Suzana Sever University of Zagreb Faculty of Organization and Informatics, Croatia E-mail: suzana.sever@gmail.com

Ivan Malbašić University of Zagreb Faculty of Organization and Informatics, Croatia E-mail: ivan.malbasic@foi.hr

MANAGING EMPLOYEE MOTIVATION WITH THE JOB CHARACTERISTICS MODEL

Original scientific paper UDK: 658.3:331.101.32]-057.16 JEL classification: M12, M14, M52 Accepted for publishing: October 31, 2019

Abstract

In modern business circumstances it is imperative to have motivated employees and to use their full potential for the benefit of the organization, which largely depends on the way in which a job is organized. Previous research suggests that the way in which a job is organized significantly affects the key variables of organizational behavior. The aim of this paper is to explain the role and importance of the Job Characteristics Model (JCM) in contemporary business environments and to show the impact of its basic dimensions on employee motivation, with particular emphasis on the level of job satisfaction. The paper also presents research findings that show how employees perceive the JCM dimensions and to what extent the dimensions actually affect their motivation and job satisfaction. The research results confirm the importance of this connection; by increasing the presence of positive job characteristics, such as feedback, autonomy and the performance of varied and important tasks, organizations can increase employee motivation and job satisfaction.

Keywords: job characteristics model, job design, motivating employees

1. INTRODUCTION

Job satisfaction, either with the job itself or with the workplace, is one of the most investigated topics in business practice. For job satisfaction, as well as for motivating employees, increasing efficiency, and promoting career development, the salary level, i.e., material compensation, is not the only important factor. Employee motivation is also influenced by many other factors, such as human relationships in the organization, work autonomy, feedback level, various benefits such as flexible working hours and, to a large extent, the way in which the workplace is designed.

For modern and successful organizations, the tangible assets that they possess are less important; much more important is their intellectual capital, i.e., the ability of employees to create a certain value, learn and increase their knowledge, and their innovativeness and creativity (Kiss 2007). This is especially important given the key trends that have been causing changes in organizations—globalization, information technology, and managerial innovation (Cummings and Worley 2009). Therefore, the interest has increasingly shifted from the static elements of the organization to the dynamic elements, from the structure to the people. There is an increasing number of studies on different organizational behavioral variables that seek to understand the ways and causes of employees' behavior and to support and encourage them to successfully achieve organizational goals.

For employees to be motivated and satisfied in their workplace, it is important that the jobs are well designed. It is also important to find those employees whose individual preferences match the needs of the particular workplace so that the employees can achieve their maximum potential. The subject of this research is analysis of main job dimensions, according to the *Job Characteristics Model* (JCM). In particular, the paper presents research findings that show how employees perceive the JCM dimensions and to what extent the dimensions actually affect their motivation and job satisfaction. Given the timeliness of the topic and issues that are covered by working conditions, the aim of this paper is to explore the opinions of employees in Croatia about their workplaces—the question is whether they are satisfied with them and whether they have enough motivating factors to perform their tasks thoroughly, ultimately leading them to achieve goals at the level of the entire organization.

2. THEORETICAL BACKGROUND

2.1. Working motivation and performance management

Work has an important place in each individual's life; therefore, how it is organized is of utmost importance. Most adults spend half their waking hours at work, and for many people, the job is their central and most important daily activity. Work is a source of not only existential resources but also satisfaction or dissatisfaction. If employees are dissatisfied, they are less productive, and organizations that fail to motivate their employees may not be desirable employers. Such organizations are not able to attract quality people and ultimately fail to achieve success, growth and development. Consequently, attitudes toward work, especially job satisfaction, have a significant impact not only on job motivation but also on the lives of the employees and the entire organization (Buntak *et al.* 2013).

There is no unambiguous answer as to what motivates employees. What motivates someone may have almost no effect on another person and may even have a negative effect. In general, many different intrinsic and extrinsic motivational factors need to be adjusted to meet the needs of employees, and organizations that succeed at this are most often successful in achieving their own goals (Brnad *et al.* 2016).

One of the most important factors affecting employee motivation is the characteristics of the workplace. It is therefore necessary to plan working places well and match them with the individual characteristics of employees. If employees are motivated and satisfied with their workplace and job in general, this will certainly affect their performance. Such employees are not prone to delay, false illness, or all other forms of absenteeism that are not justified by objective reasons. They do not avoid work or conflicts with colleagues and superiors, but they do the job accurately, precisely and on time, and they make the maximum contribution to accomplishing their tasks. Ways of motivating employees based on the JCM will be shown below; as intangible ways of motivating, they are linked mainly to the design of the workplace and their adaptation to employees.

