

## Evaluation of the Quality of Working Life and Productivity in Active Manufacturing Cooperatives of Isfahan's Industry Sector with Regard to Demographic Factors

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**Abstract:** The aim of this study was to evaluate the quality of working life and productivity in active manufacturing cooperatives of Isfahan's industry sector and the role of demographic factors in the efficiency of the cooperatives' employees. This study is practical in terms of aim and descriptive-survey in terms of collecting data. The population of the research is the staff and managers of the active manufacturing cooperatives of Isfahan's industry sector that are working in 1394 and the sample size became 254 people, through the stratified random sampling. To collect information for this study, working life quality questionnaire in 1390 and the productivity questionnaire of Hersey and Goldsmith were used. Based on the results, the average quality of working life in the active manufacturing cooperatives of Isfahan's industry sector is 2.80 and productivity is 3.22. The results showed that demographic factors of gender, age and education do not affect the productivity of the employees in the active manufacturing cooperatives of Isfahan's industry sector while years of service and the income level of employees has a significant and positive impact on their productivity in the active manufacturing cooperatives of Isfahan's industry sector.

**Key words:** Quality of working life, productivity, demographic factors, the active manufacturing cooperatives of Isfahan's industry sector, Iran

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### INTRODUCTION

Sense of being useful and effective in a work environment is an important part of a quality of work life. Increasing productivity and the sense of being useful which is one of human needs is an important factor in improving the quality of working life. Mutual relationship between productivity and quality of working life is an interaction-progressive relationship. The major variables in the path with quality of life and productivity are creating the right conditions to work, opportunities in the career path and promotion. The major variable in the impact of productivity on the quality of working life is the feeling of success in learning (the desire to succeed in the competition) and therefore job satisfaction which plays a major role in the quality of working life (Salmani, 2015). The relationship between the quality of working life and productivity is two-way, not one-sided, i.e., it's not acceptable just to give wages and benefits and asking for work, but considering work as part of the quality of working life. Labor productivity is one of the most basic assumptions of organizational efficiency and any attempts at productivity of organization is meaningless without

staff productivity, so organizations in order to achieve better performance required to improve the efficiency of their staff. The importance of this research depends on the importance of labor productivity in order to sustain human life and on the other hand depends on the quality of working life and makes impact on labor productivity of the organization. Quality of working life can be a prelude to the maintenance and improvement of human resources. As long as the people in the organization don't feel satisfaction, justice and peace, they will not be satisfied to stay in organization. If we can increase the labor productivity with the systems of work life quality, naturally, we will achieve further goals of the organization. According to a number of experts, a part of the slowdown in productivity and reduction in product quality in some countries due to lack of work life quality and emerged changes in staff interests and priorities. It is important the quality of working life is reflection of importance that, it attaches to public. Many employees were satisfied with their work and are looking for something more meaningful. When employees are involved in programs to improve the organization effectively, the result can promote morality and a significant increase in performance.

## **MATERIALS AND METHODS**

### **The relationship between quality of life and productivity:**

Quality of working life which was introduced in the early 1970s, in recent decades has been examined due to different angles. The current approach to the quality of working life has considered all aspects of employees, organization and community interests at the same time and it's not limited to changing the content of work, unfirming rules and standards of work, organizational improvements and job enrichment. But, rather by considering all these factors, it tries to humanize work and the workplace in order to generate interest and motivate employees by answering their needs, improving their areas of competence, respecting their character, participation and cooperation regarding the physical and psychological factors of work environment. In fact, the quality of working life creates a sense of social responsibility in managers so as To think of the interests of in order that the employees also ensure organizational goals (Sharif-Zadeh *et al.*, 2011). Walton (1974) in an article at a conference on the quality of working life provided one of the best explanations about the quality of working life provided. Walton provided a framework for analyzing the quality of working life which is divided into eight factors:

