

Effects of the Quality of Working Life on Job Satisfaction in an Auto Parts Manufacturing Factory

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ABSTRACT: *Since there is a significant relation between job satisfaction and staff's quality of working life, the aim of this study was surveying the relation between these parameters. Demographic information, quality of working life, and job satisfaction were collected by three questionnaires. About 60.7% of participants evaluated their job as heavy. The average of job satisfaction was 55.94 and job career satisfaction and general wellbeing had the highest effect on it. There were significant differences for home-work interface, work conditions, control at work, and total quality of working life between different jobs ($P < 0.026$). There are some reasons for low quality of working life. Tasks assigned to participants were not challenging; staff had no opportunities to realize their talents; they could not take part to organizational decision making. Individuals who adopt their job voluntarily are more satisfied. By improving the quality of working life, staff can feel justice, security and success. There were some limitations in present study such as the lack of enough time, shortage of resources, and lack of similar studies in industries. Because of shortage of industrial investigations, this paper deals with the motivation and protective factors related to job satisfaction and quality of working life in an industry and try to offer some recommendations in this respect.*

Key Words: *Quality of working life, job satisfaction, organizational performance, questionnaire, General wellbeing*

INTRODUCTION

Human resources (HR) are one of the main strategic resources for every organization (Huselid, Eackson, & Schuler, 1997). Organizations and industries can achieve more successes by efficient utilization of human resources. The comprehensive knowledge and specific tools are required to deal with challenges in efficient use of such resources (Hatami, Mir Jafari & Mojahedi Jahromi, 2011).

Some studies have investigated important predicting factors such as the opportunity to experience personal growth, remuneration, supportive work environment, work-life balance and sense of accomplishment related to quality of working life. Although, the studying of these factors date back to a lot of years ago, managers recently consider the quality of working life as an important variable to improve the quality of human resources (Ma, Samuels, & Alexander, 2003). If an organization offers the staff a high quality of working life, it will make a move for retaining and keeping those staff. In fact, the organization can create a proper work environment for the staff, and following this measure, it can improve the staff job satisfaction (Noor & Abdullah, 2012). An efficient work environment can meet personal and organizational needs of human resources and improve their quality of working life. Based on Van Lar definition, the quality of working life include job and career satisfaction, work conditions, general wellbeing, home work interface, stress at work, and control at work (Van Laar, Edwards & Easton, 2007). Many other factors can also affect on quality of working life such as fair and adequate salary

and bonus, safe work conditions, and social integration at work which can lead to realizing staff capacities and talents, and job satisfaction as well (Gupta & Sharma, 2011).

Job satisfaction is one of the most important factors for professional successes. It improves efficiency, effectiveness and personal satisfaction as well. Job satisfaction refers to the attitude and feelings people have about their work. Positive and favorable attitudes or negative and unfavorable attitudes towards the job indicate job satisfaction. High job satisfaction means that a person really loves her/his job (Saatchi, Ghasemi, & Namazi, 2008). Some researchers such as Herzberg concluded job per se is one of the main factors to make motivation and job satisfaction. He mentioned two groups of factors affecting on job satisfaction/dissatisfaction: (1) motivation factors that improve performance and attitudes, (2) protective factors that maintain morale and can reduce the probability of changing jobs, and the dissatisfaction (Spector, 2003).

Quality of working life can affect on staff job satisfaction and also life out of work environment such as family life, social life and leisure time. If staff demands at work are not met, they will get stressed which can cause negative consequences on their welfare, performance, and satisfaction (Emadzadeh, Khorasani & Nematizadeh, 2012). Some studies showed that implementation of quality of working life program leads to the reduction of job complaints and absences, improvement of positive attitude among staff, more participation in decision making, and job satisfaction (Gordon Judith, 1993). On the other hand, taking staff demands into consideration helps organizations to optimize and increase long term efficiency (Shareef,

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1990). Sharma and Gupta suggested that quality of working life is a vital factor for organizational performance and an effective factor to motivate staff at work (Gupta & Sharma, 2011). Armstrong showed that staff satisfaction is achieved by realization of their demands using the resources, activities, and the outcomes of participation in workplace activities (Armstrong, Riemenschneider, & Allen, 2007). Federico indicated that the quality of working life can lead to making job satisfaction for the staff and selecting, protecting, and keeping staff (Federico, 2003). Fourie concluded there is a significant and positive relation between job satisfaction and different aspects of quality of working life (Fourie, 2004). Nasle Seraji and Dargahi showed that the quality of working life improves staff satisfaction and their learning at work, and helps them to manage working changes; otherwise dissatisfaction negatively influences all staff regardless their position (Nasl Saraji & Dargahi, 2006).