2.2. Job characteristics model

Research on job design shows that the way in which a job or workplace is organized can increase or decrease the motivation of employees, namely, their commitment and productivity, and thus their ability to achieve organizational goals (Robbins and Judge 2017). Hackam and Oldham (1975)

developed the JCM, which best describes the workplace with key determinants affecting the motivation, satisfaction and efficiency of employees. Based on the JCM, it is possible to obtain a description or an insight into job characteristics and see how they are related to psychological and other aspects of employees. The JCM is based on the fact that all workplaces can be described along five basic dimensions, i.e., job characteristics (Hackman and Oldham 1976):

- Skill Variety refers to the degree to which a job requires different activities, skills and talents in carrying out the work. In modern business conditions, it is important to ensure challenging jobs in which employees have the opportunity to learn new things and to use the knowledge and experience that they already have.
- Task Identity refers to the degree to which the job is required to be performed as a 'whole' and identifiable piece of work, from the beginning to the end, with a visible result. Even if it is not possible to ensure that employees perform their job as a 'whole', it is important to enable them to at least have an insight into the business that they are involved in from the beginning to the end.
- Task Significance refers to the impact that the job has on the lives or work of other people, either within the organization or in the external environment. Even when employees do not see the purpose of what they are doing and when they think their job is irrelevant, they need to be well informed as to why every job is important and how it fits in with the organization as a whole.
- Autonomy refers to the degree to which the job provides a level of freedom and the independence that an individual has in making decisions about scheduling the work and determining the procedures used in performing the job. Although (complete) autonomy is not possible in all types of work, it is important for it to be present where possible, as autonomy gives employees a sense of greater personal responsibility for the results at work.
- Feedback refers to the degree to which individuals obtain clear and direct information about their performance or how they have done a particular job. Based on feedback, the employee can see whether a task has been performed in accordance with, or better or worse than, the expected results; thus, feedback is related to his/her further work and engagement.

According to the JCM, the first three dimensions, i.e., *Skill Variety, Task Identity*, and *Task Significance*, are combined to create a meaningful job. If the workplace has these three characteristics, the job holder considers his/her workplace important, useful, and worthwhile. A workplace with autonomy and feedback provides employees with a sense of personal responsibility for the results and knowledge of how efficient their work is. Furthermore, the basic job dimensions can be combined into a unique indicator, called the *Motivating Potential Score* (MPS), which is computed by combining the scores of all five job dimensions as follows (Hackman and Oldham 1976):

 $\begin{array}{l} \mbox{Motivating} \\ \mbox{Potential} = \\ \mbox{Score (MPS)} \end{array} \begin{array}{l} \mbox{Skill Task Task} \\ \mbox{Variety Identity Significance} \\ \mbox{3} \end{array} \end{array} \times \mbox{Autonomy} \times \mbox{Feedback} \\ \mbox{Feedback} \end{array}$

Jobs that have a high motivational potential must have a high score for at least one of the three factors that lead to the experience of work relevance, as well as a high degree of autonomy and feedback in the workplace. Ultimately, the JCM predicts that employees in workplaces with a high motivational potential have a higher degree of motivation and satisfaction, which is positively reflected in their productivity and facilitates the reduction of absenteeism and employee turnover (Robbins and Judge 2017).

Employee motivation is closely related to employee satisfaction. Likewise, motivation and employee satisfaction directly affect employee job performance, which in turn affects the overall

organization's performance. Therefore, employee satisfaction and motivation, along with their impact on the organization's performance, create a 'vicious circle', and so it is very important to manage them. According to Bakotić and Vojković (2013), the relationship between work satisfaction and individual performance is very complex and bidirectional, as satisfied employees direct their efforts to achieve their best possible individual performance. Likewise, successful employees will achieve greater work satisfaction, which will motivate them to work better or to achieve even better individual performance.

There are several ways that the JCM can be applied to make jobs more motivating. Since Hackman and Oldham (1975) introduced the JCM, the application of this model in different business conditions and its impact on motivation and job satisfaction have been continually researched (i.e., Fogarty and Uliss 2000; Thakor and Joshi 2005; Debnath *et al.* 2007; Hadi and Adil 2010; Ali *et al.* 2014). Motivated employees identify and are involved with the organization; they are interested in solving organizational problems and in the organization's development and success as well as the quality of its products and services; and they contribute to productivity and performance (Varga 2011).