- Fair and adequate payment
- Safe and healthy working environment
- Providing opportunities for growth and continuous security
- The rule of law on the organization of work
- Social dependence of social life
- General living space
- Integration and social cohesion in the organization
- Development of human capabilities

In this study, dimensions of quality of working life have been adapted from a residential standard questionnaire in 2011 as the review of the quality of working life. QWL in this study consisted of material benefits, training and educational opportunities, democracy, participation in decision-making, job design and workplace organization. The purpose of material benefits are items such as salaries and welfare benefits are. In another definition Golshahi in 2011 defined material privileges as all the relevant points to salaries, wages, promotions, grants and loans that an organization has given to employees. The result of education is promotion of insights, knowledge and understanding of human resources in the organization, performing duties and finally to achieve organizational objectives with higher

efficiency and effectiveness. Education has always been a means to improve the quality of performance and to solve organizational problems and lack of it is an important and sever issue for any organization (Soltani, 2014). Organizational democracy is the expansion of freedom in the context of business. In fact, democracy is a way to guide the organization and management of the organization with the assumption that centralized leadership is minimized and certain and acceptable freedoms are provided in the context of business and contains items including voting rights to members of the organization. Organizational democracy Once will be realized that the organization uses democratic principles for the design of its everyday life, designs its work environment in such a way that promote prosperity and development of potential employees in order to achieve its goals the organization and have a positive effect on the society. In cooperative management the gap between employees and managers decreases; they are involved in decision-making and planning process and it will benefit the benefits and achievements of participation.

Job design is the process of matching skills with job characteristics and interests of employees which includes those components that are not intended to dominate the business, but they are effective factors on organizational performance. These factors could be political, economic, social and technological. Workspace includes physical conditions of the workplace and mental conditions of the workplace. The physical conditions of the workplace includes work space, type of tables and chairs, tools that people work with them; from computers to industrial equipment, arrangement of tables, separation of spaces depending on the work of different groups and so on. The next item is the mental conditions of workplace. Mental condition includes the people with whom we work. Friendly relations between individuals can play an important role in enhancing the quality of work. Mutual trust between managers and employees is the other item in this area.

One of the most important pests of management is lack of attention to the quality of life of employees in the organization. This neglect reduces the effectiveness and efficiency and consequently the efficiency of the organization. Efficiency is a factor that guarantees the durability and viability of organizations in today's competitive world. The prevailing culture of productivity optimizes the use of all material and spiritual organizations and without adding new technology and manpower we can use facilities, conditions, capacity and manpower capabilities available with reproductive ability and creativity to achieve the aim of the organization. Optimal efficiency cannot be provided by changing the structure,

adding technology, agenda setting and issuing a circular, rather human is at the center of any demographic and organizational efficiency. So, the most attention and planning on organizational efficiency must be focused on human factors. Achieve model is one of the models by Hersey and Goldsmith, in order to help administrators determine the cause of performance problems and to create a variable strategies to solve these problems. In developing a model to analyze human performance, Hersey and Goldsmith had two main goals in mind. The first step is to consider the motivation and the ability to follow the Achieve model, the follower should partially have the desire and necessary skills to perform the task. The second step was developed by Porter and Lawler by adding variable or understanding of the role of independent thought. So the followers should have a good understanding of how to do it to do the job and duty right. Achieve model finds the feedback factor which include every day training and formal assessment in practice, very effective. Hersey and Goldsmith (1980) have chosen seven variables related to effective performance management among others and by combining the first letters of each of the performance variables proposed the seven-letter word “achieve” to remember easily which includes the ability, clarity, help, incentive, evaluation, validation and environment. Productivity measurement framework in this study is also based on the model of Hersey and Goldsmith:

$$P = f(A, C, H, I, E, V, E) \text{ (Achieve)}$$

The P is performance. Ability (ability to accomplish a task successfully), clarity (clearly understand the acceptance of work), help or organizational support (the support employees need to complete the work effectiveness), incentive (passion and desire to do work), evaluation (judgment in relation to how the mechanisms work), validity (relevance, legality and the legitimacy of the decision of the director), environment (the external factors).