There are some problems in different organizations and workplaces in Iran, and they can affect on quality of working life and staffs' job satisfaction. The aim of this study was surveying the quality of working life and its relation with staff's job satisfaction in an automotive parts manufacturing factory.

MATERIALS AND METHODS

This analytical-descriptive study was conducted on staff of an automotive parts manufacturing factory including casting, finishing, aluminum, and CNC units in 2012. Based on cluster random sampling 150 subjects were selected.

Three questionnaires were used to collect demographic information, quality of working life, and job satisfaction. The demographic information questionnaire included information about age, marital status, education background, working experience, second job, working hours per week and job title.

Validity and reliability of the quality of working life questionnaire designed by Van Lar were confirmed by Shabani Nejad et al. (Shabaninejad, Arab, Rashidian et al., 2012). This questionnaire including 24 questions was designed in Likert's 5-point scale (strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, and strongly agree). In order to better assessment and comparison of results with other studies, total point of each field of life quality questionnaire was balanced in the range of 0-100.

Job and career satisfaction (JCS), general wellbeing (GWB), work conditions (WCS), home-work interface (HWI), stress at work (SAW), and control at work (CAW) were assessed by 23 questions of the questionnaire, and question 24 specifically evaluated the satisfaction with quality of working life. Table 1 shows questions numbers and statements related to them at each field.

Motivation factors were the focal points of the job satisfaction questionnaire, which were designed based on nature of job and Herzberg's two-factor theory. This questionnaire could assess the staff's attitude about their job. The questionnaire containing 20 questions was designed based on Likert's five-point scale (completely disagree, almost disagree, no idea, almost disagree, completely disagree). There are five aspects including job per se,

Table 1. Questions numbers and statements related to each field of quality of working life.

Factors for quality of working life	statements	Numbers
JCS	6	20, 18, 11, 8, 3, 1
General wellbeing	6	21, 17, 15, 10, 9, 4
WCS	3	13, 16, 22
HWI	3	5, 6, 14
SAW	2	7, 19
CAW	3	2, 12, 23

promotion, recognition, success, and responsibility (four questions for each aspect). Scores in different ranges indicate the degree of satisfaction; below 40 for low job satisfaction, 40-70 for average job satisfaction and above 70 for high job satisfaction. Scoring was made based on statistical concepts and previous studies in this regard (Faraji, Pourreza, Hosseini et al., 2008). The validity and reliability of both questionnaires were confirmed by previous studies.

The statistical calculations and analysis were performed by using SPSS version 18. Pearson's correlation coefficient, one way ANOVA and Mann-Whitney tests were used for testing associations between continuous variables and comparing measurements between various groups. The level of significance was taken as $p < 0.05$.

RESULTS AND DISCUSSION

The mean of subjects' age and work history were 33.87 ± 5.27 and 10.3 ± 5.2 years respectively. In terms of education, 28.7% of them had no high-school diploma, 66% had diploma and 5.3% had associate degree. The overwhelming majority of subjects was married (95.3%) and had no second job (97.3%). With regard to the rate of subjects compared units, 20.7% of subjects were working at finishing ward, 37.3% at CNC, 17.3% at aluminum, and 24.7% at casting units. About 6% of participants evaluated their job as light duty, 11.3% as moderate, 60.7% as heavy, and 22% as very heavy.

Figure 1 illustrates the mean of different fields of working life quality. JCS obtained the highest average and home-work interface had lowest average. 54.6% of subjects were unsatisfied with their quality of working life, 23.3% had no idea, and 22% were satisfied.

