International Journal for Quality Research 16(4) 1097–1106
ISSN 1800-6450

Aleksei V. Bogoviz [1]
Svetlana V. Lobova
Alexander N. Alekseev

Article info:
Received 11.10.2021.
Accepted 15.11.2021.

UDC – 005.336.3
DOI – 10.24874/IJQR16.04-09

QUALITY OF WORKING LIFE: SCIENTIFIC CONCEPT AND MEASUREMENT METHODOLOGY

Abstract: *This article reveals a new and little-studied aspect of labour economics - the quality of working life. The author's definition of the quality of working life is proposed, which opens an original view of human resources - from the standpoint of the workers themselves. The specified author's view of human resources is based on the existing concept of development and disclosure of human potential. However, this concept presupposes the most efficient management of human resources in the interests of employers (growth of productivity and competitiveness) and the economy (acceleration of the rate of economic growth and development of an innovative economy).*

The concept of the quality of working life is considered as the peak of the evolution of the theory of labour economics reached to date. The original concept of labour as a factor of production assumed interchangeability, impersonality and low value of personnel for enterprises. The concept of human resources that followed took into account the individual characteristics of workers and presupposed an individual approach to motivating and stimulating work.

The authors of this article are developing a scientific concept and measurement methodology (polycriteria assessment) of the quality of working life. With the help of the proposed author's methodology, from the standpoint of the consequences for the quality of working life, two alternative approaches to human resource management are compared - labour norming and personnel marketing. The advantages of the marketing approach to human resource management are substantiated and recommendations for improving the marketing mix of personnel to develop the quality of working life are offered.

Keywords*: Employee commitment, Healthcare, Organizational efficiency, Quality of working life*

1. Introduction

Human resources are a major factor in the company's achievement of the expected results (Northouse, 2019). The specific qualifications of people in an organization affect how they use resources. An ineffective and operationally ineffective procedure will result in unforeseen costs for the company. Thus, the retention of employees is the first step towards the optimal achievement of the company's goals.

[1] Corresponding author: Aleksei V. Bogoviz
Email: aleksei.bogoviz@gmail.com

Innovation and an effective leadership style are also needed as a strategy for maintaining customer satisfaction with their company and increasing employee motivation and productivity. Without a defined response strategy and customer assessment, the company will remain vulnerable to any competitors.

Hermawati and Mas (2017) argue that one of the concepts for creating a better working environment for employees is quality of working life (QWL).

Quality of working life is an attempt of employees to improve working conditions, duties, protection, benefits, labour safety, and compensation. This concept highlights the importance of respect for people in their working environment due to the fact that the main objective of the quality of working life is not to improve work but to highlight how work can improve the lives of employees. Consequently, the company must provide the resources that employees need to ensure the quality of working life within the company.

An example of a higher quality of working life is the compliance of job duties with the requirements of employees. Employees are supposed to be well aware of their rights and benefits (Susilowati et al., 2020).

Thus, quality of working life is a program designed to increase personnel satisfaction with their working environment together with their productivity.

Specific characteristics of a company, such as leadership, operating procedures, policies, and any other supporting characteristics exhibited by an organization, can produce different results for each member of it.

Quality of working life plays a significant role in the development of the attitude of employees towards the company, and also in how employee decides whether to stay or leave it.

Employee's dedication to a company can improve his/her performance through the employees' belonging sense. When person feel satisfied with the company he works in, it affects their commitment to organizational responsibilities.

Quality of working life has a great impact on society. Employees who feel happy in the company transfer their feelings to their family or community. Hence, quality of working life is essential to cope with demanding lifestyles and become a way to fulfil responsibilities and balance between work and family life.

The concept of quality of working life has been attracting scholars for many years and interested psychologists and sociologists, but now it has gained popularity among scientists and academics. It is worth noting that if the personnel of a company are satisfied with the quality of their working life, they can surely achieve good results.