## RESULTS

**Calculating the mean of research variable:** This study examines the mean of the variables. Results can be seen in Table 1.

Based on the results as shown in Table 1, the average quality of working life in the active manufacturing cooperatives of Isfahan’s industry sector is 2.80 and productivity is 3.22. According to the results of the components of the quality of working life, organized workspace with an mean of 3 is the highest mean and

Table 1: The mean of research variable

Variables	Mean	SD	Min.	Max.
Quality of working life	2.80	0.67	1.06	4.62
Financial advantages	2.49	0.77	1.00	5.00
Training and educational opportunities	2.61	0.91	1.00	4.80
Democracy	2.97	0.78	1.00	5.00
Participation in decision-making	2.89	0.79	1.00	4.67
Job design	2.85	0.83	1.00	4.83
Space work of organization	3.00	0.76	1.00	5.00
Efficiency	3.22	0.60	1.00	4.86
Ability	3.74	0.73	1.00	5.00
Clarity	3.89	0.74	1.00	5.00
Organizational support	2.91	0.77	1.00	5.00
Incentive	2.56	0.88	1.00	4.86
Validity	3.01	0.88	1.00	5.00
Environment	3.31	0.89	1.00	5.00
Feedback	3.09	0.72	1.00	5.00

material rates averaging 2.49 is the lowest among the components of the quality of working life in the active manufacturing cooperatives of Isfahan’s industry. Also, clarity with a mean of 3.89 and incentive with the mean of 2.56 have the lowest mean among the component of efficiency in the active manufacturing cooperatives of Isfahan’s industry.

**Single-sample t-test:** In this test, the hypothesis about the mean of the community has been studied that the hypothesis according to the Likert scale of 5 is as follow:

The test is used to determine the level of factors in the sample. If Sig. amount is <0.05, H<sub>0</sub> hypothesis is rejected. Table 2 shows the results of the mean of variables in society. The H<sub>0</sub> hypothesis in this case is that the mean of each factor is 3 and in the contrary in the hypothesis H<sub>1</sub>, the mean of each factor is not 3.

Based on the independent one sample t-test, since the significance level of all variables except democracy, workspace organization, organizational support and credit is <0.05, so, there is a significant difference between average variable and the number 3.

In the case of components of democracy, workspace organization, organizational support and credibility since, the level its significance is >0.05 so, there is no significant difference between the mean of these variables and the number 3. As a result, the mean of these variables at the level of the statistical average is 3.

About the components of the material advantages, training and educational opportunities, participation in decision-making, job design and organizational support the significance level is <0.05, resulting in a significant difference between the mean of these variables with the number 3. Due to the fact that the mean of these variables is negative as a result the number 3 is less than the average of these variables.

About the components of ability, clarity, incentive, environment and feedback the significance level is <0.05,

Table 2: Results of the mean of the variables based on the one-sample t-test

Variables	Confidence interval of 95%		Test value = 3		df	T-statistics	Mean
	Upper limit	Lower limit	Mean difference	Sig. (2-tailed)			
Quality of working life	-0.11	-0.27	-0.19	0.00	253	-4.57	2.80
Financial advantages	-0.41	-0.60	-0.50	0.00	253	-10.47	2.49
Training and educational opportunities	-0.27	-0.50	-0.38	0.00	253	-6.79	2.61
Democracy	0.06	-0.12	-0.02	0.56	253	-0.57	2.97
Participation in decision-making	0.00	-0.20	-0.10	0.04	253	-2.04	2.89
Job design	-0.04	-0.25	-0.14	0.00	253	-2.80	2.85
Space work of organization	0.10	-0.08	0.00	0.85	253	0.17	3.00
Efficiency	0.29	0.14	0.22	0.00	253	5.79	3.22
Ability	0.83	0.65	0.74	0.00	253	16.12	3.74
Clarity	0.98	0.80	0.89	0.00	253	19.03	3.89
Organizational support	0.01	-0.17	-0.08	0.09	253	-1.68	2.91
Incentive	-0.32	-0.54	0.43	0.00	253	-7.78	2.56
Validity	0.12	-0.09	0.01	0.80	253	0.25	3.01
Environment	0.42	0.20	0.31	0.00	253	5.64	3.31
Feedback	0.18	0.00	0.09	0.03	253	2.13	3.09