T-test analysis indicated that there was no significant difference between married and unmarried staff for different fields of working life quality ($P \geq 0.05$). This insignificance can be related to the unequal number of subjects in two groups. To survey this factor, balancing the participants in groups is required for the fair comparison. According to statistical tests there was a significant difference for HWI, WCS, CAW, and total quality of working life between different jobs in studied factory ($P < 0.026$); but in other fields no significant difference was obtained ($P \geq 0.05$). In fact, subjects working in various units of factory (finishing, melting, aluminum and CNC) showed results with significant differences for factors related to quality of working life. All p-values for comparison between different jobs in factory were less than 0.05. It can be due to differences of work conditions between units studied.

The average of job satisfaction among the participants was 55.94 ± 13.45 . As for distribution of this variable, 15.3%, 68.7% and 16% reported low job satisfaction, moderate job satisfaction, and high job satisfaction, respectively. Based on job satisfaction questionnaire for motivation factors, the average of job nature was 9.96 ± 4.26 , and the averages for promotion, recognition, success, and responsibility were 11.72 ± 4.32 , 10.81 ± 3.77 , 12.68 ± 4 , and 10.77 ± 2.89 , respectively.

Statistical Analysis showed significant differences between

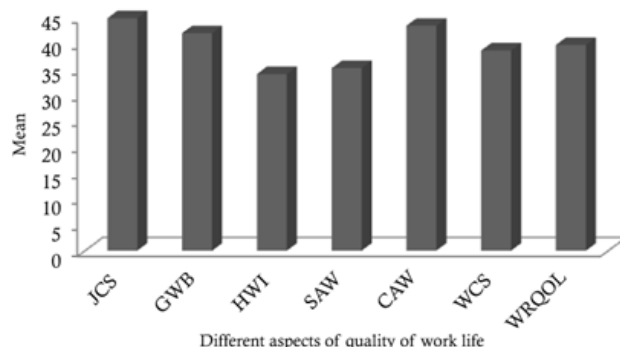


Figure 1. The mean of different fields of then quality of working life.

different jobs measuring job satisfaction ($P=0.047$), but there was no significant difference between job satisfaction and marital status ($P \geq 0.05$). This insignificance can be related to unequal number of subjects in married and unmarried groups. There were significant relationships between total quality of working life and job satisfaction (Table 2). Furthermore, there were significant relationships between various fields of working life and the dimensions of job satisfaction in the most cases of paired comparisons (Table 2). For instance, a significant correlation was seen between safety at work (SAW) and success ($P=0.02$).

Figure 2 indicates descriptive statistics for total quality of working life and job satisfaction in different units of factory studied.

According to Table 3, job career satisfaction (JCS) and general wellbeing (GWB) had the highest effect on job satisfaction ($p<0.05$) using linear regression model.

In this study, the relation between working life quality and job satisfaction was studied. As the results showed, there was a positive and significant association between the factors ($p=0.001$), so that the higher the working life quality associated with the higher the job satisfaction. Some previous studies showed similar findings about the effect of quality of working life and job satisfaction (Mirkmaly et al., 2008; Heidarie et al., 2012; Hong Lu et al., 2007; Hua, 2006; Krueger et al., 2002; Saedi et al., 2010). Factors related to staff's quality of working life are so important and have direct and significant relation with job satisfaction. Therefore, proper changing of different fields of job satisfaction can cause development and improvement of organization and work environment.

The quality of working life is an analogical concept, so comparing the results of present study with those of other studies may propose effective solutions. A research conducted by Health and Safety Executive (HSE) in the UK on quality of working life of more than 30000 employees was taken as a criterion in our study (Cardiff University, 2008). As illustrated in Figure 3, comparison of our results with the criterion indicates that quality of working life in our study is undesirable. Only 2.7% of the participants were satisfied with their quality of working life and 19.4% were completely unsatisfied.

There are some reasons for the low quality of working life in our study, for example the tasks assigned to the participants were not challenging, and the staff had no chance or opportunity to develop and realize their talents and potentials; moreover, they could not take part to organizational decision making.

