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EXAMINATION OF LEADERSHIP STYLES IN ORGANIZATIONS IN SERBIA WHICH IN ITS OPERATIONS APPLY THE CONCEPT OF PRESERVING THE NATURAL RESOURCES

Abstract

Leadership becomes an important topic of research in the organizational theory as it is an essential factor for success of organizations. Leadership can be understood as a process of influencing followers based on clear values and beliefs. Leaders, based on their own power, create trust in the organization and desire for followers to achieve the goals of both the group and organization. Bearing in mind that the natural resources are a factor necessary for functioning the societies in the modern world, the main goal of this paper is to determine the leadership styles in organizations that apply the concept of preservation the natural resources in their operations.

Keywords: *leadership; natural resources; leadership styles*

1 INTRODUCTION

The accelerated industrialization and increasing level of production in the world caused a faster depletion of natural resources and emergence of the environmental problems, which directly affects the environment. The whole world is affected by the serious environmental problems, but it is increasingly difficult to find a balance between the production and ecology.

Economic development is unthinkable without the natural resources. Natural resources belong to a group of basic and unavoidable factors on which development is based.

Leadership is the ability to focus the group on the organization's vision and goals. It can be said that it represents one of the key features of an organization that interacts with the employees, and has a great influence on the rate of turnover.

Without leadership, the realization of a task is impossible [8].

Davis [2] states that the term leadership implies an attitude, guiding the organization or some of its part in a new direction, problem solving, creativity, launching new programs, building organizational structures and improving quality in an organization. According to Kotter [6], leadership is the art of mobilizing others who strive towards the goal realization and common aspirations.

Dulewicz and Higgs [3] consider that the relationship between the approach of a leader, i.e. the leadership style and context in which they function and act is extremely important. They also argue that behaviors of the leaders on the basis of investigated literature [4; 5; 11; 13] can be grouped into three categories: 1) Orienta

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tion towards the goals - goal orientation is a set of behaviors in which the leader sets the direction and behaves in the way that he / she plays an important role in directing others to accomplish the key goals necessary to achieve certain performance of an organization; 2) Involving - in this category, the focus of the leader remains to provide a strong sense of direction, however, there is a significant focus on the involvement of others (followers) with the aim of setting direction, and to a greater extent in determining the way in which the goals will be achieved; 3) participation - behavior of the leaders in this category is focused on facilitating others in achieving the nature of directions and the way to achieve the necessary goals.

Leadership styles are ways in which the relationships between the leaders and followers and others in the organization are based, i.e. the way through which the leader directs the behavior of subordinates and means by which it is used to acquire a consent to the desired behavior [12].

Leadership styles are patterns of behavior initiated by the leaders when working with the followers. Lewin et al. [7] identified three styles of leadership: autocratic leadership; democratic leadership; and liberal, i.e. "laissez-faire" leadership.

Autocratic leadership - in this style of leadership, people know exactly what to do and how to work and always expect the exact instructions to follow. Bhatti et al. [1] argue that, in terms of productivity, the autocratic style is most effective, however, Suša [12] states that the stated leadership style in time leads to a dissatisfaction with the group climate. Democratic leadership - it is often mentioned as the most effective style of leadership. In a democratic (often referred as participative) leadership, a "democratic leader" makes the final decision, he/she always invites other team members, followers to contribute and take part in a decision-making process. This way of leadership not only contributes to increasing satisfaction with the work of

followers because they are involved in what is happening, but also contributes to development the skills and competencies of the followers. Liberal leadership "laissez-faire" leadership style - according to Lewin et al. [7], the liberal leadership represents the leadership style in which the leader is nominated and still physically occupies a leadership position, but where more or less avoids the responsibilities and assigned tasks.

Based on the above stated, the paper is organized as follows. In section 1, the Introductory considerations are presented. In section 2, the materials and methods are explained. The section 3 displays the results followed by a discussion. Finally, the conclusions are given at the end of manuscript.

2 MATERIALS AND METHODS

The survey of leadership styles was carried out in the period from 15/05/2017, until 30/06/2017 in 4 economic entities. The survey of leadership styles was made according to a questionnaire designed by Northouse [9-10].

Of the total number of surveyed leaders was 26 in all four economic entities, there were 65.38% of male leaders and 34.62% of female leaders. Regarding the age of the total number, there were 15.38% of the leaders in the age from 25 to 30, 26.93% of the leaders in the age from 31 to 45 years, and 57.69% of the leaders in the age from 46 to 60 years. Regarding the level of education, the total number of leaders were 19.23% of leaders with the college diplomas; 50% of leaders with the university degree. and 30.77% of leaders with the completed post-graduate studies.