According to Swamy et al. (2015), there are nine factors that describe the quality of working life. They are working environment, cooperation and relationships, learning and development, organizational culture and climate, manufacturing facilities, job satisfaction and safety, independence of work, and sufficiency of resources.

2. Methodology

A research method is a scientific way of obtaining data for certain purposes and uses. The type of study used in this article is descriptive, quantitative, and factor analysis. Descriptive research was conducted for the purpose of determining the value of each variable, that is, regardless of whether one or more variables are independent, without relationships or comparisons with other variables. These variables can systematically describe a population or a specific area of analysis for research efforts but they are not used to draw broader conclusions. The quantitative method is defined as a research method based on the philosophy of positivism, used to study specific populations or samples, collect data by using research tools, quantitative or statistical analysis of data to test predetermined

hypotheses. Factor analysis are used to reduce data; factors (also called dimensions or components) can be found, which can represent the original variables. The function of factor analysis is to identify the fundamental parameters that can explain the correlation of some variables.

3. Literature review

A wide range of studies has been devoted to various aspects of the quality of working life. The original theoretical and methodological approaches to the study of the quality of working life are laid down in the works of foreign classics, founders of the theory of human relations and theories of motivation E. Mayo, F. Herzberg, A. Maslow, D. McGregor, E. Lawler, K. Adelfer, J. Galbraith, and D. McClelland, who placed the employee at the centre of the work organization system, substantiated the importance of socio-psychological factors and the presence of a persistent causal relationship between the degree of job satisfaction and the increase in staff performance.

The analysis of the quality of working life as an element of the quality of life (definition of the concept, a system of indicators for measurement, analysis and assessment), and also the conditions that remove the alienation of labour and ensure the quality of working life, taking into account the peculiarities of the Russian economy, is carried out in the works of Russian scientists: V.N. Bobkova, B.M. Genkin, H.A. Gorelova, Yu.P. Kokin, P.S. Mstislavsky, V.G. Makushina, P.V. Savchenko, G.E. Slezinger, P.E. Schlender, etc.

The development of the concept of the quality of working life in the context of the need for a qualitative improvement of the entire labour management system, measures for the humanization of labour, aimed at improving it in different countries, can be traced in the works of Augustrianto et al. (2019), Becker and Lee (2019), Cvetanovic et al. (2014), and Hoa et al. (2020). The relationship between labour productivity and the quality of the working life of personnel was studied by Elizur and Shye (2014), Kara et al. (2018), and Nazarenko (2013) through socio-technical methods of changing the organization of work at the individual and group levels, based on the concept of autonomy.

The development of work enrichment programs aimed at improving the quality of working life, the participation of workers in management as the main mechanism for agreeing with the goals of workers and their groups, are devoted to the work of foreign scientists: Aryeetey and Sanda (2018), Back et al. (2016), Dargahi and Seragi (2017), Gilang et al. (2019), Bagtasos (2015). The focus of the implementation of the programs was concentrated on the quality of the relationship between the employee and his production environment, covering contacts with material factors of production and the social environment.

Taylor (1896) also represented the quality of working life as a holistic approach that includes:

- the main external labour factors of wages, hours, and working conditions;
- internal working ideas about the specifics of the work itself;
- the powers of the employees;
- participation of employees in decision-making;
- fair and equal approach to work;
- the appropriate scale of the future at work;
- the social significance of the work or product;
- the impact on additional work activities.

In this context, quality of working life emerged as an overarching conceptual framework, since it includes: the opportunity to show employee's talents and capabilities to face challenges and situations that require

personal initiative and independent direction; activities deemed worthwhile for the individuals involved but not an activity in which everyone understands the role of an individual game in achieving some common goals; and a sense of acceptance of pride in what you do and in what you do well.

Numerous studies of working life have shown that what happens in the workplace has a great impact not only on individuals and their families but also on their productivity and achievement of the company's goals (Brunges and Foley-Brinza, 2014; Fakhri et al., 2019).

