satisfaction is a pleasant or positive response to the individual's work (Milkovich and Boudreau, 1997). Job satisfaction stems from the perception that an employee has about his job and what he receives related with the work that he perform and the working environment (Black and Steers, 1994).

Certainly, job satisfaction is an interesting problem both from the standpoint of employees and from the standpoint of managers and scientists. On the one hand, employees have their own expectations and attitudes, and they want to be treated in a fair and respectful manner, and as a result they will be satisfied at their work. On the other hand, managers want satisfied workers, who will have a positive attitude to the job, who will be committed, and emotionally involved with theirs job. The growing interest in job satisfaction is undoubtedly justified by the fact that under today's business conditions employees and their knowledge are becoming a key factor in achieving competitive advantage. Scientists suggest that job satisfaction has implications for various aspects of organizational behavior. These implications can produce both positive and negative behavior and each of the organization tries to avoid negative behavior because it will have a negative impact on the overall achievement of organizational effectiveness and organizational performance.

The above mentioned leads to the simple conclusion that the job satisfaction is one of the key variables that affect organizational success, and it is necessary to pay a close attention to it in order to avoid negative impacts on organizational performance. Job satisfaction is influenced by various factors such as the nature of work, salary, stress, working conditions, colleagues, superiors, working hours etc. Given that this paper focuses on the research of the impact of working conditions on job satisfaction, so in the below the particular attention will be given to this factor.

2.2 The concept or working conditions

The conditions under which a job is performed can be different - from those completely comfortable to those very difficult and dangerous to employees' life and health. Difficult working conditions can be influenced by: (1) external factors that include climate - meteorological conditions, temperature, humidity, drafts, lighting in the workplace, noise and interference, gases, radiation, dust, smoke and other harmful factors; (2) subjective factors that include gender and age of the worker, fatigue, monotony, unfavorable posture during work, etc.; (3) factors related to the organization of production such as duration of the work shift, work schedule, working time, work pace, excessive strain etc.

Jobs with difficult working conditions may perform only those employees who meet specific requirements in terms of age, sex, qualifications, health, physical and mental condition and psycho-physiological and psychological capabilities. Difficult working conditions influence employees' performances. It is therefore necessary to take measures to eliminate uncomfortable working conditions or, if not possible, to take appropriate safety measures. Safety at work is carried out to ensure working conditions without danger to life or health, or, to avoid accidents, injuries, occupational diseases and, or at least mitigate their consequences.

In the context of safety at work it should be talking about equipment that employees use in their daily work. Equipment (machinery, equipment, plant, tools, supplies, laboratory equipment, etc.) that employees use in their work has to be functional and correctly to avoid injuries at work or reduced performances. It is important that workers are trained how to work with the equipment because inadequate equipment handling can result in accidents or deviations in performance no matter how much equipment was proper. Training of employees should be also oriented to the proper use of protective equipment and personal protection (Buble, 2006, p. 437).

3. Methodology

Empirical research of this paper is based on testing the following research hypotheses:

Hypothesis 1: Workers who work in normal working conditions have a higher level of job satisfaction than workers who work in difficult working conditions.

Hypothesis 2: Workers who work in normal working conditions are more satisfied with working conditions than workers who work under difficult working conditions.

Hypothesis 3: In the case of workers who work under difficult working conditions, the working conditions are important factor of their overall job satisfaction.

The research has been conducted in one Croatian shipbuilding company on the sample of 60 workers. Out of them 30 workers work in normal working conditions (in the administration) and 30 workers work under difficult working conditions. The research instrument was the questionnaire. The questionnaire consisted of two parts. The first part included questions about general characteristics of workers such as gender, age, tenure in the company and position. The second part of the questionnaire related to the questions about overall job satisfaction and the questions about job satisfaction factors, where 9 factors were tested based on Likert 5-item scale where 1 represents "very dissatisfied" and 5 represents "very satisfied".

The research data was statistical analyzed by programs SPSS and Microsoft Excel.

4. Research results

Table 1 presents distribution of respondents by gender, age and tenure. Out of 60 respondents who were included in this study, 60% are men and 40% are women. The majority of respondents are older than 50 years, 48.3% of them, 21.7% of them are between 40 and 50 years. Regarding the tenure, from table 1 it can be perceived that the greatest number of employees has tenure more than 20 years, 53.3% of them. These data show that in the observed company there is domination of older employees.