Ranked importance of leadership styles are calculated by assigning the score value for each parameter that is characterized by a set of answers from the survey. Applying this methodology opens the way for implementation the parametric statistical test for evaluation the parameters set by the principle of interval values.

The obtained values correspond to the rules for applying the above tests. In this way, the commodity is obtained, and it is concluded that based on the average values that are in the interval from 6 to 30. By doing so, all parameters are compared, i.e. they are all present in this interval in generalizing the conclusions. By summarizing this way, the given ratings of the scattered ness of data was avoided, i.e.

compression of the phenomenon itself resulted in precise, based on the survey data. By extracting the maximum from data, the new derived indicators were obtained which will provide the best possible way through an analysis (ANOVA) to generate the information on the reasons for determining the respondents when it comes to the leadership styles.

3 RESULTS AND DISCUSSION

Table 1 Test of normality

	Kolmogorov-Smirnov		
	Statistic	df	Sig.
Authoritarian	0.161	26	0.081
Democratic	0.147	26	0.155
Liberal	0.156	26	0.106

The Kolmogorov-Smirnov distribution normalization test is seen from Table 1 that all three leadership styles meet the

normal distribution of probability, which implies the use of parametric statistical tests.

Table 2 ANOVA test of the importance of leadership styles according to the gender of leaders

		Sum of the square	df	Average of square	F	Probability of error
Authoritarian	Between the groups	2.615	1	2.615	0.641	0.431
	Inside the group	98.000	24	4.083		
	Total	100.615	25			
Democratic	Between the groups	5.213	1	5.213	1.018	0.323
	Inside the group	122.941	24	5.123		
	Total	128.154	25			
Liberal	Between the groups	0.111	1	0.111	0.007	0.936
	Inside the group	406.235	24	16.926		
	Total	406.346	25			

It can be seen from Table 2 that by detecting the differences based on the average scores, the statistical testing is con

ducted for both genders of surveyed leaders. With statistical test, the gender differences were tested and their influence on

determination for all three leadership styles. These differences are put into a relationship through an F test giving an explanatory error probability that generalizes the conclusion about random variation or variation that has the natural and systemic foundation in this phenomenon explaining the very importance of a half of surveyed leaders towards the leadership styles. The observed differences expressed through the average scores for the gender of respon-

dents are negligible between the group and within the group which can certainly be regarded that no one leadership style is important in relation to the others, and that variation is accidentally in this social phenomenon and work environment. With confidence, it can be argued that the phenomenon that defines the examined leader in terms of importance the leadership does not have the significant statistical differences in relation to the gender.

Table 3 ANOVA test of the importance of leadership styles according to the age of the leaders

		Sum of the square	df	Average of square	F	Probability of error
Authoritarian	Between the groups	37.025	2	18.512	6.696	0.005
	Inside the group	63.590	23	2.765		
	Total	100.615	25			
Democratic	Between the groups	24.106	2	12.053	2.664	0.091
	Inside the group	104.048	23	4.524		
	Total	128.154	25			
Liberal	Between the groups	31.489	2	15.745	0.966	0.396
	Inside the group	374.857	23	16.298		
	Total	406.346	25			

It can be seen from Table 3 that the detection of differences, based on the average scores, was accessed by the statistics testing for each category of age of the surveyed leaders. The statistical test was used to detect the arise of differences between the age groups and their effect on determination for all three styles of leadership. These differences are put into a relationship through the F test, which further explains the probability of error by which generalizes the conclusion on a random variation or variation that has a natural systemic foundation in this phenomenon which explains the very importance of the age of surveyed leaders towards the leadership styles. The

observed differences are shown through the average scores for the age of employees, where the importance of authoritarian leadership can be considered with certainty and that variation has a systematic foundation in this social phenomenon in the working environment ($F = 6.7$, $p = 0.005$). It can be safely argued that the systematic phenomenon that defines the surveyed leader in terms of importance the leadership differs in relation to all three age groups. After confirming the statistical difference using the ANOVA test, it is approached to determine in which age groups the difference occurred and this is done by the following analysis.