Yankovskaya (2014) observed that quality of working life operations is more complex in the public sector than in the private sector. Nanjundeswaraswamy and Swamy (2013) found a significant correlation between the quality of working life of managers from three industrial sectors, namely public, private and cooperative, with all motivational variables such as job satisfaction and job engagement.

Dechawatanapaisal (2017) found that job quality among banking professionals was not high due to the recruitment of super-qualified staff for routine jobs. An unfair remuneration system that demotivated the best employee performers, frustration with the absence of an alternative job opportunities, little chance of promotion, suspension from work, etc.

Becker and Lee (2019) noted that private-sector workers perceive a significant and higher quality of working life than their public sector colleagues.

Nazarenko (2013) also found that although job security is higher in the public sector; so far, the quality of working life has been perceived to be higher in the private sector than in the public sector due to: promoting prospects, good and fair wages, capable management, favourable working conditions, and participation in decision-making.

4. Results

To assess the quality of working life, let us single out a set of indicators that, in our opinion, reflect it most fully: employment, labour safety, wages, qualifications, and labour productivity. These are the most important indicators of the quality of working life, which also make it possible to assess the differences in the most problematic aspects of the social and labour sphere at the regional level. Employment of the population is an important indicator for assessing the quality of working life, as it provides access to material resources and territorial mobility.

This study used a survey method that provides broad coverage, flexibility, and ease of entry for related groups of population or events. Data collection was carried out independently, in terms of determining the level of quality of working life. Participation was provided by prior appointment and consent via phone calls from the company. The researcher visited each organization at least twice to establish rapport and strengthen contacts with senior management and relevant staff to ensure that the submission and collection of questionnaires were smoothly completed. The third visit was undertaken to ensure some degree of interest and commitment on the part of respondents to collecting questionnaires if data collection was not possible in the second round, in addition to re-appealing by telephone. Questionnaires that were not received after the fourth week were classified as not responding. As this study is not a copy of any previous research, the questionnaire was developed based on a literature review and a combination and match approach were applied to modify the proposal or abandon it at all, when necessary, according to local conditions.

While scholars helped in assessing the credibility of faces, professional managers at the multinational corporation verified the credibility of the content.

The final questionnaire was pre-tested on 19 managers. All values of the coefficients were above 0.8, which corresponded to the recommendation for an acceptable level of reliability > 0.7. The total alpha was 0.8768.

There were only 64 items in the questionnaire, measuring four coefficients (three independent and one dependent). We have used a ten-point scale, where 1 was "strongly disagree" and 10 was "strongly agree". The type of statistical analysis required for this study (i.e., multiple regression analysis) dictated the use of an interval scale that ensured that the distances between adjacent numbers were the same and did not have a true zero.

Thus, the anchor points of the scale were limited to extremes with no intermediate values. In addition, for a narrow scale, there are low levels of cross-correlation and limited variance. A stratified random sampling procedure was used. The selection of respondents using this method includes a complete list of industrial companies, multinational corporations (MNCs) and small and medium-sized enterprises (SMEs). In just two and a half months in 2020, 475 respondents were reached, representing well a target group of approximately 2,622 managers and executives.

The collected quantitative data were subjected to various statistical analyzes. Stepwise regression, a method by which each predictor variable is selected for inclusion in the model based on the significance of the t-statistic in the stepwise selection, was chosen based on the prerequisite that multicollinearity, which is a common problem in multiple regressions, could be somewhat circumvented. In this research, a default value of 0.05 was used to determine the significance level. Tables 1-3 contain summary statistics, Cronbach's alphas and a zero-order correlation matrix for the studied variables.

A total of 480 people were collected, five of which were not employed because their positions did not meet the sample requirements, since they were not managers. Consequently, the final usable sample was reduced to 475, which gave a 95% return rate. In general, the samples were considered to be representative of the populations of the respective study areas. 67.2 % of the respondents were men and 32.8% were women. The majority of the respondents were between the ages of 30-39 (49.7%).