Tables 2 and 3 show the data required to test the first research hypothesis, which assumes that workers who work in normal working conditions have a higher level of job satisfaction than workers who work in difficult working conditions. Table 2 shows the results of descriptive statistics about job satisfaction of workers who work in difficult working conditions (at the facility), and workers who work in normal working conditions (in the administration). From table 2 it is clear that workers in the administration have higher level of job satisfaction than workers who work at the facility. The average value of job satisfaction for workers in administration is 3.33, while in the case of workers who work at the facility the average value of job satisfaction is 3.17. Median, which divides the distribution into two equal parts, is 3.00 for the workers at the facility as well as for workers in administration, while mode, as the most common value is 3 in the both cases. Standard deviation in the case of workers at the facility is 0.747, and in the case of workers in the administration is 0.844.

Given the above presented results it can be stated that the workers who work in normal working conditions (in the administration) reported higher level of job satisfaction than workers who work in difficult working conditions (at the facility). Further testing will show is this difference statistically significant. Table 3 provides Independent Sample Test of difference between the workers who work in administration and workers who work at the facility related to the level of their job satisfaction. On the test results given in table 3 it can be concluded that there is no statistically significant difference in job satisfaction between these two categories of workers because $\alpha > 0.05$. Thus, it can be concluded that there is difference between the workers who work in administration and workers who work at the facility related to the level of their job satisfaction, but this difference is not statistically significant. Based on these results, the first research hypothesis could not be accepted.

The second research hypothesis implies that the workers who work in normal working conditions are more satisfied with working conditions than workers who work under difficult working conditions. Tables 4 and 5 present the data needed to test this hypothesis. Table 4 presents the average value of satisfaction with working conditions and other job satisfaction factors. From table 4 it can be seen that regarding the satisfaction with working conditions there is a greatest difference between workers who work in the administration (3.40) and workers who work at the facility (2.73). The test in Table 5 shows that this difference is statistically significant.

Table 5 shows that there is statistically significant difference between the workers who work in the administration and workers who work at the facility related to the level of their satisfaction with working conditions, because $\alpha \leq 0.05$. This confirms the second research hypothesis that assumes that workers who work in normal working conditions are more satisfied with working conditions than workers who work under difficult working conditions. As additional support to the above, in table 5, it is possible to see that regarding satisfaction with other job satisfaction factors there are no statistically significant differences in mean values between workers in the administration and workers at the facility, since $\alpha > 0.05$.

And finally, the third research hypothesis should be tested. This hypothesis assumes that in the case of workers who work under difficult working conditions, the working conditions are important factor of their overall job satisfaction. Table 6 shows the correlations between each job satisfaction factors and overall job satisfaction of workers who work in normal working conditions (in the administration) and workers who work under difficult working conditions (at the facility). From table 6 it is observed that the correlation coefficient between satisfaction with working conditions and overall job satisfaction in the case of workers who work in difficult working conditions (at the facility) is higher (0.527), compared to those who work in normal working conditions (in the administration) (0.374). Thus it can be concluded that working conditions are important factor of overall job satisfaction for workers who work at the facility in relation to employees who work in the administration. Furthermore, it can be seen that for workers at the facility, in the case of satisfaction with working conditions correlation with overall job satisfaction is higher than in the case of all other job satisfaction factors. So it can be concluded that in the case of workers who work at the facility working conditions among all job satisfaction factors strongest determine their overall job satisfaction. Based on the above third research hypothesis can be accepted. So it could be stated that in the case of workers who work under difficult working conditions, the working conditions are important factor of their overall job satisfaction.

5. Conclusion

Job satisfaction is a phenomenon does not totally clarified. This paper is focused on the observation of the importance of working conditions to overall job satisfaction.

Empirical research of this paper showed that there is no significant difference in overall job satisfaction between workers who work in normal working conditions and workers who work in difficult working conditions. Furthermore, it was found out that the satisfaction with working conditions is higher in the case of workers who work in the administration than in the case of workers who work in difficult working conditions. And finally, it is discovered that in the case of workers who work under difficult working conditions, the working conditions are important factor of their overall job satisfaction.

So, working conditions as a factor of job satisfaction, do not considerably determine overall job satisfaction to make significantly difference between workers who work in normal working conditions and workers who work in difficult conditions. However, given that it was discovered that the working conditions are an important factor of the overall job satisfaction of workers who work in the difficult working conditions, and given that these workers are less satisfied with this factor in relation to employees who work in normal working conditions, it could be concluded that it is necessary to improve the working conditions of workers who work in difficult working conditions.