Table 4 Post Hoc test

			Average difference	Std. error	Probability error	95% confidence interval	
						Lower	Upper
Authoritarian	from 25 to 30 years	from 31 to 45 years	-3.643*	1.042	0.002	-5.80	-1.49
		from 46 to 60 years	-3.033*	0.936	0.004	-4.97	-1.10
	from 31 to 45 years	from 25 to 30 years	3.643*	1.042	0.002	1.49	5.80
		from 46 to 60 years	0.610	0.761	0.431	-0.96	2.18
	from 46 to 60 years	from 25 to 30 years	3.033*	0.936	0.004	1.10	4.97
		from 31 to 45 years	-0.610	0.761	0.431	-2.18	0.96
Democratic	from 25 to 30 years	from 31 to 45 years	-3.071*	1.333	0.031	-5.83	-0.31
		from 46 to 60 years	-1.833	1.197	0.139	-4.31	0.64
	from 31 to 45 years	from 25 to 30 years	3.071*	1.333	0.031	0.31	5.83
		from 46 to 60 years	1.238	0.974	0.216	-0.78	3.25
	from 46 to 60 years	from 25 to 30 years	1.833	1.197	0.139	-0.64	4.31
		from 31 to 45 years	-1.238	0.974	0.216	-3.25	0.78
Liberal	from 25 to 30 years	from 31 to 45 years	-3.143	2.530	0.227	-8.38	2.09
		from 46 to 60 years	-3.000	2.272	0.200	-7.70	1.70
	from 31 to 45 years	from 25 to 30 years	3.143	2.530	0.227	-2.09	8.38
		from 46 to 60 years	0.143	1.848	0.939	-3.68	3.97
	from 46 to 60 years	from 25 to 30 years	3.000	2.272	0.200	-1.70	7.70
		from 31 to 45 years	-0.143	1.848	0.939	-3.97	3.68

*The average difference is significant at the 0.05 level

The afterwards (post-hoc) analysis can be seen from Table 4, which was conducted through the LSD method. Statistical differences occurred in younger age groups, which explain the importance of the age of employed leaders and their behavior through the empowerment of authorities. It can be safely concluded that the estimated reasons

are increasing with age at most respondents expressed through the authority of personality who is the leader. The findings of the younger age group are statistically significantly different from the other two older age groups and, on the basis of this, it is concluded that less often the leaders who have a strong personality.

Table 5 ANOVA test of the importance of leadership styles according to the education level of leaders

		Sum of the square	df	Average of square	F	Probability of error
Authoritarian	Between the groups	3.017	2	1.509	0.356	0.705
	Inside the group	97.598	23	4.243		
	Total	100.615	25			
Democratic	Between the groups	6.787	2	3.393	0.643	0.535
	Inside the group	121.367	23	5.277		
	Total	128.154	25			
Liberal	Between the groups	47.702	2	23.851	1.530	0.238
	Inside the group	358.644	23	15.593		
	Total	406.346	25			

It can be seen from Table 5 that detection of differences, based on the average scores, was accessed by the statistics testing for each category of the education level of surveyed leaders. The statistical test was used to detect the arise of differences between the level of education and their effect on determination for all three styles of leadership. These differences are put into a relationship through the F test, which further explains the probability of error by which generalizes the conclusion on random variation or variation that has a natural

systemic foundation in this phenomenon, which explains the very importance of the education level of surveyed leaders towards the leadership styles. The observed differences expressed through the average scores for the education level of leaders are negligible between the groups and within the group where it is safe to assume that no one leadership style is important in relation to the others and that variation is accidental in this social phenomenon in the work environment. It can be safely argued that the phenomenon that defines the surveyed

leaders in terms of importance the leadership styles does not have significant statistical differences in relation to the levels of education.

CONCLUSIONS

Creating an organizational culture and initiating changes in the organization almost always starts from the leader. Therefore, the leaders are those who initiate changes in the organization and who have an influence on creating an organizational culture that will respect the concepts of sustainable development, especially in terms of preserving the natural resources. The culture of one group changes over time and is the result of the most frequent changes in various influencing factors such as the business environment, leadership, management practice and formal and informal socialization processes. Also, as research has shown the leadership styles have a great importance in applying the concept of sustainable development, and therefore preserving the natural resources. Organizations face the challenge of applying the concept of sustainable development and preserving the natural resources, however, this is possible with the active role of leaders. Therefore, a leader in the organization provides the largest contribution in creating an organizational culture where it demonstrates how employees should behave in terms of preserving the natural resources and directs followers in a direction of use the resources, while respecting the principles of sustainable development. Also, the leader demonstrates to a large extent the conformity of his/her beliefs and actions regarding to creation an organizational culture aimed at preserving the natural resources, where employees led by the action of their leader align their behavior towards preservation the natural resources.

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