Our results showed the average of total quality of working life

was 39.73. Arab et al. and Goudarznand-Chegini studied quality of working life and job satisfaction in some health care workers (Arab et al., 2012; Goudarznand et al., 2012) They reported the means of the quality of working life were 48.75 and 73.28, respectively. It can be seen there is considerable difference with our results. Further, we found that job career satisfaction (JCS) had the highest average while in Arab study (Cardiff University, 2008) general wellbeing (GWB) had this situation. This inconsistency may be due to different studied populations and background of education, or different dominant systems in two investigated groups. In addition, Home-Work Interface (HWI) obtained the lowest point; therefore the working life quality of staff can have undesirable effects on their personal life.

The survey of association between various fields of quality of working life and job satisfaction showed high correlation, in line with some other studies found (Kloep, 2005; Hosseini et al., 2008; Othman et al., 2009; Goodall, 2003).

Therefore, by improving all fields of quality of working life, the organization may develop an environment where the staff can feel justice, security and success; they can also have an opportunity to realize their talents and capacities. It might lead to general satisfaction with the job, better performance and higher motivation among the staff and more successful organizations.

Based on our results, average of job satisfaction among the staff was 55.94%, considered as a moderate level of job satisfaction, and shows a clear consistency with Monjamed et al. (Monjamed, Ghorbani, Mostofian et al., 2003) and Fernández studies (Fernández, Villagrasa, Fe Gamo et al., 1995). The participants' satisfaction based on the level of success was higher than other aspects. The results showed that the nature of job and responsibility items had the lowest scores. This probably implies that the tasks assigned to the staff are not challenging and they are not participated in decision making. The weight of responsibility at work was also emphasized in Wild et al. study (Wild, Parsons, & Dietz, 2006).

Table of regression illustrates that job career satisfaction and general wellbeing had the highest impact on job satisfaction. This implies individuals who adopt their job voluntarily are more satisfied with their job and have higher physical and mental health. In Mirkmaly and Narngi-Sani study on universities professors (Mirkmaly & Arngi-Sani, 2008) legality in organization, opportunities for progress and steady security were named as the most effective factors on job satisfaction. The aspect of organizational atmosphere as another aspect of working life quality was introduced in Fourie study as the most important factor to indicate job satisfaction (Fourie, 2004). It is worth to mention some reasons such as different studied

Table 2. Correlation coefficient (and P-value) between quality of working life as well as its fields and job satisfaction dimensions (Pearson's test).

quality of working life fields	Job satisfaction dimensions					
	Job per se	promotion	recognition	success	responsibility	Job satisfaction
Total quality of working life	0.453 ($p=0.001$)	0.326 ($p=0.001$)	0.520 ($p=0.001$)	0.366 ($p=0.001$)	0.557 ($p=0.001$)	0.593 ($p=0.001$)
JCS	0.374 ($p=0.001$)	0.375 ($p=0.001$)	0.582 ($p=0.001$)	0.378 ($p=0.001$)	0.554 ($p=0.001$)	0.598 ($p=0.001$)
SAW	0.281 ($p=0.001$)	0.029 ($p=0.728$)	0.082 ($p=0.319$)	0.205 ($p=0.02$)	0.305 ($p=0.001$)	0.213 ($p=0.009$)
WCS	0.245 ($p=0.003$)	0.210 ($p=0.009$)	0.470 ($p=0.001$)	0.216 ($p=0.008$)	0.401 ($p=0.001$)	0.434 ($p=0.001$)
HWI	0.451 ($p=0.001$)	0.314 ($p=0.001$)	0.385 ($p=0.001$)	0.274 ($p=0.004$)	0.388 ($p=0.001$)	0.470 ($p=0.001$)
CAW	0.360 ($p=0.001$)	0.361 ($p=0.001$)	0.450 ($p=0.001$)	0.308 ($p=0.001$)	0.463 ($p=0.001$)	0.510 ($p=0.001$)
GWB	0.411 ($p=0.001$)	0.329 ($p=0.001$)	0.490 ($p=0.001$)	0.385 ($p=0.001$)	0.521 ($p=0.001$)	0.565 ($p=0.001$)