Table 1. Summary statistics

Statistics	Y_1 (QWL)	X_1Career Satisfaction	X_2Career Achievement	X_3Career Balance
Mean	6.39	6.39	6.68	5.68
Median	6.50	6.40	6.85	5.60
Standard deviation	1.46	1.11	1.41	1.15
Minimum	2.30	2.70	2.08	1.93
Maximum	10.00	10.00	10.00	10.00
Interquartile range	2.00	1.50	1.77	1.53
Asymmetry percentile	-0.209	-0.242	-0.570	0.112
25^{th} 5.40		5.70	5.85	4.93
50^{th} 6.50		6.40	6.85	5.60
75^{th} 7.40		7.20	7.62	6.47
90^{th} 8.24		7.80	8.39	7.13

Source: Calculated by the authors.

Table 2. Calculation of the Pearson correlation coefficient

Mean			
Description of statistics	Total career tenure	Tenure with current employer	Y1 QWL
Total career length	1	0.699** 0.000	0.120** 0.009
Length of stay with current employer	0.699** 0.000	1	0.135** 0.003

[a] Pearson correlation, b Sig. (2-tailed), n = 475.
** Correlation is significant at 0.01 level (2-tailed)
Source: Calculated by the authors.

Table 3. Descriptive statistics, zero-order correlations and Cronbach's alpha QWL and predictor variables

Variations		X	s	Y	X_1	X_2	X_3
Y	QWL (10)	6.3882	1.45784	*0.84*			
X_1	Career satisfaction (10)	6.3905	1.11479	0.60	*0.87*		
X_2	Career achievement (13)	6.6766	1.41228	0.71	0.72	*0.82*	
X_3	Career balance (15)	5.6749	1.14991	0.14	0.34	0.25	0.91

Source: Calculated by the authors.

The average age is 36.33 years (SD = 6.905), the youngest is 24 years old, the oldest is 58 years old. Most of the responders were married (77.5%), next were single (20.4%), divorced/separated (0.8%) and living with a partner (0.8%). Most of the responders have a bachelor's degree (49.7%), a diploma (30.1%), a professional degree (10.9%), a master's degree (8.2%) and a certificate (1.1%). 44.2% of respondents have a total work experience of fewer than 10 years, then by 43.6% (11-20 years), 11.2% (21-30 years), and 1.1% (> 30 years). They have worked on average 12.5 years (SD over their career = 6.9639), minimum 3 months and maximum 37 years, average work experience 9.2 years (SD experience = 6.116), minimum 3 months and maximum 32 years with current employer.

Thus, based on the ten-point scale used, the minimum rating for the quality of working life (QWL) was 2.30 and the maximum was 10.00, which gives a range of 7.70, as shown in Table 1. The average rating for the quality of working life was 6.40 with a standard deviation of 1.46. The average rating for the quality of working life (QWL) was 6.39, which means that the overall level of the quality of working life is good. The 25th percentile of quality of work of life (QWL) is 5.40, and the 75th percentile is 7.40, and thus the interquartile range (IQR) is 2.00. The obtained values for the 25th and 75th percentiles showed that 50% of respondents have a quality of working life (QWL) rating from 5.40 to 7.40. The 90th percentile of quality of working life (QWL) is 8.24, which means that 90% of respondents have a quality of working life score of 8.24 or less. In other words, only 10% of respondents received quality of working life score above 8.24. According to ratings below 4 is low, 4-6 is average, 7-8 is good, and above 8 is excellent, which indicate satisfaction, managers, were very satisfied with their level of quality of working life. Managers who consider their level of quality of working life to be good (49.5%), moderate (30.7%), excellent (13.1%) and low (6.1%). The results in Table 3 show that the mean ratings for the explanatory variables, in descending order from high to low: career achievement (M = 6.6766, SD = 1.4123), career satisfaction (M = 6.3905, SD = 1,

1148) and career balance (M = 5.6749, SD = 1.1499). As shown in Tables 2 and 3, quality of working life (QWL) is positively associated with career satisfaction (r = 0.60, p = 0.001), career achievement (r = 0.71, p = 0.0001), career balance (r = 0.14, p = 0.001).