resulting in a significant difference between the mean of these variables with the statistical average (3). Due to the fact that the mean average of these variables is positive therefore their mean is greater than the number 3. It means that the average of these variables in the active manufacturing cooperatives of Isfahan’s industry sector is relatively good.

**Demographic factors on productivity:** In this study, the role of demographic factors like gender, age, education level, work experience and different income levels has been investigated in their productivity. Based on the results, demographic factors as gender, age and educational level don’t affect employee productivity in the active manufacturing cooperatives of Isfahan’s industry sector, but different levels of income and the amount of work experience had an impact on employee productivity. According to ANOVA test and Tukey post-test, the efficiency of those with 10-20 years of work experience and of those with 20-30 years of work experience is significantly different. The average productivity of those with 10-20 years of work experience is 3.03 and of those with 20-30 years work experience is 3.51. Also efficiency and productivity of people who earn over 2 million people with those who earn below 1 million, 1-1 million and half and one million and a half to 2 has significant difference:

- Efficiency of people with incomes below 1 million: 2.99
- Efficiency of people with an income of 1 million to 1 and a half: 3.24
- Efficiency of people with an income of 1 million and a half to 2: 3.23
- Efficiency of people with incomes over 2 million: 3.62

Based on the results, the higher the income, the greater its efficiency in the organization.

## DISCUSSION

The aim of this study was to investigate the connection between qualities of working life by improving efficiency in the active manufacturing cooperatives of Isfahan’s industry sector in 1394. Based on the results, the average quality of working life in the active manufacturing cooperatives of Isfahan’s industry sector is 2.80 and productivity is 3.22. According to the results of the components of the quality of working life, organized workspace with an mean of 3 is the highest mean and material rates averaging 2.49 is the lowest among the components of the quality of working life in the active manufacturing cooperatives of Isfahan’s industry. Also, clarity with a mean of 89/3 and incentive with the mean of 56/2 have the lowest mean among the component of efficiency in the active manufacturing cooperatives of Isfahan’s industry. Also, the one-sample t-test was determined based on the average of independent components of democracy, workspace organization, organizational support and credibility at the statistical average is 3. According to the average of the components of material advantages, training and educational opportunities, participation in decision-making, job design and organizational support, since the significance level is <0.05 and due to the fact that the mean difference of these variables is negative therefore their average number is less than, so the mean of these variables is below the average. About the components of ability, clarity, incentive, environment and feedback the significance level is <0.05, resulting in a significant difference between the mean of these variables with the statistical average (3). Due to the fact that the mean average of these variables is positive therefore their mean is greater than the number 3. It means that the average of these variables in the active manufacturing cooperatives of Isfahan’s industry sector is relatively

good. In addition, it was found that demographic variables and the level work experience and monthly incomes affect employee productivity in the active manufacturing cooperatives of Isfahan's industry sector.

### **CONCLUSION**

The results showed that people with more income have higher productivity than the other employees of the active manufacturing cooperatives of Isfahan's industry sector. They also found that the efficiency of the active manufacturing cooperatives of Isfahan's industry sector is free from demographic variables like gender, age and education level which means that these variables have no effect on the efficiency of individuals. The following suggestions for future research are presented below:

- Considering that this study has done in the manufacturing cooperatives of Isfahan's industry sector, the researchers are suggested to do this research in other cities and provinces and compare the results with the study

- Due to the broad issue of quality of working life it is recommended to use other models of working life quality and other variables either
- This research only studied industrial cooperatives; other research may include other non-industrial companies

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