Modern business conditions offer a variety of ways by which it is possible to create jobs and improve the nature of work. For example, employees can be rotated through different jobs, and the scope of their work can also be expanded so that it makes a meaningful 'whole'. Improving job characteristics based on the JCM leads to a job becoming a recognizable and meaningful whole, giving employees a certain level of accountability and control and providing feedback that provides insight into their performance. Apart from redesigning the very nature of work, alternative work arrangements also have a positive impact on motivation and include flexible working hours, job sharing, and working from home (Robbins and Judge 2017). Finally, employee involvement in decision making is also important because it will make them more committed to the organization and more motivated to achieve goals.

3. RESEARCH ON THE RELATIONSHIP BETWEEN JOB CHARACTERISTICS AND EMPLOYEE MOTIVATION AND SATISFACTION

3.1. A sample profile and the research instrument

To determine the role of the JCM in employee motivation and satisfaction, a survey was conducted. The questionnaire, along with general data on the respondents, asked questions about three key variables: job characteristics, employee motivation, and job satisfaction. A total of 75 respondents answered the survey questionnaire, which was conducted in May and June 2018 in several Croatian companies. Table 1 shows the descriptive indicators of the general characteristics of the respondents.

Variables	Categories		Ν	%
Sex	Male		31	41.3
	Female		44	58.7
		Σ	75	100.0
Age	29 years or less		34	45.4
	30 to 39 years		16	21.3
	40 to 49 years		18	24.0
	50 years and above		7	9.3
		Σ	75	100.0
Level of education	Primary school or lower		2	2.7
	Secondary school		18	24.0
	Professional undergraduate study		11	14.7
	University undergraduate or graduate study		35	46.6
	Scientific master's and/or doctoral degree		9	12.0
		Σ	75	100.0
Time spent in the current workplace	Under 2 years		27	36.0
	Between 2 and 5 years		14	18.7
	Between 6 and 9 years		11	14.6
	Between 10 and 20 years		17	22.7
	21 years and over		6	8.0
		Σ	75	100.0

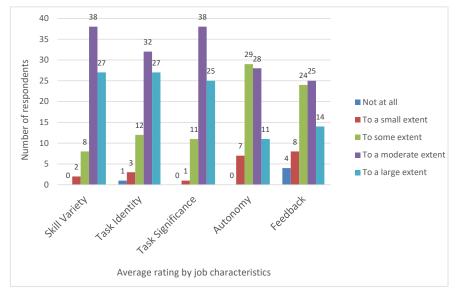
Table 1 General characteristics of the respondents

Source: author's own research

Questions for assessing job characteristics were taken from the *Job Diagnostic Survey* (JDS), an instrument for measuring three variables: objective job characteristics, personal psychological responses to work and the work environment, and the willingness of individuals to respond positively to job enrichment (Hackman and Oldham 1974). The next group of questions referred to the motivation of employees, with the goal of determining how much employees are working to achieve the best possible results, how much they are willing to learn, to what extent their job does not seem hard to them, and so on. Questions from the last group tried to assess how much the respondents are satisfied with the nature of their job, the way that supervisors treat them, the employees' working time, the degree to which supervisors accept employee suggestions and opinions, and whether their job is a source of frustration and dissatisfaction at their point in life. The respondents answered all the questions using a 5-point Likert scale. Finally, a question was asked about what characteristics of jobs from the JCM most impact their employee motivation and job satisfaction. This question was a closed-type question, and the respondents respondent to it by choosing one of the offered job characteristics.

3.2. Research results

Within each of the job characteristics, respondents were asked several questions; to obtain the grades for each of the five characteristics, an average score of the questions related to a particular characteristic was used. Figure 1 shows the distribution of average ratings for all five job characteristics.



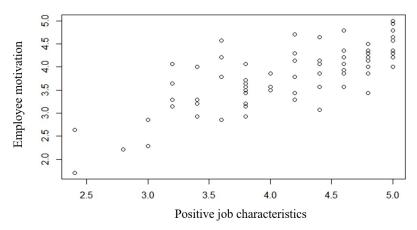
Source: author's own research

Figure 1 Average rating of each job characteristic by respondents according to their representation of their workplaces

Figure 1 shows that the first three characteristics, i.e., *Skills Variety, Task Identity*, and *Task* Significance, were mainly evaluated with high ratings by the respondents, meaning that they are largely present in their workplaces. In the case of *Autonomy*, there were some negative deviations in relation to the previous three job characteristics. The last category of questions referred to the *Feedback* that respondents were receiving in their workplace, and this characteristic of the JCM was rated as less present in the workplaces of the respondents.