To find out the predictors of quality of working life, a stepwise regression method was used. Based on the stepwise method used, only four predictive variables were found to be relevant to explain the quality of working life. The three predictive variables are career satisfaction (X_1), career achievement (X_2), and career balance (X_3).
As shown in the coefficient Table 3, the estimates of the model coefficients for $þ_0$ are 1.175, $þ_1$ - 0.178, $þ_2$ - 0.365.3 - 0.125, and $þ_4$ - 0.383. Thus, the estimation model looks like this:

$$Y\ (QWL) = 1.175 + 0.178\ (X_1) + 0.365\ (X_2) + 0.125\ (X_3) + E$$

Where:
X_1 = career satisfaction,
X_2 = career achievement,
X_3 = career balance.

An R-square of 0.626 means that four predictor variables account for about 62.6% of the quality of working life variance. This is a pretty decent result. The variation analysis has showed that the F-statistic (157.126) is very large and the corresponding *p*-value is very significant (0.0001) or lower than the alpha value 0.05. This indicates that the slope of the linear regression model scoreline is not zero, suggesting that there is a linear relationship between quality of working life and the three predictor variables.

Table 4. Estimation of model coefficients

QWL size	B (irregular coefficients)	Beta error	Standardized coefficients	t	*p-value*
Constant	1.175	0.275		4.278	0.0001
Career achievement (X_2)	0.365	0.047	0.354	7.748	0.0001
Career balance (X_3)	0.125	0.038	0.098	3.269	0.001
Career satisfaction (X_1)	0.178	0.055	0.136	3.209	0.001

Source: Calculated by the authors.

As shown in Table 4, the highest beta is 0.429, which is consistent with the organizational climate. This means that this variable makes the strongest unique contribution to the explanation of the dependent variable (QWL) when the variance explained by all other predictor variables in the model is controlled. The beta value for career achievement is the second highest (0.354), followed by career satisfaction in third place (0.136). The beta value for career balance is the smallest (0.098), indicating that he made the least contribution. Based on the resulting diagnostic collinearity, none of the model measurements has a condition index above the threshold of 30.0, none of the tolerance values is less than 0.10, and the VIF statistic is less than 10.0. This indicated that there was no serious problem of multicollinearity among the predictor variables of the model. The normal PP plot of the standardized regression residuals showed that all observed values fall approximately along a straight line, indicating that the residuals are from a normal distribution. The scatter plot (standardized predicted values versus observed values) shows that the relationship between the dependent variables and predictors is linear, and the variances of the residuals are equal or constant. Since there is no problem of multicollinearity between the predictors included in the model and the normality assumptions, all equality of variance and linearity are met, that is why it is reasonable for us to conclude that the estimated multiple regression model is valid and respectable enough.

5. Discussion

Without a doubt, given the data, the most important indicator of the quality of working life is the organizational climate, followed by career achievement, career satisfaction, and career balance. This finding is consistent with what has been found by other researchers that companies and individuals are interdependent and that an organizational climate of warmth, friendliness, and fair reward is conducive to a high-performance focus, is beneficial for increasing motivation and satisfaction in one's work, and a sense of fulfilment, which will ultimately affect their work. Likewise, employees in organizations with favourable management relationships, group decision-making, and corporate goals experienced less burnout. Back et al. (2016) also found that Korean employees apprehend a more negative organizational climate as thoroughly counterproductive to positive workplace attitudes (e.g., support, recognition, rewards, and responsibility). In addition, respondents who worked for multinational corporations had a slightly higher level of quality of working life. The higher the income of the respondents, the higher the level of the quality of working life. However, respondents were not satisfied with the balance of their careers. This fits with the literary point of view and is expressed in the conflict between work and family life. The results show that respondents are satisfied with their achievements in career growth (63.8%) but not in terms of career balance (36.6%). Participation in a work (family) role is hampered by participation in a family (work) role.