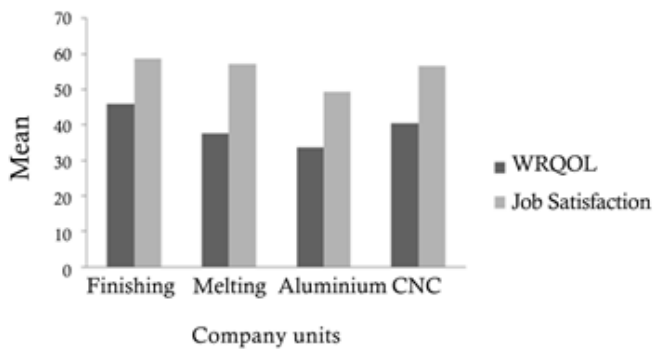


Figure 2. Quality of working life and job satisfaction in factory units.

Table 3.

The regression coefficients for effects of quality of working life fields on job satisfaction

Model	Non-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	36.007	2.344		15.363	0.000
JCS	0.220	0.083	0.323	2.651	0.009
GWB	0.176	0.077	0.251	2.275	0.024
HWI	0.091	0.056	0.139	1.622	0.107
SAW	-0.024	0.042	-0.041	-0.573	0.567
CAW	0.021	0.068	0.034	0.309	0.758
WCS	-0.012	0.057	-0.019	-0.205	0.838

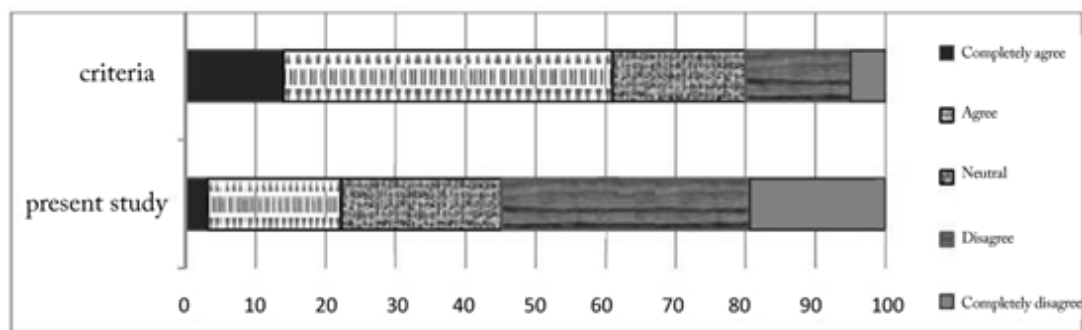


Figure 3. Comparison of quality of working life between this study and HSE (Cardiff University, 2008).

conducting comprehensive studies on quality of working life (i.e., WHI, WCS, and CAW measuring in different units) is recommended to the factory managers. Moreover, effective measures must be taken to minimize differences between the units.

It is worth to mention, there were some limitations in present study such as the lack of enough time, shortage of resources, and lack of similar studies in industries.

Finally, it can be suggested conducting more studies in future to obtain applicable solutions and minimize the negative factors for the increased job satisfaction.

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populations, education background and various data collection methods can probably lead to inconsistencies in the results of various investigations.

In different units of factory, the highest average of quality of working life was obtained by staff in finishing unit. It can show that the staff in this ward had better general wellbeing, control at work, work conditions comparing with other units. The work conditions in the unit enable the staff to use their talents, and somewhat the level of stress is lower compared to other units, which result in higher job satisfaction in the unit. In contrary, lower average of the quality of working life in Aluminum unit heralds a stressful environment and poor wellbeing and health conditions, which are resulted in lower job satisfaction. It is recommended, therefore, there is a need to study quality of working life in Aluminum unit, and adopt proper measures to improve job satisfaction of its staff.

The results of study showed significant differences for HWI, WCS, CAW, and quality of working life between different jobs in the factory. The highest average of quality of working life, for instance, was obtained by the staff of finishing and casting units. Our surveys confirmed better conditions of these units, leading to better home-work interface. On the other hand, the staff in Aluminum and CNC wards were suffering from poor quality of working life and work conditions. Safe and healthy work environment, proper work conditions, and work-home relations have considerable effects on reducing negative effects on personal life of staff. Therefore,

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