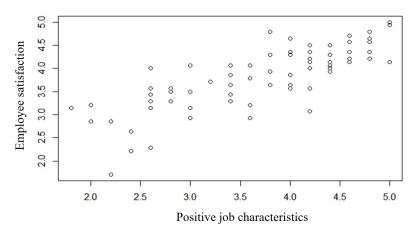
In the second group of questions, respondents needed to answer five questions related to motivation. The results showed that a significant number of respondents rated their workplace motivation with very good or excellent grades, up to 81% (when taking the average of the answers to all five questions). The third group of questions asked about satisfaction with the job or workplace, and 62% of the respondents stated that they were very satisfied or completely satisfied with their jobs and workplaces.

The relationship between the positive characteristics of the workplace, according to the JCM, and motivation and employee job satisfaction was determined by the degree of correlation. The following calculations and graphs were made with the programming language R. For the purpose of calculating the correlation between the presence of the positive job characteristics based on the JCM and employee motivation and job satisfaction, the average scores of employees for these three variables were used. Figures 2 and 3 show scatter diagrams indicating that the condition of linear linkage between the investigated variables was met.



Source: author's own research

Figure 2 Relationship between job characteristics and employee motivation



Source: author's own research



Both scatter diagrams (Figures 2 and 3) show that the distribution of the points, i.e., the values of the variables, has an increasing direction and that the linear-shape points gather around the straight line. It is also apparent that the strength of the connection is medium and that there are no outliers or unusual values.

The correlation between the variables of workplace and motivational characteristics was investigated using Spearman's correlation coefficient, which is 0.72, p=0.000. It can be concluded that the correlation between the characteristics of the workplace and motivation is positive and moderate, almost good, which means that along with the increasing representation of positive characteristics predicted by the JCM, the motivation of employees is also increasing.

The finding of Spearman's coefficient of correlation between the variables of workplace characteristics and employee satisfaction is similar and is 0.81, p=0.000. It can be concluded that the correlation between workplace characteristics and job satisfaction is positive and very good, which means that with the increasing representation of positive characteristics predicted by the JCM, employee satisfaction is also increasing.

We can mention several additional research findings based on the demographic characteristics of the sample. The research did not reveal significant difference between ratings of main research variables with regard to their sex. Furthermore, although younger respondents rated their workplaces, motivation and job satisfaction with slightly higher ratings, these grades do not

differ significantly from other age groups, and similar finding is also related to the level of education of the respondents.

4. CONCLUSIONS

In modern business conditions, it is of utmost importance that an organization properly cares for its employees, as this is one of the important preconditions for achieving its goals. Therefore, an increasing emphasis is being placed on human factors, i.e., on human knowledge and abilities that can bring something new, progressive, recognizable and unique to the organization. This applies especially to younger employees and is of great importance in Croatia, given that Croatia is increasingly facing the trend of young people emigrating abroad.

For the purposes of this paper, a survey was conducted, with approximately 45% of the respondents being young people aged 20 to 29 years. A significant number of the respondents rated their motivation at work with high marks, similar to the level of their job satisfaction. We can conclude that employees in Croatia, especially young ones, are not as unsatisfied and unmotivated as might be inferred on the basis of daily media statements and writing. However, it must also be taken into consideration that these are mostly young and highly educated people who just started working. Therefore, their motivation could be related to the fact that they just started working or that they found a good job related to their education. Since job characteristics were generally assessed by very good or excellent grades, the conclusion is that the design of the workplaces and their characteristics affect motivation and job satisfaction.

It is also very important to mention that in relation to superiors, the surveyed employees rated the characteristics of autonomy and feedback at the workplace with the lowest ratings. The superiors can most easily influence these two characteristics, adapting them to the needs and wishes of the employees. For this reason, supervisors who take part in job design should pay particular attention to these characteristics since feedback, as well as the possibility of autonomy and decision making, is becoming increasingly more important to employees in their work experience. Involving employees in decision making and other important processes is positive for boosting employees and increasing their motivation, as well as for the quality of decision making and changes at the level of the entire organization. Regarding feedback, attention should certainly be paid to employees when they do a good job, which their superiors often "forget" or fail to do, although it would mean a lot to the employees. It is often easy to point to errors and omissions, and there is too little recognition of a job well done, when the opposite outcome should happen.