Improving working conditions relates to the improvement of safety at work, training of workers, control and improvement of machinery and tools, and to provide adequate protective equipment. As a result of these improvements it is possible that satisfaction with working conditions of workers who work in difficult working conditions increases. In that case these workers could become equally satisfied with working conditions as workers who work in normal working conditions which may act favorably on their overall job satisfaction as well as their performance.

References

- Black, S. J., & Steers, R. M. (1994). *Organizational Behavior*. (5th ed.) Fifth Edition. Harper Collins College Publishers.
- Brill, M., Weidemann, S., & BOSTI Associates. (2001). *Disproving Widespread Myths About Workplace Design*. Kimball International. Jasper. IN.
- Buble, M. (2006). *Management*. Ekonomski fakultet Split.
- Finnegan, M. C., & Solomon, L. Z. (1981). Work attitudes in windowed vs windowless environments. *Journal of Social Psychology*, 115, 291-292.
- Kinzl, J. F., Knotzer, H., Traweger, C., Lederer, W., Heidegger, T., & Benzer, A. (2005). Influence of working conditions on job satisfaction in anesthetists. *British Journal of Anesthesia*, 94(2), 211-215.
- Leap, T. L., & Crino, M.D. (1993). *Personnel/Human Resource Management*. Macmillian Publishing Company.
- Leather, P., Pygras, M., Beale, D., & Lawrence, C. (1998). Windows in the workplace: sunlight, view and occupational stress. *Environment and Behavior*, 30, 739-762.
- Locke, E. A. (1976). The nature and causes of job satisfaction, In Dunnette, M. D., Editor. *Handbook of Industrial/Organizational Psychology*, McNally, Chicago, 1297-1346.
- Milkovich, G. T., & Boudreau, J. W. (1997). *Human Resource Management*. Irwin McGraw-Hill.
- Newsham, G., JayBrand, C. D., Veitch, J., Aries, M., & Charles, K. (2009). Linking Indoor Environment Conditions to Job Satisfaction. *Building Research & Information*, 37(2), 129-147.
- Newsham, G., Veitch, J., Arsenault, C., & Duval, C. (2004). Effect of dimming control on office worker satisfaction and performance, in *Proceedings of the IESNA Annual Conference*. Tampa, Florida, USA, 19-41.
- Robbins, S. P. (1998). *Organizational Behavior: Concepts, Controversies and Applications*. (8th ed.). Prentice Hall.
- Rollinson, D., Broadfield, A., & Edwards, D. J. (1998). *Organizational Behavior and Analysis, An Integrated Approach*. Pearson Education, Prentice Hall.
- Veitch, J. A., Geerts, J., Charles, K. E., Newsham, G. R., & Marquardt, C. J. G. (2005). Satisfaction with lighting in open-plan offices: COPE field findings, in *Proceedings of Lux Europa 2005*, Berlin, Germany, 414-417.

Table 1: Distribution of respondents by gender, age and tenure

		Frequency	Percent	Cumulative Percent
Gender	Male	36	60,0	60,0
	Female	24	40,0	100,0
	Total	60	100,0	-
Age	up to30	9	15,0	15,0
	30 - 40	9	15,0	30,0
	40 - 50	13	21,7	51,7
	more than 50	29	48,3	100,0
	Total	60	100,0	-
Tenure	2 - 5	9	15,0	15,0
	5 - 10	3	5,0	20,0
	10 - 20	16	26,7	46,7
	more than 20	32	53,3	100,0
	Total	60	100,0	-

Table 2: Descriptive statistics about job satisfaction of workers who work at the facility, and workers who work in the administration

	Workers at the facility	Workers in the administration
N	30	30
Mean	3,17	3,33
Median	3,00	3,00
Mode	3	3
Standard deviation	0,747	0,844

Table 3: Independent Sample Test of difference between the workers who work in the administration and workers who work at the facility related to the level of their job satisfaction

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Job satisfaction	Equal variances assumed	.627	.432	-.810	58	.421	-.167	.206	Lower	Upper
	Equal variances not assumed			-.810	57.147	.421	-.167	.206	-.579	.245