Leaders who value their careers very highly will find that it affects the amount of time they can devote to their families. Report supported this by showing that the family's moral support and the distractions it entails make it an important factor in the quality of working life. There is a significant difference in the quality of working life between married and single ($F = 1.644$, $df = 463$, $p = 0.02$). Those who are married and have children have a higher level of quality of working life than those who are single. Previous researchers have observed that in the early stages of their careers, people are often willing to sacrifice their personal lives in the interests of their career growth. However, as people reach adulthood in their careers, it has been found that they pay more attention to the balance between their work and family life. Previous research has shown that in marriage, people place their personal lives ahead of their jobs. Likewise, being a parent increases the importance that people place on their family role. Several studies show that happy family life is correlated with high levels of job satisfaction and objective career achievement. This is confirmed in this example study. In this study, the E&E industry includes mainly Japanese companies, in which workers tend to be more central to work and place more emphasis on employment and stability. This finding is consistent with data from Jabeen et al. (2018).

6. Conclusions

From a practical point of view, our results show that organizational climate does matter and that it matters the most among predictors. In this regard, organizations need to place great emphasis on their practices and create a favourable environment for their employees to gain recognition for their careers in leadership positions and progress. The organizational climate is essential for the quality of working life level. It also implies that organizations can take tactical actions to improve the work climate to achieve the desired quality of working life and specific desired work behaviour and, indirectly, the main consequences of productivity. Quality of working life increases when managers are satisfied with their organizational climate, which is the main factor, followed by career achievement, career satisfaction, and career balance. In this light, there must be a harmonious

relationship between the organization and the individual so that the partnership between the needs and values of the individual and the environment is firmly established and beneficial. In a positive, participatory work climate, managers have a higher sense of accomplishment, and the organizational climate forms the psychological foundation for achieving quality of working life. The result of this study supports the hypothesis that quality of working life satisfaction is related to the degree to which a person believes that his or her criteria for success have been met, especially if the person attaches great importance to these criteria, which include organizational climate, payment, respect, personal growth, and the balance of family life. This supports a materialistic work ethic that emphasizes corporate power, income, and personal growth as part of their careers. It can also be concluded from the data obtained that a person's family life is significantly correlated with his or her quality of working life level.

References:

Aryeetey, M., and Sanda, A. (2018). Understanding employees' perspective of quality of working life indicators in Ghanaian organizations. *International Journal of Contemporary Business Studies, 3*(3), 17-30.

Augustrianto, A., Silvianita, A., Ferari, E. (2019). Hofstede's organization culture on deviant workplace behaviour (Case study on workers at plaza Toyota Bandung). *Journal of Advanced Research in Dynamical and Control Systems, 11*(3), 720-725.

Back, K.J., Lee, C.K., Abbott, J. (2016). Internal relationship marketing: Korean casino employees' job satisfaction and organizational commitment. *Cornell Hospitality Quarterly, 52*(2), 111-124. https://doi.org/10.1177/1938965510370742

Bagtasos, M.R. (2015). Quality of Working Life: A Review of Literature. *DLSU Business & Economics Review, 20*(2), 1-8. https://doi.org/10.3860/ber.v20i2.1909

Becker, K., and Lee, J.W. (2019). Organizational usage of social media for corporate reputation management. *Journal of Asian Finance, Economics and Business, 6*(1), 231-240. http://doi.org/10.13106/jafeb.2019.vol6.no1.231

Brunges, M., and Foley-Brinza, C. (2014). Projects for increasing job satisfaction and creating a healthy work environment. *AORN Journal, 100*(6), 670-681. https://doi.org/10.1016/j.aorn.2014.01.029

Cvetanovic, S., Nedic, V., Eric, M. (2014)**.** Information technologies as a determinant of SMEs collaboration and innovativeness. *International Journal of Quality Research, 8*(41), 465-480.