Although this research has confirmed that there is a very strong link among major research variables, it is still necessary to point to some limitations in this research. Thus, this sample failed to achieve a normal distribution of data for the selected variables, so there could be some possible deviations from the actual values due to the said measurement and interpretation of the results. Similarly, the small number of respondents with regard to the whole population, as well as their subjectivity in answering questionnaires, must be taken into account. Finally, surveyed employees come from very different types of organizations—from education, healthcare, and manufacturing to banking sector. However, it would be interesting to see is there any difference in researched variables, regarding the type of companies the respondents come from, but for this purpose it is necessary to ensure larger sample than in this research.

In conclusion, the job represents an important aspect of our lives because we spend most of our time on the job, and the job provides us with resources to meet our living needs and achieve different relationships and goals. All of this is done in our workplace, so job characteristics are of great importance to employees. Motivational approaches are increasingly becoming associated with the way in which workplaces are designed and structured. Research on job design shows that the way in which a job or workplace is organized can increase or decrease the motivation of employees, namely, their commitment and productivity, and thus the ability to achieve the goals of the organization. The aim of this paper was to determine the role of the JCM in employee motivation and satisfaction and to show that managing the most important job characteristics in the right way can lead to better employee motivation and greater job satisfaction.

REFERENCES

Ali, S.A.M., Said, N.A., Yunus, N.M., Kader, S.F.A., Latif, D.S.A., Munap, R. (2014) 'Hackman and Oldham's Job Characteristics Model to Job Satisfaction', *Procedia - Social and Behavioral Sciences*, 129, 46–52.

Bakotić, D., Vojković, I. (2013) 'Veza između zadovoljstva na radu i individualnih performansi', *Poslovna izvrsnost*, 7(1), 31–43.

Brnad, A., Stilin, A., Tomljenović, L. (2016) 'Istraživanje motivacije i zadovoljstva zaposlenika u Republici Hrvatskoj', *Zbornik Veleučilišta u Rijeci*, 4(1), 109–122.

Buntak, K., Drožđek, I., Kovačić, R. (2013) 'Materijalna motivacija u funkciji upravljanja ljudskim potencijalima', *Tehnički glasnik*, 7(1), 56–63.

Cummings, T.G., Worley, C.G. (2009) *Organization Development & Change*, 9th ed, South-Western/Cengage Learning: Mason, OH.

Debnath, S.C., Tandon, S., Pointer, L.V. (2007) 'Designing Business School Courses To Promote Student Motivation: An Application of the Job Characteristics Model', *Journal of Management Education*, 31(6), 812–831.

Fogarty, T.J., Uliss, B. (2000) 'Auditor Work and Its Outcomes: An Application of the Job Characteristics Model to Large Public Accounting Firms', in Hunton, J.E., ed., *Advances in Accounting Behavioral Research, Volume 3*, Emerald Group Publishing Limited: Bingley, 37–68.

Hackman, J.R., Oldham, G.R. (1974) *The Job Diagnostic Survey: An Instrument for the Diagnosis of Jobs and the Evaluation of Job Redesign Projects*, Technical Report No. 4, Department of Administrative Sciences, Yale University.

Hackman, J.R., Oldham, G.R. (1975) 'Development of the Job Diagnostic Survey', *Journal of Applied Psychology*, 60(2), 159–170.

Hackman, J.R., Oldham, G.R. (1976) 'Motivation Through the Design of Work: Test of a Theory', *Organizational behavior and human performance*, 16(2), 250–279.

Hadi, R., Adil, A. (2010) 'Job Characteristics as Predictors of Work Motivation and Job Satisfaction of Bank Employees', *Journal of the Indian Academy of Applied Psychology*, 36(2), 294–299.

Kiss, I. (2007) 'Ljudski faktor – najvažniji element organizacijske strukture', Ekonomija/Economics, 13(2), 379–392.

Robbins, S.P., Judge, T.A. (2017) Organizational Behavior, 17th (Global Edition). ed, Pearson: Boston.

Thakor, M.V., Joshi, A.W. (2005) 'Motivating Salesperson Customer Orientation: Insights from the Job Characteristics Model', *Journal of Business Research*, 58(5), 584–592.

Varga, M. (2011) 'Upravljanje ljudskim potencijalima kroz motivaciju', *Zbornik radova Međimurskog veleučilišta u Čakovcu*, 2(1), 152–163.