Table 4 Average value of satisfaction with different job satisfaction factors

		N	Mean	Std. Deviation	Std. Error Mean
Satisfaction with working conditions	Facility	30	2.73	.828	.151
	Administration	30	3.40	.814	.149
Satisfaction with colleagues	Facility	30	2.97	.850	.155
	Administration	30	3.63	1.098	.200
Satisfaction with workload	Facility	30	3.23	.679	.124
	Administration	30	3.50	.974	.178
Satisfaction with job security	Facility	30	2.73	.944	.172
	Administration	30	2.47	1.137	.208
Satisfaction with salary	Facility	30	2.70	.915	.167
	Administration	30	2.93	.868	.159
Satisfaction with working hours	Facility	30	3.90	.803	.147
	Administration	30	4.10	.803	.147
Satisfaction with promotion	Facility	30	2.10	1.094	.200
	Administration	30	2.23	.935	.171
Satisfaction with supervisors	Facility	30	3.10	1.062	.194
	Administration	30	3.20	1.126	.206
Satisfaction with nature of work	Facility	30	3.17	.699	.128
	Administration	30	3.13	1.074	.196

Table 5: Independent Sample Test of difference between the workers who work in the administration and workers who work at the facility related to the level of their satisfaction with each job satisfaction factors

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Satisfaction with working conditions	Equal variances assumed	.000	1.000	-3.146	58	.003	-.667	.212	-1.091	-.242
	Equal variances not assumed			-3.146	57.983	.003	-.667	.212	-1.091	-.242
Satisfaction with colleagues	Equal variances assumed	3.668	.060	-2.629	58	.011	-.667	.254	-1.174	-.159
	Equal variances not assumed			-2.629	54.581	.011	-.667	.254	-1.175	-.158
Satisfaction with workload	Equal variances assumed	4.871	.031	-1.230	58	.224	-.267	.217	-.701	.167
	Equal variances not assumed			-1.230	51.804	.224	-.267	.217	-.702	.168
Satisfaction with job security	Equal variances assumed	1.218	.274	.988	58	.327	.267	.270	-.273	.807
	Equal variances not assumed			.988	56.117	.327	.267	.270	-.274	.807
Satisfaction with salary	Equal variances assumed	.310	.580	-1.013	58	.315	-.233	.230	-.694	.228
	Equal variances not assumed			-1.013	57.839	.315	-.233	.230	-.694	.228
Satisfaction with working hours	Equal variances assumed	.002	.960	-.965	58	.339	-.200	.207	-.615	.215
	Equal variances not assumed			-.965	58.000	.339	-.200	.207	-.615	.215
Satisfaction with promotion	Equal variances assumed	.074	.786	-.507	58	.614	-.133	.263	-.659	.393
	Equal variances not assumed			-.507	56.633	.614	-.133	.263	-.660	.393
Satisfaction with supervisors	Equal variances assumed	.167	.685	-.354	58	.725	-.100	.283	-.666	.466
	Equal variances not assumed				57.799	.725	-.100	.283	-.666	.466
Satisfaction with nature of work	Equal variances assumed	8.017	.006	.142	58	.887	.033	.234	-.435	.502
	Equal variances not assumed			.142	49.821	.887	.033	.234	-.437	.503

Table 6 Correlations between each job satisfaction factors and overall job satisfaction of the workers who work in the administration and workers who work at the facility

		Overall job satisfaction (Workers in the administration)	Overall job satisfaction (Workers at the facility)
Satisfaction with working conditions	Correlation Coeff. Sig. (2-tailed) N	.374* .042 30	.527* .003 30
Satisfaction with colleagues	Correlation Coeff. Sig. (2-tailed) N	.407* .026 30	.126 .508 30
Satisfaction with workload	Correlation Coeff. Sig. (2-tailed) N	.618* .000 30	.244 .195 30
Satisfaction with job security	Correlation Coeff. Sig. (2-tailed) N	.590* .001 30	.387* .036 30
Satisfaction with salary	Correlation Coeff. Sig. (2-tailed) N	.441* .015 30	.246 .190 30
Satisfaction with working hours	Correlation Coeff. Sig. (2-tailed) N	.553* .002 30	.379* .039 30
Satisfaction with promotion	Correlation Coeff. Sig. (2-tailed) N	.768* .000 30	-.016 .934 30
Satisfaction with supervisors	Correlation Coeff. Sig. (2-tailed) N	.540* .002 30	.343 .063 30
Satisfaction with nature of work	Correlation Coeff. Sig. (2-tailed) N	.785* .000 30	.346 .061 30