Dargahi, H., and Seragi, J.N. (2017). An approach model for employees' improving quality of working life (IQWL). *Iranian Journal of Public Health, 36*(4), 81-86.

Dechawatanapaisal, D. (2017). The mediating role of organizational embeddedness on the relationship between quality of working life and turnover. *International Journal of Manpower, 38*(5), 696-711. https://doi.org/10.1108/IJM-12-2015-0205

Elizur, D., and Shye, S. (2014). Quality of Working Life and its Relation to Quality of Life. *Applied Psychology, 39*(3), 275-291. https://doi.org/10.1111/j.1464-0597.1990.tb01054.x

Fakhri, M., Pradana, M., Syarifuddin, S., Hafid, H., & Mustika, N.P. (2019). Analyzing work satisfaction of employees at production department. A case study of Indonesian state military equipment manufacturer. *International Journal of Advanced Science and Technology, 28*(8s), 163-175.

Gilang, A., Syarifuddin, S., Pradana, M., Fakhri, M., Maisarah, N. (2019). Factors Analysis of Basic Human Values at Indonesian Insurance Company. *International Journal of Advanced Science and Technology, 28*(8s), 755-763.

Hermawati, A., and Mas, N. (2017). Mediation effect of quality of working life, job involvement, and organizational citizenship behaviour in the relationship between transglobal leadership to employee performance. *International Journal of Law and Management, 59*(6), 1143-1158. https://doi.org/10.1108/IJLMA-08-2016-0070

Hoa, N.D., Ngan, P.T., Quang, N.M., Thanh, V.B., Quyen, H.V. (2020). An Empirical Study of Perceived Organizational Support and Affective Commitment in the Logistics Industry. *Journal of Asian Finance, Economics and Business, 7*(8), 589-598. https://doi.org/10.13106/jafeb.2020.vol7.no8.589

Jabeen, F., Friesen, H.L., Ghoudi, K. (2018). Quality of working life of Emirati women and its influence on job satisfaction and turnover intention. *Journal of Organizational Change Management, 31*(2), 352-370. https://doi.org/10.1108/JOCM-01-2017-0016

Kara, D., Kim, H., Lee, G., Uysal, M. (2018). The moderating effects of gender and income between leadership and quality of working life (QWL). *International Journal of Contemporary Hospitality Management, 30*(3), 1419-1435. https://doi.org/10.1108/IJCHM-09-2016-0514

Nanjundeswaraswamy, T.S., and Swamy, D.R. (2013). Quality of working life of employees in private technical institutions. *International Journal of Quality Research, 7*(3), 3-14.

Nazarenko, M.A. (2013). Intersubject communications of the theory of organizations, organizational culture and personnel audit. *International Journal of Applied and Fundamental Research, 10*(3), 518-519. URL: https://applied-research.ru/ru/article/view?id=4283 (Accessed: 08.11.2021).

Northouse, P.G. (2019). Leadership Theory and Practice. 8th Edition. Thousand Oaks, CA: Sage Publications.

Susilowati, L., Ananda, C.F., Ashsar, K., Susilo S. (2020) Labour productivity in micro and small industries. *International Journal of Quality Research, 14*(1), 11-128.

Swamy, D.R., Nanjundeswaraswamy, T.S., Rashmi, S. (2015). Quality of working life: scale development and validation. *International Journal of Caring Sciences, 8*(2), 281.

Taylor, F.W. (1896). A Piece-rate System. New York.

Yankovskaya, V.I. (2014). The main components of the quality of working life. *Standards and quality, 2*, 46-47.

Aleksei V. Bogoviz
Independent Researcher, Moscow, Russia
aleksei.bogoviz@gmail.com
ORCID 0000-0002-6667-5284

Svetlana V. Lobova
Altai State University, Barnaul, Russia
barnaulhome@mail.ru
ORCID 0000-0002-5784-1260

Alexander N. Alekseev
Financial University under the Government of the Russian Federation, Moscow, Russia
Alexeev_alexan@mail.ru
ORCID 0000-0001-7925-975X